

# **Remedial Investigation Report**

**R. Freedman & Son Property  
New York State Department of Environmental Conservation  
Site No. 401033**

Prepared for:  
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## *Certification*

I, Peter von Schondorf, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (“DER-10”).

A handwritten signature in black ink, reading "Peter von Schondorf". The signature is written in a cursive style with a large initial "P" and a long, sweeping underline.

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Peter von Schondorf, QEP  
Senior Project Manager

## **1.0 INTRODUCTION**

This Remedial Investigation (“RI”) report is being completed in fulfillment of the Order on Consent Index # A7-0834-14-07 (“Order”) between Eastern Metal Recycling LLC (“EMR”) and the New York State Department of Environmental Conservation (“NYSDEC”). The requirement of the Order is to prepare a RI report at the completion of the field work specified in RI/FS Work Plan.

The RI report has been prepared for the property located at 25 Tibbits Avenue which is situated north of Tibbits Avenue and west of Cannon Street in the Village of Green Island, Albany County (“Site”). The property is identified on the Green Island, Albany County Tax map as tax parcel Identification Number 21.13-1-2, covering approximately 11.8 acres.

Leader Professional Services, Inc. (“Leader”) has prepared this RI report to document the implementation of the RI and Feasibility Study (“FS”) Work Plan and the Supplemental Work Plan for Additional Field Work and Interim Remedial Measures (“IRM”). The RI/FS Work Plan was approved by NYSDEC on November 2, 2016 and the field work was conducted between December 2016 and February 2017. The Supplemental Work Plan was accepted by NYSDEC on December 31, 2018 and field work started on June 12, 2019 and was completed on July 2, 2019. During this phase of the IRM, NYSDEC requested additional work (“IRM Modification”) which was authorized by approval of the Work Plan on July 26, 2019. The work performed under the IRM Modification was started on November 18, 2019 and was completed on November 22, 2019. All waste was removed from the Site on February 6, 2020.

## **2.0 BACKGROUND**

### **2.1 Property Location**

The Site is located at the northwest corner of the intersection between Tibbits Avenue and Cannon Street in the Village of Green Island at 25 Tibbits Avenue. The Site covers approximately 11.8 acres. Figure 1 shows the Site’s location.

### **2.2 Site Description**

The Site is a former metals recycling yard which received and staged scrap metals and processed the metal into various metal types. EMR shipped bailed ferrous and non-ferrous metals to other EMR facilities (see Figure 2). Unlike the operations of the prior Site owners, EMR did not conduct vehicle shredding activities at the Site. The Site has six buildings: two concrete buildings used to support former processing equipment (crushing and shredding operations); one building used as a weight scale house/office space; one vacant warehouse building used for material and equipment storage; one vacant concrete building with no apparent use; and one vehicle garage which is currently in use. The operational area of the Site is fenced and there is one entrance to the property from Cannon Street. Surrounding much of the Site is a berm with a height of approximately 8 to 14 feet composed of soil and inert debris. The berm was constructed

in response to a settlement agreement between the Village of Green Island, Honeywell and R. Freedman & Son, the prior owners of the Site.

The former operational areas of the Site property were loosely defined and dependent on the amount of metal being received, processed and shipped. The primary metal processing areas were located north of the property's main entrance. This area is now vacant except for the garage and storage of roll-off containers. South of the entrance, the property was used for equipment and container storage, but it is now vacant. Access driveways on the north end of the property are paved and used to restrict the path of over the road vehicles making deliveries and pickups. The surface of the Site areas other than the driveways are a combination of crushed stone and recycled concrete and a combination of stone, soil and debris. Vehicles used for transporting material off site over public roads are required to run through the Site's wheel wash before leaving the Site.

The Site is situated in an area primarily used for industrial and commercial purposes. A former Ford Motor Company manufacturing plant is located to the east and a Honeywell industrial plant is located to the west. North of the Site is a construction yard for the Burt Crane & Rigging Company. South of the Site is a residential area.

## **2.3 Site History**

### **2.3.1 Site and Area Use History**

The Site has been used as a scrap metal recycling facility since at least 1951 when historical Sanborn Fire Insurance maps (Resources, 1951) identify the Site and possibly the nearby areas as the John J. Ryan & Sons, Inc. ("Ryan & Sons"). Prior to this date, the Site and the areas to the north, south and east were used as railroad yards and railroad car manufacturing and repair shops (see Figures 3, 4, and 5). The earliest map for the Site and the surrounding area is 1903. From 1903 to 1951 the Site and the area on the east side of Cannon Street were used for industrial purposes by the Delaware and Hudson Canal Companies and Railroad Car Shops ("D&H"). In 1951 D&H moved their operation. The Site was operated by Ryan & Sons. The Standard Block Company and the Symansky Brothers Scarp Iron Company moved into the former D&H property. To the west, the Marshall-Eclipse Division of Bendix Aviation Company ("Bendix") is shown as having a manufacturing operation on the north and south side of Tibbits Avenue. The Slade Asbestos Company (acquired by Bendix in 1933) moved to Green Island in 1929.

In 2010 EMR retained Penn Environmental & Remediation ("Penn E&R") to conduct a Phase I Environmental Site Assessment ("Phase I") of the Site (January 4, 2011). During the completion of the Phase I, deed information and Sanborn maps were reviewed. The deed information indicated that R. Freedman & Son, Inc. ("Freedman") purchased the property from D&H in 1973. The ownership timeline of the Site by D&H is not clear, but it appears they may have acquired the Site from the Rensselaer and Saratoga Railroad Company, which purchased the property in 1880 from Sarah Tibbits. EMR purchased Freedman in 2011.

In June of 2015, EMR received a notice of violation (“NOV”) from the NYSDEC Division of Materials Management regarding piles of debris (wood and automotive scrap) and recycled scrap metals that had been on the property since EMR’s acquisition of the property from Freedman and Sons. In response to the NOV, EMR retained S.M. Gallivan, LLC (“Gallivan”) to assist with the sorting of the piles and the berms surrounding the Site, including the separation and removal of metal scrap from the other debris. The material left over from the berm sorting was used to reform the berms. Gallivan imported clean recycled concrete from its Port Albany facility and stone from the Cropseyville pit (“stone fill”) to provide a level surface to the Site. Not all areas of the Site were covered; those areas covered with broken concrete or asphalt remained uncovered and areas in the northeast corner of the Site were left uncovered. A total of 6,900 cubic yards of stone and concrete were used to resurface the property. The stone and concrete reached a thickness of 8 to 12-inches across the covered areas of the site.

### **2.3.2 Site Regulatory History**

The regulatory history of Freedman’s operations included various registrations, permits, spill notifications and consent orders with NYSDEC and a settlement of a claim with the Village and Honeywell. The following summary provides additional background information.

Seventeen (17) tanks are listed under the Freedman’s Petroleum Bulk Storage registration number for the Site (4-132608) and NYSDEC currently lists the registration as unregulated (NYSDEC, 2015). The NYSDEC database lists the facility as having one active, 1,000 gallon aboveground storage tank (“AST”) storing diesel fuel. The database also lists the use of an underground storage tank (“UST”) removed from service in 1998.

The Site is registered as a RCRA Generator of hazardous waste beginning April 6, 1988 and generating the following wastes: D001-Ignitable, Benzene, PCB (New York State) and Batteries (Penn Environmental & Remediation, Inc, January 4, 2011). USEPA’s website lists the Site in the following databases: Air Facility System (“AFS”) for air emissions permits and Large Quantity Generator of hazardous waste (USEPA, 2015).

Between 1991 and until the Site was sold in 2011, Freedman reported seven spills to NYSDEC. Three of the spills occurred as a result of a fire on the property which involved machinery, debris and a structure fire. In 2011, a Freedman warehouse (dating to the era the property was used as a railroad manufacturing site) burned to the ground. The remaining four spills occurred from 1991 to 1996 and involved unknown materials, waste oil, hydraulic oil and non-PCB oil. One spill (#9012848) occurred on the former railroad tracks and Tibbits Avenue adjacent to the Site indicating it was an off-site spill. The material involved is not identified in the NYSDEC Spill Database (NYSDEC Spill Incidents Database, 1991).

As a result of their activities, NYSDEC issued two Orders on Consent to Freedman, including a modification of the original order and two amendments (NYSDEC, 2014):

- R4-1913096-09 – signed on March 22, 1997 to conduct certain activities contained in the Schedule of Compliance related to petroleum releases.
- A4-0351-97-01 – signed on April 23, 1998 to address petroleum and hazardous waste contamination on the site.
- R4-1913-96-09M – a modification of the original consent order for petroleum contamination issues.
- Amendment 1 to A4-0351-97-01 – an amendment (index #A4-0603-0508) for an IRM to address off-site PCB contamination only along Tibbits Avenue. This amendment was not executed.
- Amendment 1 to A4-0351-97-01 – an amendment (index #A4-0603-0508) for an IRM to address on site issue. This amendment was not executed.

After the sale of the Freedman operation and property to EMR, NYSDEC issued a new Order on Consent #A7-0834-14-07 to EMR Inc. to conduct a RI/FS to resolve the historic liability attributable to the acts of Freedman. Previous Consent Orders and IRMs required Freedman to focus on investigating specific on-site sources of contamination, (e.g. transformer storage pad and off-site contamination along Tibbits Avenue). Prior to EMR acquiring the site, Freedman closed the Tibbits Avenue entrance, constructed berms along the perimeter of the southernmost portions of the site, instituted a truck wheel wash at the newer Cannon Street entrance and instituted a street cleaning program on the streets commonly used by facility and vendor vehicles. As a result of these activities, the migration of contaminants off-site is not suspected. A further limiting factor is the 2004–2005 renovation of Cannon Street by New York State Department of Transportation, where the former road surface was removed, and the street was widened. The removal of material and comingling of fill soils from other sources complicates contamination patterns from the Site.

## **2.4 Previous Environmental Investigations**

There have been four investigations completed at the Site by Freedman. Prior to the purchase of Freedman, EMR conducted an environmental due diligence assessment.

Since 1990 Freedman has conducted the following environmental investigations:

- March 1990, Report on Remediation for an Inactive Hazardous Waste Disposal Site, Clough Harbor and Associates. This report has not been provided to Leader.



- December 13, 1996, Report Summary of Findings of PCB Soil Investigation, Alpha Geoscience – the investigation entailed the sampling of eight soil borings drilled through and around a concrete slab located in the northeast corner of the Site. Grab samples were collected from the upper 1-foot of soil and a second sample was collected as a composite of the interval from two to six feet below ground surface (“bgs”). Each sample was analyzed for PCBs. The “Site Sketch Map” obtained by Leader shows the eight sampling locations and soil results. The results indicate PCB concentrations ranged from “not detected” to “22,” presumably in milligrams per Kilogram (“mg/Kg”).
- July 1999, Supplemental Site Assessment Report, Alpha Geoscience (“Alpha”) – this report is a summary of investigations completed to partially fulfill Consent Order A4-035109701. According to the report three rounds of sampling were completed to evaluate PCB concentrations in the surface soil around the former transformer and capacitor storage pad and one groundwater sample from monitoring well MW-1 (March 25, 1998). The report also summarizes the soil sampling activities for petroleum contamination, which was conducted on August 5 and 6, 1998 and groundwater sampling conducted on January 7, 1999. A total of 47 soil samples were collected and composited into 15 samples for PCB analysis. According to Penn E&R eight subsurface sample locations (S-1, S-2 S-6, S-7, S-8, S-10, S-12 and S-13) contained PCB concentrations greater than 10.0 mg/Kg. Eight surface soil samples contained PCB concentrations ranging from greater than 10.0 mg/Kg to 16.5 mg/Kg. During this same sampling event Alpha sampled monitoring well MW-1, reportedly down gradient of the concrete building pad, for PCBs and found PCBs were not detected above the laboratory detection limit of 0.5 micrograms per Liter (“µg/L”).
- As a part of the Supplemental Site Assessment Report, Alpha also excavated test pits and sampled monitoring wells. Sixteen test pits were completed to depths ranging from 7 to 8 feet. Four soil samples were collected and analyzed and two samples which were collected from the bailer and shear operations were found to be impacted, but at concentrations below Part 375 restricted residential soil cleanup objectives. The groundwater flowing into the test pits near the shear was found to have a thin film of petroleum. Groundwater impacts were identified at monitoring well locations MW-2 and MW-4 (installed near the shear). Benzene was found in both monitoring well MW-2 and MW-4 at a concentration of 2.0 µg/L and 27.0 µg/L, respectively. MTBE was detected in only monitoring well MW-2 at a concentration of 63.0 µg/L.
- June 6, 2000, Sampling of the Debris Pile, W. Z. Baumgartner & Associates, Inc. (“Baumgartner”) – conducted sample collection and analysis of material, suspected to be automobile shredder residue (“ASR”), following a draft work plan prepared by Alpha Geoscience. Baumgartner did not provide an interpretation of the results. Twelve (12) composite samples were analyzed for TCLP RCRA Metals, polynuclear aromatic hydrocarbons (“PAHs”), aromatic volatile organic compounds (“VOCs”) and PCBs. Two of the samples exceeded the 5.0 milligrams per Liter (“mg/L”) regulatory limit for TCLP Lead by approximately 2.6 mg/L. PCB concentrations for Aroclors 1242 and 1254 ranged from 2.414 mg/Kg to 26.64 mg/Kg.

In addition, the NYSDEC and others collected and analyzed surface soil samples for PCBs along Tibbits Avenue between High Street and Cannon Street in 2005. This area was used by Freedman and various railroads for access to the site and the railroad sidings and spurs located on and off the Site. The Ford Motor Company facility has a documented history of airborne dust and storm water runoff from their site and the roadways were used heavily by vehicles accessing the Ford plant.

On Cannon Street, the New York State Department of Transportation and Ford Motor Company collected samples prior to and after the road reconstruction work. The soil sampling performed prior to construction found the soil quality acceptable for reuse, indicating no need for further investigation at this location. Ford's sampling activities did not reference Freedman as a source of any of the contaminants.

### **3.0 SCOPE OF WORK**

The scope of work for the RI/FS was presented in the RI/FS Work Plan and in the Supplemental Work Plan Additional Field Sampling and IRM, and Work Plan Modification. The Work Plan modification was prepared in response to NYSDEC request for additional sampling and to conduct IRMs. The IRM was designed to address the significant health and environmental threats at the Site.

#### **3.1 RI/FS Scope of Work**

The goal of the fieldwork was to characterize the nature and extent of historic contamination on the Site and to address potential off-site impacts related to Freedman's operations that were unresolved during Freedman's ownership. To achieve this goal, a multi-tasked effort was proposed including: characterizing the Site's geology and hydrology; determining the nature of the chemical contaminants found on the Site; determining the extent of contamination of those chemical contaminants originating from the Site; and evaluating how the current conditions may impact environmental and human health.

During a joint meeting between NYSDEC, EMR and Leader at the property on July 19, 2016, it was discussed how to handle the newly placed stone fill in the context of the remedial investigation. NYSDEC requested the source of the fill. EMR's contractor Gallivan provided Leader with invoices for the stone fill and a gradation analysis performed by the Construction Technology Inspection & Testing Division of P.D.&T.S, Inc. The materials are recycled gravel-sized materials. The analysis shows the stone fill has less than 10.2% passing the 50-mesh sieve and 7.3% passing the 100 mesh sieve. Leader concluded that the stone fill complies with applicable regulatory requirements and may continue to serve as a cover barrier based on the following:

- NYSDEC's DER-10 guidance, Chapter 5, paragraphs 5 and 6 provides that chemical testing is not required since it is likely the stone fill has less than 10% passing the 80 mesh sieve.
- Gallivan is a registered gravel pit operator and concrete recycler with the NYSDEC; and
- EMR has sufficiently documented the source of the fill.

Based on this information, Leader conducted limited sampling of the stone fill.

Other environmental media sampled during Leader's field investigation included: surface and subsurface soils, groundwater and soil vapor.

Sediments were not addressed since there is no surface water migration onto or from the Site. Stormwater is retained on site by berms and topography surrounding the Site causing it to infiltrate into the ground.

In addition to sampling and analysis of the various environmental media, a location and elevation survey was conducted to locate the collected samples and show the Site's attributes on drawings of the Site. Attributes shown included: the Site's property lines, ground surface topography, the location of buildings, roads, and stationary equipment, and easements or right of ways. The ground surface elevation and each sample location's northing and easting was determined relative to the latest version of the New York State Planimetric Coordinate System.

The individual field tasks of the Scope of Work conducted during the RI/FS are presented below.

### **3.1.1 Task 1: Site Walk**

Leader conducted several Site walks with NYSDEC to determine if any of the existing monitoring wells required abandonment and replacement, and to review and modify the locations of the proposed sampling points. No significant changes were made.

### **3.1.2 Task 2: Property and Land Survey**

A property line, Site topographic survey and instrument survey of all features (buildings; stationary equipment; buried utilities; storm water collection; etc.) on the Site was completed, and a drawing prepared for use in documents. Ground surface elevations and northings and eastings were determined using New York State's Planimetric Coordinate System.

### **3.1.3 Task 3: Surface Soil Investigation**

The goals of the surface soil investigation included: 1) evaluation of the distribution of the chemical and elemental compounds in the surface soils; and 2) an evaluation of how contaminant levels influenced the cleanup methods for the property. The majority of the Site is covered with approximately 8 to 12 inches of stone fill that complies with NYSDEC's DER-10 requirements for final cover. Surface soil samples were collected from the interval between 0 and 2-inches bgs and analyzed for TCL, SVOCs, already defined pesticides, herbicides, PCBs and TAL metals plus mercury and cyanide. Figure 6 shows the sample locations. A total of 21 surface soil samples were collected.

During the collection of surface soil samples, the ground surface was evaluated using three techniques: a visual assessment (presence of stains, possible fill material, etc.), the presence of VOCs using a portable organic vapor analyzer with a photoionization detector ("PID") and the presence of discernable odors. If the soil sample contained visible, removable pieces of metal, wood or plastic, the material was excluded from sample.

### **3.1.4 Task 4: Subsurface Soil Investigation**

The subsurface soil sampling was conducted to complement surface soil sampling and to collect hydrogeologic data for the Site soil. Samples were collected continuously to a point below the water table and retained for chemical analysis. In general, the collection of samples for chemical analysis was based on evidence of contamination. The following zones were sampled:

- Soil depth interval of 8-12 inches – evaluated soil conditions buried beneath the imported stone fill or below the concrete slab where former PCB contaminated transformers were stored by Freedman.
- Fill and native soil interface – evaluated soil conditions in that interval where contaminants from historic fill materials may begin to impact native materials.
- Saturated zone – evaluated soil conditions within the water table to determine if this material is a source of contaminants or if groundwater is contaminating the soil.

In addition to interval sampling, each soil sample core was screened with the PID and visually evaluated in boring logs. Portions of the sample were retained in either a Ziplock sandwich bag or a clean glass jar for additional headspace screening. Samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides and herbicides, TAL metals including mercury and cyanide and PCBs. Seventy-four subsurface soil samples were collected for analysis.

### **3.1.5 Task 5: Groundwater Investigation**

The groundwater investigation included the installation and sampling of conventional monitoring wells screened within the shallow groundwater zone and the collection of grab groundwater samples from temporary wells or screened drive points. Eight 2-inch monitoring wells were installed, and nine grab samples of the groundwater were collected during the drilling of soil borings. Figure 6 shows the locations of the monitoring wells and soil borings where groundwater samples were collected. One existing monitoring well, PES-2, installed by NYSDEC in the Cannon Street right of way, was also sampled.

Groundwater sampling included purging of the monitoring wells to remove silt, clay and debris from the wells and the recording of field parameters. Samples for chemical analysis were collected once the monitoring wells were developed and allowed to stabilize.

The field parameters measured included: turbidity, oxidation reduction potential, dissolved oxygen, pH, temperature, and conductivity. Turbidity measurements was measured until the clarity of the groundwater sustained a value of 50 Nephelometric units (“NTU”) or below. The other parameters were measured at 10-minute intervals until they stabilized (within 20% of the preceding three values).

The monitoring wells were bailed to remove sediment from the screen and to induce water flow into the temporary well before sample collection. Dedicated sampling equipment was used for the collection of each sample. The grab samples were analyzed for TCL VOC.

The groundwater samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides and herbicides, TAL metals including mercury and cyanide and PCBs. On February 6, 2019, a second round of groundwater samples were collected from all monitoring wells with the exception of MW-8 because it was buried under debris. During this event three samples were also analyzed for NYSDEC’s emerging contaminant listed per- and polyfluoroalkyl substance compounds and 1,4-Dioxane. A low-flow groundwater sampling technique with dedicated tubing was used to collect samples from the permanent monitoring wells.

During the drilling, construction, development and sampling activities Leader recorded task field notes and sample logs, geologic logs and monitoring well construction diagrams, see Appendix 1. When the monitoring well construction was completed the wells were surveyed and the casing elevation calculated.

### **3.1.6 Task 6: Berm Sampling**

During Freedman's cleanup of the Site, Gallivan excavated the existing berms and sorted the material to remove metals and unwanted debris. The berms were then re-built, and, in some locations, a retaining wall was constructed using concrete blocks to confine the berm and separate the facility's operation area. Leader conducted the sampling to evaluate the materials found within the berm and to evaluate any potential contamination. The sampling locations are shown on Figure 6. The samples were collected using an excavator since the berm could not be accessed with all-terrain or truck-mounted sampling equipment. Appendix 2 provides copies of the test pit excavation logs.

At each sampling location the entire thickness of the pile was excavated or until the sidewalls became unstable. Leader monitored the soil conditions in the excavations with a PID and evaluated samples using the same criteria as the soil borings. One subsurface soil sample was collected. No characteristics of contamination were encountered. The berm was composed of homogenous material and the default depth in the middle of berm pile was sampled. Thirteen locations were sampled.

### **3.1.7 Task 7: Soil Vapor Sampling**

Leader collected three soil vapor samples and one ambient air sample from the Site to evaluate the soil vapor and determine if potential vapor intrusion threat to the nearby residences and businesses exists.

Soil vapor sampling points were installed inside a bore hole formed with a direct push sampling tool at a depth of approximately five feet bgs. A copy of the soil logs prepared for the soil vapor points is provided in Appendix 1. The soils retrieved during the process of boring were visually evaluated and screened with a PID. Leader's observations of the soil quality and PID measurements were recorded on boring logs. No soil samples were collected for chemical analysis during the soil sampling task of constructing the vapor sampling points.

In addition to the soil vapor samples, one ambient air sample was collected at a location upwind from the Site. The ambient air sample was collected over the same two-hour period, when the soil vapor samples were collected. All samples were analyzed for USEPA Method TO-15 VOCs.

### **3.1.8 Task 8: Off-Site PCB Surface Soil Sampling**

Nine surface soil samples were collected in the right of way of Cannon Street and Tibbits Avenue for PCB analysis, see Figure 6. A dedicated trowel was used to sample the upper two inches of soil (0 to 2-inches).

### **3.2 Supplemental Work Plan Additional Field Sampling and IRMs**

Based on the sampling conducted for the RI/FS, NYSDEC determined additional sampling was needed in the vicinity of a mound/historic train turnstile in addition to a second round of groundwater sampling. As a part of the Supplemental Work Plan, IRM activities were also proposed. The initial IRM phase (“Phase 1”) was completed on July 2, 2019 following the Supplemental Work Plan activities. The second phase (“Phase 2”) was provided in the IRM Work Plan Modification in August 2019.

- Phase 1 included the removal of surface soil along the north and south sides of Tibbits Avenue, see Figure 7; removal of fill material at berm sampling locations Berm 10 and Berm 13; reshaping and re-vegetating the berm in selected areas; and decommissioning of equipment, see Figure 8.
- Phase 2 included the following: removing soil in the vicinity of the former crusher operation building and the shredder operation building and conveyor; removing automotive scrap debris and grease accumulations from the concrete foundations which once supported crusher and shredder equipment; pressure washing the interior of the former crusher building; and pumping out the truck tire wash basin. Phase 2 IRM activities began on November 20, 2019 and concluded on November 22, 2019. Waste from the Phase 2 IRM was removed on February 5 and 6, 2020.

#### **3.2.1 Mound Area Sampling**

The sampling of the mound area included the excavation of three test pits to evaluate the soil conditions below the mound. Appendix 2 provides a copy of the test pit logs from the mound area. A concrete surface over the mound 80 square feet in area, may be a part of a former train turnstile. Test pit TP-1 was excavated alongside the concrete and exposed approximately 4-feet of fill composed of scrap metal, vehicle parts and a small amount of soil. Below the 4-foot level a second concrete slab was found, with a thickness of more than 1-foot. A hydraulic ram was used to break the surface of the concrete to a depth of one foot but could not penetrate further, so the test pit was terminated. Two test pits were excavated on the east and west sides of the mound to further evaluate the soil conditions for evidence of (stains, odors, and organic vapors). Sampling was conducted within the fill material and the native soil. Groundwater was not encountered. Five samples and one duplicate sample from the fill and native soil were collected for TCL VOCs, TCL SVOCs, pesticides and herbicides, PCBs, TAL metals, and cyanide analysis.

### **3.2.2 Additional Sampling**

During the Supplemental Work Plan activities, a Site walk was conducted to evaluate other areas which may need additional sampling. The areas inspected included the former locations of stationary equipment (cyclone, shredder, etc.), buildings where hydraulic equipment was kept, crushing equipment, transformer areas, and waste storage areas. Additional samples were collected in the vicinity of the former crushing equipment and the shredders (see Figure 8). Samples were collected from automotive scrap debris and soil in these areas and analyzed for TCL SVOCs, PCBs, pesticides and herbicides, and TAL Metals.

### **3.2.3 Groundwater Sampling**

Leader conducted a second round of groundwater sampling on February 6, 2019 when eight of the nine monitoring wells were sampled. Monitoring well MW-8 could not be located and therefore was not sampled. Leader's sampling techniques, procedures and analytical methods did not change from the RI/FS with the exception of the following: the samples were not analyzed for herbicides and pesticides and three monitoring wells were sampled for NYSDEC's emerging contaminants and 1,4-Dioxane. The locations of the wells sampled for emerging contaminants including Perfluorinated Alkyl Acids and 1,4-Dioxane are shown on Figure 9 (collectively referred to as PFAS). PFAS are found in Teflon™ and requires sampling equipment without Telfon™ parts and the samplers cannot use Goretex™ PPE or clothing laundered with certain detergents or fabric conditioners.

### **3.3 Data Usability Summary Report**

A Data Usability Summary Report ("DUSR") was prepared for all data sets, with the exception of the laboratory data used for waste disposal and imported fill approval, and data collected from field instruments. Field instruments were calibrated before use. The primary objective of the DUSR was to determine whether the data, as presented, meets the site/project specific criteria for data quality and data use. Problems with the data were identified and qualified as to their impact on using the data in the RI report.



## **4.0 FINDINGS**

### **4.1 Sample Analysis Results**

The discussion of the sample analysis results is presented in three sections: soil samples, groundwater samples and soil vapor samples. Both on and off-site samples are discussed in each of the discussions, as appropriate. Appendix 3 provides laboratory packages for the soil and debris samples analysis. Appendix 4 provides a copy of the laboratory packages for the groundwater samples analysis

#### **4.1.2 Soil Samples**

Soil samples were collected from the on-site and off-site ground surface and from the subsurface soil materials using soil borings and test pits.

#### **4.1.3 Surface Soil Samples**

Surface soil samples were collected from the interval between 0 and 2 inches bgs at locations shown on Figure 6. The surface soil samples: Surface 1, Surface 7, Surface 8, Surface 9, Surface 10 and Surface 11 were collected within the Tibbits Avenue right of way. Surface soil samples: Surface 2, Surface 12 and Surface 13 were collected within the Cannon Street right of way. The samples collected from locations Surface 1 and Surface 2 were analyzed for TCL VOCs, TCL SVOC, pesticides, herbicides, PCBs and TAL metals plus mercury and cyanide. The other samples collected within the right of ways were analyzed for only PCBs.

The following surface soil samples were collected on-site; Surface 3 and Surface 4, analyzed for the targeted compounds including TCL VOCs; and Composite 1, Surface 5, Surface 6. Samples of debris and soil were collected from around the outside of the Crusher building and Shredder structure and are identified as a Crusher North, Crusher South End, Crusher East, and Shredder East. These samples were analyzed for all of the targeted compounds except VOCs.

Samples of concrete were collected from locations identified as Shredder Pad 1, Shredder Pad 2, and Crusher House (inside the crusher building). These were analyzed for PCBs.

Table 1, 2 and 3 provide the sample analysis results compared to the Unrestricted Use SCO (“UUSCO”), and either the Restricted Residential Use SCOs (“RRSCO”) or the Restricted Industrial Use SCO (“RISCO”).

#### **4.1.4 Off-Site Sample Locations**

The off-site soil samples were primarily taken as surface soils (0 to 2-inches bgs) with the exception of SB-25, which involved the sampling of soil from the ground surface to a depth of 12-feet. Two samples were analyzed from this soil boring.

Table 1 provides the sample results for the off-site soil sample results and Figure 10 shows the locations where samples were found exceeding the RRSCO's.

#### 4.1.4.1 Surface Soil Sample Results

##### *Volatile Organic Compounds*

No volatile organic compounds were found at concentrations which exceeded the UUSCO.

##### *Semi-volatile Organic Compounds*

SVOCs exceeding the UUSCO include the following polynuclear aromatic hydrocarbons ("PAHs") in Surface 2: Benzo(a)anthracene at a concentration of 3.4 mg/Kg; Benzo(a)pyrene at a concentration of 3.5 mg/Kg; Benzo(b)fluoranthene at a concentration of 5.3 mg/Kg; Benzo(k)fluoranthene at a concentration of 1.7 mg/Kg; Chrysene at a concentration of 3.8 mg/Kg; Dibenzo(a,h)anthracene at a concentration of 0.66 mg/Kg; and Indeno(1,2,3-cd)pyrene at a concentration of 2.3 mg/Kg. The UUSCO and RRSCO for Benzo(a)anthracene, Benzo(a)pyrene, and Benzo(b)fluoranthene are both 1.0 mg/Kg. Benzo(k)fluoranthene has an UUSCO of 0.8 mg/Kg and a RRSCO of 1.0 mg/Kg. Chrysene has an UUSCO of 1.0 and a RRSCO of 3.9 mg/Kg, respectively. Dibenzo(a,h)anthracene has an UUSCO and RRSCO concentration of 0.33 mg/Kg. Indeno(1,2,3-cd) pyrene. The UUSCO and RRSCO for Indeno(1,2,3-cd) pyrene is 0.5 mg/Kg.

##### *Pesticides, Herbicides and PCBs*

Pesticides/herbicides found exceeding the UUSCO include the following: Dieldrin in Surface 1 at concentration of 0.00817 mg/Kg; and 4,4-DDT in Surface 1 at a concentration of 0.0207 mg/Kg. In Surface 2, DDT was found at a concentration of 0.0288 mg/Kg. The UUSCO and RRSCO for Dieldrin are 0.005 mg/Kg and 0.2 mg/Kg, respectively. The UUSCO and RRSCO DDT are 0.0033 and 7.9 mg/Kg, respectively.

PCBs were found in 7 of 9 samples exceeding the UUSCO. PCB concentrations ranged from 0.249 mg/Kg in Surface 2 to 1.53 mg/Kg in Surface 11. The UURSCO for PCB is 0.1 mg/Kg and the RRSCO is 1.0 mg/Kg.

##### *Metals*

Metals were found in every sample exceeding the UUSCO. The metals found in the Surface 1 and Surface 2 from the right of way between the Site fence and Tibbits Avenue and Cannon Street, include: Chromium, Copper, Lead, Mercury, Nickel, and Zinc. The following metals were found exceeding the UUSCO off-site:

- Chromium was found exceeding the UUSCO in the samples from Surface 1 at a concentration of 55.0 mg/Kg and Surface 2 at a concentration of 34.0 mg/Kg. The UURSCO for Chromium (Trivalent) 30.0 mg/Kg and the RRSCO is 180 mg/Kg.
- Lead was found exceeding the UUSCO in Surface 1 at a concentration of 700 mg/Kg and in Surface 2 at a concentration of 370 mg/Kg. The UUSCO for Lead is 63.0 mg/Kg and the RRSCO is 400 mg/Kg.

- Copper was found exceeding the UUSCO in Surface 1 at a concentration of 540 mg/Kg and in Surface 2 at a concentration of 340 mg/Kg. The UURSCO for Copper is 50.0 mg/Kg and the RRSCO is 270 mg/Kg.
- Mercury was found exceeding the UUSCO in Surface 1 at a concentration of 1.3 mg/Kg and in Surface 2 at a concentration of 0.87 mg/Kg. The UUSCO for Mercury is 0.18 mg/Kg and the RRSCO is 0.81 mg/Kg.
- Nickel was found exceeding the UUSCO in Surface 1 at a concentration of 53.0 mg/Kg and in Surface 2 at a concentration of 37.0 mg/Kg. The UUSCO for Nickel is 30.0 mg/Kg and the RRSCO is 310 mg/Kg.
- Zinc was found exceeding the UUSCO in Surface 1 at a concentration of 500 mg/Kg and in Surface 2 at a concentration of 280 mg/Kg. The UUSCO for Zinc is 109 mg/Kg and the RRSCO is 10,000 mg/Kg.

The samples collected between the Tibbets Avenue and the Site fence may not be located in the right of way but for the purposes of comparing the results to SCO's these samples were compared to RRSCOs. Surface soil samples collected from Surface 1 and Surface 2 were analyzed for the targeted compounds including VOCs, SVOCs, pesticides, herbicides, PCBs, and TAL metals (including mercury and cyanide). Samples collected at locations Surface 7, Surface 8, Surface 9, Surface 10, Surface 11 and Surface 13 were analyzed for PCBs.

#### **4.1.4.2 Subsurface Soil Sample Results**

One soil boring (SB-25) was completed within the right of way of Cannon Street adjacent to the north end of the Site. Two samples analyzed from this soil boring were analyzed for the complete list of target compounds.

##### ***Volatile Organic Compounds***

No volatile organic compounds were found at concentrations which exceeded the UUSCO.

##### ***Semi-volatile Organic Compounds***

The SVOCs found to exceed the UUSCO include the following PAHs: Benzo(a)anthracene at a concentration of 1.4 mg/Kg; Benzo(a)pyrene at a concentration of 1.3 mg/Kg; Benzo(b)fluoranthene at a concentration of 2.7 mg/Kg; Benzo(k)fluoranthene at a concentration of 0.86 mg/Kg; Chrysene at a concentration of 1.9 mg/Kg; and Indeno (1,2,3-cd)pyrene at a concentration of 1.1 mg/Kg. The UUSCO and RRSCO for Benzo(a)anthracene, Benzo(a)pyrene, and Benzo(b)fluoranthene have UUSCO and RRSCO concentrations of 1.0 mg/Kg. Benzo(k)fluoranthene has an UUSCO of 0.8 mg/Kg and a RRSCO of 1.0 mg/Kg. Chrysene has an UUSCO of 1.0 mg/Kg and a RRSCO of 3.9 mg/Kg. Indeno(1,2,3-cd) pyrene has an UUSCO and RRSCO of 0.5 mg/Kg.

### ***Pesticides, Herbicides and PCBs***

In sample from the 0 to 2-foot interval, only 4,4-DDT was found at a concentration of 0.0259 mg/Kg. 4,4-DDT has a UUSCO of 0.0033 mg/Kg and a RRSCO of 7.9 mg/Kg.

PCBs were found in the sample from the 0 to 2-foot interval at 0.0559 mg/Kg. The UUSCO for PCB is 0.1 mg/Kg and the RRSCO is 1.0 mg/Kg.

### ***Metals***

Copper, lead and mercury were found exceeding the UUSCO in the sample from the 0 to 2-foot sample interval. Lead and mercury were found exceeding the RRSCO.

- Copper was found exceeding the UUSCO at a concentration of 210 mg/Kg. The UUSCO for Copper is 50 mg/Kg and the RRSCO is 270 mg/Kg.
- Lead was found exceeding the UUSCO at a concentration of 460 mg/Kg. The UUSCO for Lead is 63 mg/Kg and the RRSCO is 400 mg/Kg.
- Mercury was found exceeding the UUSCO at a concentration of 0.95 mg/Kg. The UUSCO for Mercury is 0.18 mg/Kg and the RRSCO is 0.81 mg/Kg.

#### **4.1.5 On-Site Sample Locations**

The on-site sample locations are shown on Figure 1 and the results are shown on Tables 2 and 3.

### ***Volatile Organic Compounds***

No VOCs were found in Surface 3 and Surface 4 above the UUSCO.

### ***Semi-volatile Organic Compounds***

No SVOCs exceeding the UUSCO or UISCO were found on the Site in the surface soil samples, although several samples had elevated reporting limits which exceeded the UUSCO.

### ***Pesticides, Herbicides, and PCBs***

No Pesticides, herbicides or PCBs were found exceeding the RIUSCO in the surface soil samples. Endrin was found in Surface 4 and 4 Duplicate and in Surface 6 exceeding the UUSCO concentration of 0.014 mg/Kg. Dieldrin was found to exceed the UUSCO concentration of 0.005 mg/Kg in Surface 3, Surface 4 and Surface 4 Duplicate. DDT was found in Surface 3, Surface 4 and Surface 4 Duplicate exceeding the UUSCO concentration of 0.0033 mg/Kg.

PCB were found to exceed the UUSCO of 0.1 mg/Kg in all of the on-site surface soil samples. None of the samples exceeded the RIUSCO of 25.0 mg/Kg.

### ***Metals***

The following metals were found exceeding the RIUSCO: Arsenic was found in the samples identified as Crusher North at a concentration of 35.9 mg/Kg and in Crusher East Side at 36.8 mg/Kg. Arsenic has a RIUSCO of 16 mg/Kg. Chromium was found in one sample, Crusher

North, at a concentration of 8,490 mg/Kg and has a RIUSCO of 800 mg/Kg. Lead was found in Shredder East at a concentration of 8,200 mg/Kg and has a RIUSCO of 3,900 mg/Kg. Mercury was found in two samples, Crusher North at a concentration of 7.29 mg/Kg and Crusher East at a concentration of 10.7 mg/Kg. Mercury has a RIUSCO of 5.7 mg/Kg. Zinc was found in the sample from Shredder East at a concentration of 10,300 mg/Kg. Zinc has a RIUSCO of 10,000 mg/Kg.

The following metals were found to exceed the UUSCO in the samples identified below:

- Barium, (UUSCO 350 mg/Kg), sample Surface 3, Crusher North, and Shredder East.
- Cadmium, (UUSCO 2.5 mg/Kg), samples Shredder East Side, Crusher North, Crusher East Side, Shredder East, Surface 3, Surface 4, Surface 4 Duplicate, Surface 5, and Surface 6.
- Chromium, (UUSCO 30 mg/Kg), samples Crusher South End and Duplicate, Crusher East Side, Shredder East, Surface 3, Surface 4, Surface 4 Duplicate, Surface 5, and Surface 6.
- Copper, (UUSCO 50 mg/Kg), Crusher North, Crusher South End and Duplicate, Crusher East Side, Shredder East, Surface 3, Surface 4, Surface 4 Duplicate, Surface 5, and Surface 6.
- Lead, (UUSCO 63 mg/Kg), samples Crusher North, Crusher South End and Duplicate, Crusher East Side, Surface 3, Surface 4, Surface 4 Duplicate, Surface 5, and Surface 6.
- Manganese, (UUSCO 1,600 mg/Kg), samples Crusher North and Crusher East Side.
- Mercury, (UUSCO 0.18 mg/Kg), samples Shredder East, Surface 3, Surface 4, Surface 4 Duplicate, Surface 5, and Surface 6.
- Nickel, (UUSCO 30 mg/Kg), samples Crusher North, Crusher East Side, Shredder East, Surface 3, Surface 4, Surface 4 Duplicate, Surface 5, and Surface 6.
- Zinc, (UUSCO 109 mg/Kg), samples Crusher North, Crusher South End and Duplicate, Crusher East Side, Surface 3, Surface 4, Surface 4 Duplicate, Surface 5, and Surface 6.
- Silver, (UUSCO 2 mg/Kg), sample Surface 5.

### ***Tentatively Identified Compounds***

Tentatively identified compounds (“TICs”) were measured in samples analyzed for VOCs and SVOCs. TICs are compounds that include compounds not targeted by the analysis but are identified by the laboratory analytical equipment. The concentrations measured are reported by the laboratory as estimates (“J” qualifier), because the laboratory equipment is not calibrated to quantify the concentration.

Two on-site surface soil samples were analyzed for VOC TICs. TICs were found in the Surface 3 sample at a concentration of 0.0037 mg/Kg. The TICs were labeled as “unknown” and range in estimated concentrations from 0.00378 mg/Kg to 0.0135 mg/Kg. TICs were found in all samples that were analyzed for SVOCs. These TICs were identified as PAHs, Alkanes, Unknown Phenol, Vitamin E or unknowns. The concentrations ranged from 0.288 mg/Kg to 743 mg/Kg PAHs appear to be most common type of compound found.

## **4.2 Subsurface Soil Samples**

### **4.2.1 Soil Borings**

A total of 48 subsurface soil samples were collected for analysis from the soil borings. This data is provided on Table 4 and the samples with exceedances above the UUSCO and RIUSCO are presented on Figure 12.

#### ***Volatile Organic Compounds***

Acetone was the only VOC found that exceeded the UUSCO of 0.05 mg/Kg, acetone exceeded the UUSCO value in 8 samples. None of the acetone results exceeded the RIUSCO.

#### ***Volatile Organic Compound TICs***

Thirty-six samples were found to have detectable concentrations of TICs. Concentrations ranged from below detection limit to a maximum concentration of 313.2 mg/Kg found in sample SB-18 at a depth interval of 10 to 12 feet bgs. Many of the compounds are labeled as “Unknown”, but various alkanes, benzenes and pentanes were found.

#### ***Semi-volatile Organic Compounds***

Twelve samples were found to have SVOCs at concentrations which exceeded the UUSCO. The SVOCs included the following: Hexachlorobenzene, Benzo(a)anthracene; Benzo(a)pyrene; Benzo(b)fluoranthene; Benzo(k)fluoranthene; Chrysene; Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene; Phenol; and 3-Methylphenol/4-Methylphenol. The results for these compounds follow:

- Hexachlorobenzene was found only in the sample from soil boring SB-1 at a depth of 0 to 2-feet at a concentration of 0.53 mg/kg, which exceeds the UUSCO of 0.33 mg/Kg, but is lower than the RIUSCO of 12.0 mg/Kg.
- Benzo(a)anthracene was found in three samples exceeding the UUSCO of 1 mg/Kg. None of these samples exceeded the RIUSCO of 11.0 mg/Kg.
  - The sample from soil boring SB-8 at a depth of 0 to 2-feet bgs had a Benzo(a)anthracene concentration of 2.0 mg/Kg.
  - The sample from soil boring SB-23 at a depth of 0 to 2-feet bgs had a Benzo(a)anthracene concentration of 1.3 mg/Kg.

- Benzo(a)pyrene was found in three samples exceeding the UUSCO of 1.0 mg/Kg. None of these samples exceeded the RIUSCO of 1.1 mg/Kg.
  - The sample from soil boring SB-8 at the depth interval of 0 to 2-feet had a Benzo(a)pyrene concentration of 2.3 mg/Kg.
  - The sample from soil boring SB-23 at the depth of 0 to 2-feet had a Benzo(a)pyrene concentration of 1.5 mg/Kg.
- Benzo(b)fluoranthene was found in three samples exceeding the UUSCO of 1.0 mg/Kg. None of these samples exceeded the RIUSCO of 11.0 mg/Kg.
  - The sample from soil boring SB-8 at the depth of 0 to 2-feet had a Benzo(b)fluoranthene concentration of 3.6 mg/Kg.
  - The sample from soil boring SB-23 at the depth of 0 to 2-feet had a Benzo(b)fluoranthene concentration of 2.1 mg/Kg.
- Benzo(k)fluoranthene was found in two samples exceeding the UUSCO of 0.8 mg/Kg. None of these samples exceeded the RIUSCO of 110 mg/Kg.
  - The sample from soil boring SB-8 at the depth of 0 to 2-feet had a Benzo(k)fluoranthene concentration of 0.98 mg/Kg.
- Chrysene was found in three samples exceeding the UUSCO of 1.0 mg/Kg. None of these samples exceeded the RIUSCO of 110 mg/Kg.
  - The sample from soil boring SB-8 at the depth of 0 to 2-feet had a Chrysene concentration of 2.3 mg/Kg.
  - The sample from soil boring SB-23 at the depth of 0 to 2-feet had a Chrysene concentration of 1.4 mg/Kg.
  - The sample from soil boring SB-25 (Cannon Street right of way) at the depth of 0 to 2-feet had a Chrysene concentration of 1.9 mg/Kg. This value did not exceed the RRSCO of 3.9 mg/Kg.
- Dibenzo(a,h)anthracene was found in the sample from soil boring SB-8 at a depth of 0 to 2-feet at a concentration of 0.44 mg/Kg exceeding the UUSCO of 0.33 mg/Kg. None of these samples exceeded the RIUSCO of 1.1 mg/Kg.
- Indeno(1,2,3-cd)pyrene was found in four samples exceeding the UUSCO of 0.5 mg/Kg. None of these samples exceeded the RIUSCO of 11 mg/Kg.

- The sample from soil boring SB-8 at the depth of 0 to 2-feet had an Indeno(1,2,3-cd)pyrene concentration of 1.7 mg/Kg.
- The sample from soil boring SB-21 at the depth of 2 to 4-feet had an Indeno(1,2,3-cd)pyrene concentration of 0.52 mg/Kg.
- The sample from soil boring SB-23 at the depth of 0 to 2-feet had an Indeno(1,2,3-cd)pyrene concentration of 0.99 mg/Kg.
- Phenol was found in two samples exceeding the UUSCO of 0.33 mg/Kg. None of these samples exceeded the RIUSCO of 1,000 mg/Kg.
  - The sample from soil boring SB-1 at the depth of 0 to 2-feet had a Phenol concentration of 2 mg/Kg.
  - The sample from soil boring SB-23 at the depth of 0 to 2-feet had a Phenol concentration of 1.4 mg/Kg.
- 3-Methylphenol/4-Methylphenol was found in three samples exceeding the UUSCO of 0.33 mg/Kg. None of these samples exceeded the RIUSCO of 1,000 mg/Kg.
  - The sample from soil boring SB-1 at the depth of 0 to 2-feet had a 3-Methylpheno/4-Methylphenol concentration of 1.3 mg/Kg.
  - The sample from soil boring SB-2 at the depth of 2 to 4-feet had a 3-Methylpheno/4-Methylphenol concentration of 0.89 mg/Kg.

***Semi-volatile Organic Compound Tentatively Identified Compounds***

Thirty-four samples were found to have detectable concentrations of SVOC TICs. Concentrations ranged from a few milligrams per kilogram to a maximum concentration of 12,805 mg/Kg found in sample SB-18 at a depth interval of 6 to 8-feet bgs. In sample SB-18 the largest concentrations of TICs were an unidentified compound and a sulfur compound. Many of the compounds are labeled as “Unknown”, but various PAHs, alkanes, naphthalene, benzenes and biphenyl compounds were found.

***Pesticides and Herbicides***

Compounds identified as pesticides and herbicides were found in 10 samples exceeding the UUSCO. None of the results exceeded the RIUSCO.

- Aldrin was found in the sample from soil boring SB-8 at a depth of 0 to 2-feet at a concentration of 0.00569 mg/Kg. The UUSCO for Aldrin is 0.005 mg/Kg and the RIUSCO is 1.4 mg/Kg.



- Endrin was found in two samples exceeding the UUSCO of 0.014 mg/Kg. The RIUSCO is 0.06 mg/Kg.
  - The sample from soil boring SB-17 at the depth of 2 to 4-feet had an Endrin concentration of 0.0191 mg/Kg.
  - The sample from soil boring SB-21 at the depth of 0 to 2-feet had an Endrin concentration of 0.0227 mg/Kg.
- Dieldrin was found in 7 samples exceeding the UUSCO of 0.005 mg/Kg. None were found that exceeded the RIUSCO of 2.8 mg/Kg.
  - The sample from soil boring SB-6 at the depth of 6 to 8-feet had a Dieldrin concentration of 0.012 mg/Kg.
  - The sample from soil boring SB-8 at the depth of 0 to 2-feet had a Dieldrin concentration of 0.00741 mg/Kg.
  - The sample from soil boring SB-9 at the depth of 0 to 2-feet had a Dieldrin concentration of 0.0172 mg/Kg.
  - The sample from soil boring SB-17 at the depth of 2 to 4-feet had a Dieldrin concentration of 0.0207 mg/Kg.
  - The sample from soil boring SB-21 at the depth of 0 to 2-feet and 2 to 4-feet had a Dieldrin concentration of 0.0449 mg/Kg and 0.0156 mg/Kg.
  - The sample from soil boring SB-22 at the depth of 0 to 2-feet had a Dieldrin concentration of 0.0756 mg/Kg.
- 4,4'-DDE was found in the sample from soil boring SB-23 at a depth of 0 to 2-feet at a concentration of 0.0133 mg/Kg. The UUSCO for Aldrin is 0.0033 mg/Kg and the RIUSCO is 120 mg/Kg.
- 4,4'-DDD (“DDD”) was found in 4 samples exceeding the UUSCO of 0.0033 mg/Kg. The RIUSCO is 180 mg/Kg.
  - The sample from soil boring SB-8 at the depth of 0 to 2-feet had a DDD concentration of 0.00525 mg/Kg.
  - The sample from soil boring SB-21 at the depth of 0 to 2-feet had a DDD concentration of 0.0449 mg/Kg and at the depth of 2 to 4-feet at a concentration of 0.0156 mg/Kg.

- The sample from soil boring SB-23 at the depth of 0 to 2-feet had a DDD concentration of 0.00991 mg/Kg.
- 4,4'-DDT (“DDT”) was found in 9 samples exceeding the UUSCO of 0.0033 mg/Kg. None of the samples exceeded the RIUSCO of 94 mg/Kg.
  - The sample from soil boring SB-6 at the depth of 6 to 8-feet had a DDT concentration of 0.00974 mg/Kg.
  - The sample from soil boring SB-8 at the depth of 0 to 2-feet had a DDT concentration of 0.00913 mg/Kg.
  - The sample from soil boring SB-17 at the depth of 2 to 4-feet had a DDT concentration of 0.238 mg/Kg.
  - The sample from soil boring SB-19 at the depth of 4 to 7.5-feet had a DDT concentration of 0.00332 mg/Kg.
  - The sample from soil boring SB-21 at the depth of 0 to 2-feet had a DDT concentration of 0.0355 mg/Kg and at the depth of 2 to 4-feet at a concentration of 0.0929 mg/Kg
  - The sample from soil boring SB-22 at the depth of 0 to 2-feet had a DDT concentration of 0.446 mg/Kg.
  - The sample from soil boring SB-23 at the depth of 0 to 2-feet had a DDT concentration of 0.0499 mg/Kg.

***PCBs***

PCBs were found in 22 samples exceeding the UUSCO of 0.1 mg/Kg out of 48 samples collected. None of the results exceeded the RIUSCO of 25 mg/Kg. The samples exceeding the UUSCO were found at the following locations and depths:

- Soil boring locations 1,2,3,5,7,8,9,14,19,21,22, and 23; all of these samples collected exceeded the PCB UUSCO of 0.1 mg/Kg in the 0 to 2-feet sample depth.
- Soil boring locations 15, 16, 17, and 21; samples collected exceeded the PCB UUSCO of 0.1 mg/Kg in the 2 to 4 feet sample depth.
- Soil boring locations 6 and 19; samples collected exceeded the PCB UUSCO of 0.1 mg/Kg in the 4 to 6 feet sample depth.
- Soil boring locations 6 and 21; samples collected exceeded the PCB UUSCO of 0.1 mg/Kg in the 6 to 8 feet sample depth.

- Location SB 15; samples collected exceeded the PCB UUSCO 0.1 mg/Kg in the 8 to 10-foot sample depth.
- Soil boring locations 6 and 18; samples collected exceeded the PCB UUSCO 0.1 mg/Kg in the greater than 10-foot sample depth.

### ***TAL Metals***

At least one of the metals on the TAL Metals list were found in 22 out of 47 samples at concentrations exceeding the UUSCO, with the exception of Iron. Iron was found to exceed the UUSCO (2,000 mg/Kg) in every sample. Iron does not have an RIUSCO. Exceedances to the RIUSCO were found, but these were limited to two samples with Arsenic and Mercury. Arsenic was found in the sample collected from soil boring SB-23 at a depth of 0 to 2-feet found Arsenic at a concentration of 27 mg/Kg which exceeds the RIUSCO of 16 mg/Kg. Mercury was found in the sample from soil boring SB-22 at a depth of 0 to 2-feet at a concentration of 6.6 mg/Kg, which exceeds the RIUSCO of 5.7 mg/Kg.

- Arsenic was found in samples from the following locations exceeding the UUSCO of 13.0 mg/Kg:
  - SB-2, 0 to 2 feet depth, at a concentration of 14 mg/Kg
  - SB-4, 0 to 2 feet depth, at a concentration of 15 mg/Kg
  - SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 14 mg/Kg
  - SB-23, 0 to 2 feet depth, at a concentration of 27 mg/Kg
- Cadmium was found in eight samples at concentrations exceeding the UUSCO of 2.5 mg/Kg:
  - SB-1, 0 to 2 feet depth, at a concentration of 3.6 mg/Kg
  - SB-2, 0 to 2 feet depth, at a concentration of 16.0 mg/Kg
  - SB-17, 2 to 4 feet depth, at a concentration of 5.5 mg/Kg
  - SB-19, 0 to 2 feet depth, at a concentration of 3.3 mg/Kg
  - SB-21, 0 to 2 feet depth, at a concentration of 3.4 mg/Kg
  - SB-21, 2 to 4 feet depth, at a concentration of 5.4 mg/Kg
  - SB-22, 0 to 2 feet depth, at a concentration of 10.0 mg/Kg
  - SB-23, 0 to 2 feet depth, at a concentration of 5.8 mg/Kg
  - SB-1, 0 to 2 feet depth, at a concentration of 270 mg/Kg
  - SB-2, 0 to 2 feet depth, at a concentration of 240 mg/Kg
  - SB-6, 4 to 6 feet depth, at a concentration of 110 mg/Kg
  - SB-8, 0 to 2 feet depth, at a concentration of 70.0 mg/Kg
  - SB-9, 0 to 2 feet depth, at a concentration of 70.0 mg/Kg

- SB-17, 2 to 4 feet depth, at a concentration of 440 mg/Kg
  - SB-21, 0 to 2 feet depth, at a concentration of 100 mg/Kg
  - SB-21, 2 to 4 feet depth, at a concentration of 79.0 mg/Kg
  - SB-21, 4 to 8 feet depth, at a concentration of 46.0 mg/Kg
  - SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 85.0 mg/Kg
  - SB-22, 0 to 2 feet depth, at a concentration of 180 mg/Kg
  - SB-23, 0 to 2 feet depth, at a concentration of 190 mg/Kg
  - B-1, 0 to 2 feet depth, at a concentration of 850 mg/Kg
  - SB-2, 0 to 2 feet depth, at a concentration of 3,000 mg/Kg
  - SB-4, 0 to 2 feet depth, at a concentration of 82.0 mg/Kg
  - SB-5, 0 to 2 feet depth, at a concentration of 91.0 mg/Kg
  - SB-6, 4 to 6 feet depth, at a concentration of 160 mg/Kg
  - SB-7, 0 to 2 feet depth, at a concentration of 110 mg/Kg
  - SB-8, 0 to 2 feet depth, at a concentration of 890 mg/Kg
  - SB-9, 0 to 2 feet depth, at a concentration of 1,900 mg/Kg
  - SB-10, 6 to 8 feet depth, at a concentration of 2,600 mg/Kg
  - SB-11, 0 to 4 feet depth, at a concentration of 95.0 mg/Kg
  - SB-14, 0 to 2 feet depth, at a concentration of 170 mg/Kg
  - SB-16, 2 to 4 feet depth, at a concentration of 150 mg/Kg
  - SB-17, 2 to 4 feet depth, at a concentration of 280 mg/Kg
  - SB-19, 0 to 2 feet depth, at a concentration of 200 mg/Kg
  - SB-21, 0 to 2 feet depth, at a concentration of 7,900 mg/Kg
  - SB-21, 2 to 4 feet depth, at a concentration of 580 mg/Kg
  - SB-21, 4 to 8 feet depth, at a concentration of 170 mg/Kg
  - SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 190 mg/Kg
  - SB-22, 0 to 2 feet depth, at a concentration of 5,800 mg/Kg
  - SB-23, 0 to 2 feet depth, at a concentration of 680 mg/Kg
- Iron was found in all samples at concentrations exceeding the UUSCO for IRM of 2,000 mg/Kg.
  - Lead was found in 20 samples at concentrations exceeding the UUSCO of 63 mg/Kg:
    - SB-1, 0 to 2 feet depth, at a concentration of 470 mg/Kg

- SB-2, 0 to 2 feet depth, at a concentration of 1,900 mg/Kg
  - SB-4, 0 to 2 feet depth, at a concentration of 340 mg/Kg
  - SB-6, 4 to 6 feet depth, at a concentration of 250 mg/Kg
  - SB-7, 0 to 2 feet depth, at a concentration of 130 mg/Kg
  - SB-8, 0 to 2 feet depth, at a concentration of 2,000 mg/Kg
  - SB-9, 0 to 2 feet depth, at a concentration of 780 mg/Kg
  - SB-14, 0 to 2 feet depth, at a concentration of 270 mg/Kg
  - SB-15, 2 to 4 feet depth, at a concentration of 170 mg/Kg
  - SB-16, 2 to 4 feet depth, at a concentration of 540 mg/Kg
  - SB-17, 2 to 4 feet depth, at a concentration of 490 mg/Kg
  - SB-19, 0 to 2 feet depth, at a concentration of 190 mg/Kg
  - SB-21, 0 to 2 feet depth, at a concentration of 510 mg/Kg
  - SB-21, 2 to 4 feet depth, at a concentration of 870 mg/Kg
  - SB-21, 4 to 8 feet depth, at a concentration of 200 mg/Kg
  - SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 360 mg/Kg
  - SB-22, 0 to 2 feet depth, at a concentration of 1,500 mg/Kg
  - SB-23, 0 to 2 feet depth, at a concentration of 980 mg/Kg
- Manganese was found in two samples at concentrations exceeding the UUSCO of 1,600 mg/Kg:
    - SB-13, 8 to 12 feet depth, at a concentration of 2,000 mg/Kg
    - SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 1,700 mg/Kg
- Mercury was found in 20 samples at concentrations exceeding the UUSCO of 0.18 mg/Kg:
    - SB-1, 0 to 2 feet depth, at a concentration of 0.77 mg/Kg
    - SB-2, 0 to 2 feet depth, at a concentration of 4.0 mg/Kg
    - SB-4, 0 to 2 feet depth, at a concentration of 0.19 mg/Kg
    - SB-6, 4 to 6 feet depth, at a concentration of 0.23 mg/Kg
    - SB-7, 0 to 2 feet depth, at a concentration of 0.31 mg/Kg
    - SB-8, 0 to 2 feet depth, at a concentration of 0.54 mg/Kg
    - SB-9, 0 to 2 feet depth, at a concentration of 0.71 mg/Kg
    - SB-11, 0 to 4 feet depth, at a concentration of 0.51 mg/Kg

- SB-14, 0 to 2 feet depth, at a concentration of 2.1 mg/Kg
  - SB-15, 2 to 4 feet depth, at a concentration of 0.43 mg/Kg
  - SB-16, 2 to 4 feet depth, at a concentration of 0.8 mg/Kg
  - SB-17, 2 to 4 feet depth, at a concentration of 1.2 mg/Kg
  - SB-19, 0 to 2 feet depth, at a concentration of 0.33 mg/Kg
  - SB-21, 0 to 2 feet depth, at a concentration of 3.1 mg/Kg
  - SB-21, 2 to 4 feet depth, at a concentration of 3.1 mg/Kg
  - SB-21, 4 to 8 feet depth, at a concentration of 0.28 mg/Kg
  - SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 0.79 mg/Kg
  - SB-22, 0 to 2 feet depth, at a concentration of 6.6 mg/Kg
  - SB-23, 0 to 2 feet depth, at a concentration of 1.5 mg/Kg
- Nickel was found in 12 samples at concentrations exceeding the UUSCO of 30.0 mg/Kg:
    - SB-1, 0 to 2 feet depth, at a concentration of 160 mg/Kg
    - SB-2, 0 to 2 feet depth, at a concentration of 280 mg/Kg
    - SB-6, 4 to 6 feet depth, at a concentration of 60 mg/Kg
    - SB-8, 0 to 2 feet depth, at a concentration of 66 mg/Kg
    - SB-9, 0 to 2 feet depth, at a concentration of 53 mg/Kg
    - SB-14, 0 to 2 feet depth, at a concentration of 50 mg/Kg
    - SB-17, 2 to 4 feet depth, at a concentration of 79 mg/Kg
    - SB-19, 0 to 2 feet depth, at a concentration of 200 mg/Kg
    - SB-21, 0 to 2 feet depth, at a concentration of 89 mg/Kg
    - SB-21, 2 to 4 feet depth, at a concentration of 51 mg/Kg
    - SB-21, 4 to 8 feet depth, at a concentration of 32 mg/Kg
    - SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 61 mg/Kg
    - SB-22, 0 to 2 feet depth, at a concentration of 170 mg/Kg
    - SB-23, 0 to 2 feet depth, at a concentration of 180 mg/Kg
  - Silver was found in two samples at concentrations exceeding the UUSCO of 2 mg/Kg:
    - SB-2, 0 to 2 feet, at a concentration of 2.3 mg/Kg
    - SB-22, 0 to 2 feet, at a concentration of 2.7 mg/Kg
  - Zinc was found in 16 samples at concentrations exceeding the UUSCO of 109 mg/Kg:

- SB-1, 0 to 2 feet depth, at a concentration of 1,200 mg/Kg
- SB-2, 0 to 2 feet depth, at a concentration of 5,000 mg/Kg
- SB-6, 4 to 6 feet depth, at a concentration of 280 mg/Kg
- SB-7, 0 to 2 feet depth, at a concentration of 220 mg/Kg
- SB-8, 0 to 2 feet depth, at a concentration of 480 mg/Kg
- SB-9, 0 to 2 feet depth, at a concentration of 490 mg/Kg
- SB-14, 0 to 2 feet depth, at a concentration of 260 mg/Kg
- SB-16, 2 to 4 feet depth, at a concentration of 430 mg/Kg
- SB-17, 2 to 4 feet depth, at a concentration of 490 mg/Kg
- SB-19, 0 to 2 feet depth, at a concentration of 360 mg/Kg
- SB-21, 0 to 2 feet depth, at a concentration of 970 mg/Kg
- SB-21, 2 to 4 feet depth, at a concentration of 490 mg/Kg
- SB-21, 4 to 8 feet depth, at a concentration of 310 mg/Kg
- SB-21 Duplicate, 4 to 8 feet depth, at a concentration of 240 mg/Kg
- SB-22, 0 to 2 feet depth, at a concentration of 3,600 mg/Kg
- SB-23, 0 to 2 feet depth, at a concentration of 1,200 mg/Kg

#### **4.2.2 Berm Test Pit Samples**

A total of 13 samples were collected from test pits, see Figure 13 for the sample locations. Each sample was analyzed for all of the target compounds. Table 5 provides the sample results compared to UUSCO and RIUSCO. Appendix 2 provides a copy of the test pit logs prepared for the berm sampling locations.

##### ***Volatile Organic Compounds***

No VOCs were identified at a concentration above the UUSCO. Generally, since the UUSCO is the strictest of the SCOs, none of the targeted VOCs exceeded the SCOs.

##### ***Volatile Organic Compound Tentatively Identified Compounds***

Thirteen samples were found to have detectable concentrations of TICs. The concentrations ranged from a few ug/Kg to a maximum concentration of 53.3 ug/Kg found in sample Berm 6. Many of the compounds are labeled as “Unknown”, but several samples contained various pentanes.

##### ***Semi-volatile Organic Compounds***

SVOCs found in the berm samples which exceeded SCOs included the following: Benzo (a) anthracene; Benzo (a) pyrene; Benzo (b) fluoranthene; Benzo (k) fluoranthene; Chrysene; Indeno (1,2,3-cd) pyrene and Dibenzo (a,h) anthracene. These SVOCs exceeded the UUSCO's but were found at concentrations below the RIUSCO in berm samples Berm 2, Berm 6, Berm 9 and Berm 11, with the following exceptions. In berm sample Berm 11, Benzo (a) pyrene was found at a concentration of 2.3 mg/Kg which exceeds the RIUSCO of 1.1 mg/Kg and Benzo (k) fluoranthene was found at a concentration of 0.96 mg/Kg, which exceeds the UUSCO concentration of 0.8 mg/Kg. Phenol was found in the sample Berm 2 at a concentration of 0.61, which is greater than the UUSCO concentration of 0.33 mg/Kg but below the RIUSCO of 1,000 mg/Kg.

##### ***SVOC TICs***

Thirteen samples were found to have detectable concentrations of TICs. The concentrations ranged from 0.688 mg/Kg to a maximum concentration of 72 mg/Kg found in sample Berm 11. Many of the compounds were labeled as “Unknown”, but some samples were identified as unknown alkane, biphenyl, PAHs or naphthalene.

##### ***Pesticides and Herbicides***

Dieldrin was found in samples from berm sample locations Berm 2, Berm 3, and Berm 12 at concentrations greater than the UUSCO concentration of 0.005 mg/Kg, but all samples were below the RIUSCO concentration of 2.8 mg/Kg. DDT was found in berm sample Berm 12 at concentrations greater than the UUSCO of 0.0033 mg/Kg but less than the RIUSCO concentration of 1.7 mg/Kg. DDD was also found in the berm samples Berm 4, Berm 5 and Berm 12 at concentrations, which exceeds the UUSCO concentration of 0.0033 mg/Kg, but they were lower than the RIUSCO concentration of 1.7 mg/Kg.



### ***PCBs***

The total concentration of PCBs in each of the berm samples was found to exceed the UUSCO concentration of 0.1 mg/Kg. The total concentration of PCB in berm sample Berm 10 was found at 41.4 mg/Kg, which is the only exceedance of the RIUSCO concentration of 25.0 mg/Kg.

### ***TAL Metals***

At least one TAL metal was identified in all berm samples at concentrations greater than UUSCO. Mercury was found in one sample, Berm 13 at a concentration of 82 mg/Kg, which exceeded the RIUSCO of 5.7 mg/Kg. No other elements exceeded the RIUSCOs.

### ***Cyanide***

Cyanide was not found at concentrations exceeding the UUSCO concentration of 27 mg/Kg in any of the berm samples. The cyanide concentrations in the berm samples ranged from less than 0.27 mg/kg to 1.4 mg/Kg.

#### **4.2.3 Mound Test Pit Samples**

Three test pits were excavated, and soil samples were screened with a PID and submittal for chemical analysis. The sample locations are shown on Figure 12. Representative samples from the test pits were screened immediately after the soil was placed on plastic sheeting. A portion of the excavated soil was also placed in a plastic sandwich bag and brought indoors to increase the soil temperature to approximately 70-degrees Fahrenheit (“F”), when it was screened again with a PID. The sample results are provided on the test pit logs located in Appendix 2.

Soil samples from the test pits were analyzed for the full suite of analysis: TCL VOCs + TICs, TCL SVOC + TICs, pesticides and herbicides, PCBs, cyanide, mercury and TAL metals. The sample results are compared on Table 6 to UUSCO and RIUSCOs.

#### ***Volatile Organic Compounds***

Acetone and 2-Butanone were found at concentrations exceeding the UUSCO but did not exceed the RIUSCOs. Acetone was found at concentrations exceeding the UUSCO of 0.05 mg/Kg in the following samples: test pit TP-1, at a depth of 0 to 1-foot bgs at a concentration of 0.086 mg/Kg; test pit TP-2, at a depth of 0 to 1-foot bgs at a concentration of 0.06 mg/Kg; and in test pit TP-3, at a depth of 5 to 7-feet bgs at a concentration of 0.17 mg/Kg.

#### ***Volatile Organic Compounds TICs***

All mound test pit samples contained TICs. The TIC concentrations ranged from 0.00586 mg/Kg to 2.469 mg/Kg. The TIC’s found included those labeled as “Unknown”, 1,1-Difluoroethane, Tridecane, Dimethyl sulfide, Hexamethyl-cyclotrisiloxane, 1-Pentene and those identified as Unknown; Alkane, Benzene, Aromatic, Naphthalene, and others.

### ***Semi-volatile Organic Compounds***

The PAH's were found at concentrations exceeding the UUSCO, but none were found to exceed the RIUSCO. Those PAHs found exceeding the UUSCO include: Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene and Indeno(1,2,3-cd)pyrene. Benzo(a)anthracene was found in the samples from test pit TP-1, at a depth of 3 to 4 feet bgs at a concentration of 1.4 mg/Kg; at test pit TP-2, at a depth of 5 to 7-feet bgs at a concentration of 1.2 mg/Kg; and at test pit TP-3 at a depth of 0 to 2 feet bgs at a concentration of 1.4 mg/Kg. The UUSCO for Benzo(a)anthracene is 1 mg/Kg.

Benzo(a)pyrene was found in the samples from test pit TP-1, at a depth of 3 to 4 feet bgs at a concentration of 1.4 mg/Kg; at test pit TP-2, at a depth of 5 to 7-feet bgs at a concentration of 1.0 mg/Kg; and at test pit TP-3 at a depth of 0 to 2-feet bgs at a concentration of 1.2 mg/Kg. The UUSCO for Benzo(a)pyrene is 1.0 mg/Kg.

Benzo(b)fluoranthene was found in the samples from test pit TP-1, at a depth of 0 to 1-feet bgs and at a depth 3 to 4-feet bgs at a concentration of 1.3 and 2.0 mg/Kg, respectively; at test pit TP-2, at a depth of 5 to 7-feet bgs at a concentration of 1.5 mg/Kg; and at test pit TP-3 at a depth of 0 to 2-feet bgs at a concentration of 2.0 mg/Kg. The UUSCO for Benzo(b)fluoranthene is 1.0 mg/Kg.

Chrysene was found in the samples from test pit TP-1, at a depth of 3 to 4-feet bgs at a concentration of 1.2 mg/Kg; at test pit TP-2, at a depth of 5 to 7-feet bgs at a concentration of 1.1 mg/Kg; and at test pit TP-3 at a depth of 0 to 2-feet bgs at a concentration of 1.4 mg/Kg. The UUSCO for Chrysene is 1 mg/Kg.

Indeno(1,2,3-cd)pyrene was found in the samples from test pit TP-1, at a depth of 3 to 4-feet bgs at a concentration of 1 mg/Kg; at test pit TP-2, at a depth of 5 to 7-feet bgs at a concentration of 0.72 mg/Kg; and at test pit TP-3 at a depth of 0 to 2-feet bgs at a concentration of 0.89 mg/Kg. The UUSCO for Indeno (1,2,3-cd) pyrene is 0.5 mg/Kg.

### ***Semi-volatile Organic Compounds TICs***

Eight out of the nine samples analyzed contained TICs. The TIC concentrations ranged from 0.0 mg/Kg to 16.974 mg/Kg found in the sample from test pit TP-2 at a depth of 5 to 7-feet bgs. The TIC's found included those labeled as "Unknown" and those Unknown compounds such as; Alkane, Benzene, Biphenyl, Phenol, PAH, Naphthalene and Organic Acid.

### ***Pesticides and Herbicides***

Dieldrin was the only compound exceeding the UUSCO of 0.005 mg/Kg. Dieldrin was found in the sample from test pit TP-3 at a depth of 0 to 2 feet bgs at a concentration of 0.0179 mg/Kg. None of the samples exceeded the pesticides and herbicides RIUSCO.

### ***PCBs***

PCBs were identified in six out of eight mound test pit samples at concentrations exceeding the UUSCO of 0.1 mg/Kg (the total concentration of PCB found). PCBs were not found in the samples above the RIUSCO of 25.0 mg/Kg. PCBs were found in the samples from test pit TP-1,

at 5.12 mg/Kg a depth of 0 to 1 foot bgs and at 9.38 mg/Kg a depth of 3 to 4 feet bgs at test pit TP-2, at a depth of 0 to 1 foot at a concentration of 0.2 and at the depth of 5 to 7 feet at 4.37 mg/Kg, respectively; and at test pit TP-3 at 2.15 mg/Kg a depth of 0 to 2 feet and at 0.276 mg/Kg at 5 to 7 feet bgs.

### ***TAL Metals***

TAL Metals were found in every mound test pit sample at concentrations exceeding the UUSCO, but none of the metals were found in any of the samples at concentrations greater than the RIUSCO. The sample from test pit TP-3 at a depth of 7 to 9 feet bgs did not have any exceedances.

- Arsenic was found in one sample, test pit TP-1 at a depth of 3 to 4 feet bgs at a concentration of 15.9 mg/Kg. The UUSCO for Arsenic is 13 mg/Kg and the RIUSCO is 16 mg/Kg.
- Cadmium was found in one sample, test pit TP-1 at a depth of 3 to 4 feet bgs at a concentration of 3.61 mg/Kg. The UUSCO for Cadmium is 2.5 mg/Kg.
- Chromium was found in four out of eight samples exceeding the UUSCO of 30 mg/Kg
- Copper was found in five out of eight samples exceeding the UUSCO of 50 mg/Kg
- Iron was found in six out of eight samples exceeding the UUSCO of 2,000 mg/Kg
- Lead was found in five out of eight samples exceeding the UUSCO of 63 mg/Kg
- Mercury was found in five out of eight samples exceeding the UUSCO of 0.18 mg/Kg
- Nickel was found in three out of eight samples exceeding the UUSCO of 30 mg/Kg
- Zinc was found in five out of eight samples exceeding the UUSCO of 109 mg/Kg

#### **4.2.4 Groundwater Sample Analysis Results**

Groundwater samples were collected from soil borings (using temporary monitoring wells penetrating the water table) and monitoring wells placed in the groundwater zone. The samples collected from the soil borings/temporary monitoring wells analyzed for TCL VOCs, with minimal well development. The objective of these “grab” samples was to provide additional information on the extent of groundwater contamination across the Site and perhaps assist in the delineation of the extent of contamination.

Leader collected samples from monitoring wells after developing the monitoring well screen and purging the wells prior to sampling. During the collection of the monitoring well samples, field parameters were measured and used as an indicator to determine when a representative sample of the groundwater zone could be collected. Samples from monitoring wells were collected on February 1<sup>ST</sup> and 2<sup>nd</sup>, 2017 and February 6<sup>th</sup> and 7<sup>th</sup>, 2019. All samples collected in 2017 from monitoring wells were analyzed for the complete suite of TCL and TAL analytes including pesticides, herbicides, PCBs, mercury and cyanide. Those samples collected in 2019 were analyzed for these compounds plus three samples were also analyzed for the NYSDEC emerging contaminants PFAS and 1,4-Dioxane. The groundwater sample results are shown on Tables 7 and 8. Table 9 provides the groundwater elevations and field parameter test results collected during the sampling. Grab sample locations and monitoring well locations are shown on Figure 14. Appendix 4 is a copy of the laboratory packages for the groundwater sample analysis.

#### **4.2.5 Water Grab Sample Results**

The results of the grab samples analyzed for VOCs are shown on Table 7 and compared to the NYSDEC TOGS ambient groundwater criteria. As Table 7 shows, two compounds were found at concentrations that exceed TOGS:

- Acetone was found in one sample from soil boring SB-10 at a concentration of 540 micrograms per liter (“µg/L”). The TOGS groundwater quality criteria for Acetone is 50 µg/L. Acetone was found in 8 of the 9 samples analyzed.
- Benzene was found at a concentration of 0.96 µg/L in the sample from soil boring SB-21. Benzene has TOGS groundwater quality criteria of 0.7 µg/L.

Other compounds found but below TOGS include: Trichlorofluoromethane, found in one sample at a concentration of 3.2 µg/L; Vinyl Chloride, found in one sample at a concentration of 0.4 µg/L; Methyl-tert Butyl Ether (“MTBE”), found in four samples at concentrations ranging from 1.3 to 3.2 µg/L; Dichlorofluoromethane, found in one sample at a concentration of 2.3 µg/L; and 2-Butanone, found in one sample at a concentration of 4.1 µg/L.

#### **4.2.6 Monitoring Well Groundwater Sample Analysis Results**

##### **2017 Groundwater Sample Analysis Results**

The February 2017, groundwater monitoring well samples were collected and analyzed for the complete suite of organic and inorganic compounds. These results are shown on Table 8. The results are discussed below:

##### ***Volatile Organic Compounds***

Benzene was the only VOC found to exceed the TOGS groundwater quality criteria. Benzene was found in three samples ranging in concentration from 0.19 to 4.9 µg/L. The highest concentration of Benzene was found in the sample from monitoring well MW-4.

MTBE was found in 5 of the 10 samples (MTBE was also found in the duplicate sample). The concentrations ranged from 1.9 to 9.8 µg/L. The TOGS criteria is 10 µg/L. The highest concentration was found in the sample from monitoring well MW-4.

The following VOCs were also found:

- Acetone was found in 3 of the 10 samples at concentrations ranging from 1.5 to 2.5 µg/L;
- Vinyl Chloride was found in 3 of the 10 samples at concentrations ranging from 0.46 to 0.87 µg/L;
- Benzene was found in 3 of the 10 samples at concentrations ranging from 0.19 and 0.54 µg/L;
- Chlorobenzene, Chloroethane, 1,4-Dichlorobenzene, m&p Xylene, 2-Butanone, and Cyclohexane were each found once.

#### ***Volatile Organic Compound TICs***

TICs were identified during the VOC analysis and were found in four samples: monitoring well MW-4 at a concentration of 96.5µg/L; monitoring well MW-5 at a concentration of 10.63 µg/L; monitoring well MW-7 at a concentration of 4.62 µg/L and monitoring well MW-8 at a concentration of 25.53 µg/L. All of these concentrations were identified by the laboratory PAHs as estimates with a “J” qualifier. J indicates the compound is found above the method detection limit, but below the laboratory reporting limit. None of the TICs are not a part of the routine analysis; therefore, the laboratory does not have their equipment is calibrated to quantify these concentrations, hence the J qualifier. There are no TOGS guidance values or standards for TICs.

#### ***Semi-volatile Organic Compounds***

SVOCs found at concentrations exceeding TOGS were limited to those and include the following: Benzo (a) anthracene; Benzo (a) pyrene; Benzo (b)fluoranthene; Benzo (k) fluoranthene; Chrysene; and Indeno (1,2,3-cd) pyrene. The concentration of the other SVOCs did not exceed their TOGS. PAH exceedances were found in samples from monitoring wells MW-4, MW-6 and MW-8.

- Benzo (a) anthracene was found in 3 of 10 samples at concentrations ranging from 0.04 to 0.1 µg/L, with the highest concentration found in the sample from monitoring well MW-8.
- Benzo (a) pyrene was found in the sample from monitoring well MW-8 at a concentration of 0.11µg/L.
- Benzo (b)fluoranthene was found in 3 of 10 samples at concentrations ranging from 0.02 to 0.18 µg/L, with the highest concentration found in the sample from monitoring well MW-8.

- Benzo (k) fluoranthene was found in the sample from monitoring well MW-8 at a concentration of 0.07 µg/L.
- Chrysene was found in the sample from monitoring well MW-8 at a concentration of 0.13 µg/L.
- Indeno (1,2,3-cd) pyrene was found in the sample from monitoring well MW-8 at a concentration of 0.09 µg/L.

#### ***Semi-volatile Organic Compound TICs***

TICs were identified in 8 of the 10 samples ranging in concentration from 5.07 to 175.49 µg/L. The sample from monitoring well MW-4 found the highest concentration of TICs. The laboratory identified all but one of the TICs as an unknown. The exception to this label is an unknown organic acid found in the samples from monitoring well MW-4 at a concentration of 7.98 µg/L and MW-8 at a concentration of 0.09 µg/L.

#### ***Pesticides and Herbicides***

Heptachlor was the only compound found during this analysis in the sample from monitoring well MW-5 at a concentration of 0.015 µg/L. The TOGS quality criteria for Heptachlor is 0.01 µg/L.

#### ***PCBs***

PCBs (Aroclor 1260) was found in the sample from monitoring well MW-3 at a concentration of 0.046 µg/L, which is below the TOGS quality standard of 0.09 µg/L (the total concentration for all PCBs).

#### ***Metals and Cyanide***

The metals and cyanide that exceeded TOGS quality criteria were limited to three elements: Iron, Manganese and Sodium. Arsenic, although not found at a concentration exceeding TOGS, was found at just below the standard of 25 µg/L at 24.95 µg/L.

Iron was found in every groundwater sample. In the sample from monitoring well PES-2, the concentration was just below the TOGS standard of 300 µg/L at 289 µg/L. The Iron concentrations for all groundwater samples ranged from 289 to 12,100 µg/L. The TOGS standards also require the concentration of Iron be evaluated with the concentration of Manganese; in these cases, although each element may be below the TOGS standard, they also must not exceed 500 µg/L as a combined concentration.

Manganese was found in every sample at a concentration exceeding the TOGS standard of 300 µg/L. The concentrations ranged from 873.3 µg/L to 4,670 µg/L.

Sodium was found in every sample at a concentration exceeding the TOGS standard of 20,000 µg/L. The concentrations ranged from 32,000 µg/L to 158,000 µg/L.

## February 2019 Groundwater Sample Analysis Results

The February 2019 groundwater samples were analyzed for the complete suite of organic and inorganic compounds. The results are shown on Table 8 and discussed below. During this sampling event, monitoring well MW-8 could not be located. The failure to locate monitoring well MW-8 may have been due to recent demolition of the shredder and cyclone structures and the steel or surface gravel covering the monitoring well during the movement of equipment.

### *Volatile Organic Compounds*

MTBE was the most frequently found compound and was found in 4 of the 10 samples analyzed (MTBE was also found in the duplicate sample). The concentrations ranged from 4.8 to 6 µg/L (the TOGS criteria are 10 µg/L). The highest concentration was found in the sample from monitoring well MW-5.

The following VOCs were also found:

- MTBE was found in 4 of the 9 samples at concentrations ranging from 2.5 µg/L to 6 µg/L;
- Vinyl Chloride was found in 1 of the 9 samples at a concentration of 0.3 µg/L, the TOGS concentration is 2 µg/L;
- Benzene was found in 1 of the 9 samples at a concentration of 2.5 µg/L, the TOGS concentration is 1 µg/L;
- Chlorobenzene was found in 1 of the 9 samples at a concentration of 1.8 µg/L, the TOGS concentration is 5 µg/L;
- 1,3-dichlorobenzene was found in 1 of the 9 samples at a concentration of 1.4 µg/L, the TOGS concentration is 5 µg/L;
- 1,4-dichlorobenzene was found in 1 of the 9 samples at a concentration of 5.9 µg/L, the TOGS concentration is 5 µg/L; and
- Cyclohexane was found in 1 of the 9 samples at a concentration of 0.33 µg/L, there is no TOG concentration for Cyclohexane.

### *Volatile Organic Compound TICs*

Volatile organic compound TICs were identified in four samples: MW-2 at a concentration of 1.51 µg/L; MW-3 at a concentration of 4.13 µg/L; MW-4 at a concentration of 43.1 µg/L; and MW-5 at a concentration of 2.43 µg/L. The majority of the TICs were identified as unknowns, but the following compounds were identified: 2-Methyl-butane; 1-Chloro-1-fluoro ethane; and Chlorofluoro methane. There are no TOGS guidance values or standards for TICs.

### *Semi-volatile Organic Compounds*

SVOCs found at concentrations exceeding TOGS were limited to those PAHs with standards of 0.002 µg/L or less and include the following: Benzo (a) anthracene; Benzo (a) pyrene; Benzo (b)fluoranthene; Benzo (k) fluoranthene; Chrysene; and Indeno (1,2,3-cd) pyrene.

Hexachlorobenzene was found in one sample monitoring well MW-2 at a concentration of 0.08 µg/L. The TOGS for Hexachlorobenzene is 0.04 µg/L. The concentration of the identified PAHs and any other SVOCs had concentrations that did not exceed 1.0 µg/L. PAH exceedances were found in samples from monitoring wells MW-2 and MW-4.

- Benzo (a) anthracene was found in 2 of 9 samples at a concentration of 0.06 µg/L in the sample from monitoring well MW-2 and at 0.12 µg/L in the sample from monitoring well MW-4.
- Benzo (a) pyrene was found in 2 of 9 samples at a concentration of 0.05 µg/L in the sample from monitoring well MW-2 and at 0.09 µg/L in the sample from monitoring well MW-4.
- Benzo (b)fluoranthene was found in 2 of 9 samples at a concentration of 0.07 µg/L in the sample from monitoring well MW-2 and at 0.15 µg/L in the sample from monitoring well MW-4.
- Benzo (k) fluoranthene was found in 2 of 9 samples at concentrations of 0.06 in both samples from monitoring wells MW-2 and MW-4.
- Chrysene was found in 2 of 9 samples at a concentration of 0.07 µg/L in the sample from monitoring well MW-2 and at 0.03 µg/L in the sample from monitoring well MW-4.
- Indeno (1,2,3-cd) pyrene was found in the sample from monitoring well MW-8 at a concentration of 0.09 µg/L.

#### ***Semi-volatile Organic Compound TICs***

SVOC TICs were identified in each monitoring well sample samples ranging in concentration from 26.9 to 113 µg/L. TICs were found in the highest concentrations in the sample from MW-4. The majority of the TICs found were identified as unknowns, although the following compounds were identified: Butylated hydroxytoluene, triethyl phosphate, Aldol condensates, Sulfur and Cyclic Octaatomic Sulfur.

#### ***Pesticides and Herbicides***

Heptachlor and 4,4-DDT were the only pesticides/herbicides found in the groundwater samples. Heptachlor was found in the sample MW-1 at a concentration of 0.002 and the sample from NYSDEC monitoring well PES-2 at a concentration of 0.003 µg/L. Heptachlor has a TOGS quality criteria of 0.04 µg/L. Heptachlor was also found in the field blank sample at a concentration of 0.002 µg/L. 4,4-DDT was found in the sample from MW-1 at a concentration of 0.018 µg/L and has a TOGS quality criteria of 0.2 µg/L.



### ***PCBs***

PCBs were found in three samples: MW-4 at a total concentration of 0.584 µg/L; MW-5 at a total concentration of 0.054 µg/L; and NYSDEC monitoring well PES-2 at a concentration of 0.032 µg/L. The field blank sample also had PCBs at a concentration of 0.04 µg/L. The TOGS quality standard for PCBs is 0.09 µg/L (the total concentration for all PCBs). The PCB congeners found included 1242, 1254, and 1260.

### ***Metals and Cyanide***

The exceedances of the metals and cyanide TOGS criteria were in the groundwater samples limited to a few elements: Antimony, Iron, Manganese and Sodium.

Antimony was found in 7 of 9 samples ranging in concentrations from 0.67 to 4.54 µg/L. The TOGS for Antimony is 3.0 µg/L. Antimony was found above the TOGS concentration in the following samples: MW-1, MW-2 and MW6.

Iron was found in every sample except the sample from NYSDEC monitoring well PES-2, where the concentration was below the TOGS standard of 300 µg/L at 126 µg/L. The Iron concentrations for all groundwater samples ranged from 126 µg/L to 24,400 µg/L. TOGS requires the concentration of Iron be evaluated with the concentration of Manganese. In these cases, although each element may be below the TOGS standard, they also must not exceed 500 µg/L as a combined concentration.

Manganese was found in every sample at a concentration exceeding the TOGS standard of 300 µg/L. The concentrations ranged from 354.5 µg/L to 6,262 µg/L.

Sodium was found in every sample at a concentration exceeding the TOGS standard of 20,000 µg/L. The concentrations ranged from 23,600 µg/L to 99,100 µg/L.

### ***Perfluorinated Alkyl Substances (“PFAS”)***

Currently there are no TOGS for PFAS. The concentrations of the various PFAS compounds, including Perfluorooctanoic sulfonic acid (“PFOS”) and Perfluorooctanoic acid (“PFOA”) compounds, found in the three groundwater samples analyzed are shown on Table 8. In general, PFAS were found in all samples including the field blank.

PFAS were found in samples from monitoring wells MW-1 MW-2, and MW-7. The concentration PFOS and PFOA in these samples includes:

- Sample MW-1, PFOS was found at a concentration of 42.9 nanograms per liter (“ng/L”) and PFOA at a concentration of 0.134 ng/L; sample MW-2, PFOS was found at a concentration of 136 ng/L and PFOA at a concentration of 102 ng/L; and sample MW-7, PFOS was found at a concentration of 76.8 ng/L and PFOA at a concentration of 64 ng/L. 1,4-Dioxane found only in the sample from monitoring well MW-7 at a concentration of 0.319 µg/L.

Only two compounds were identified in the field blank PFAS isotope dilution: (N-Methyl Perfluorooctanesulfonamidoacetic Acid (“NMeFOSAA”) at a concentration of 0.395J ng/L and N-Ethyl Perfluorooctanesulfonamidoacetic Acid (“NEtFOSAA”) at a concentration of 0.451J ng/L. The total concentration of PFAS in the field blank sample was below the reporting limit for the analysis. 1,4-Dioxane was not found.

#### 4.2.7 Soil Vapor Sample Results

Three soil vapor samples and one ambient air sample were collected during the field activities. The sampling locations are shown on Figure 1. The sample results are shown on Table 10 and the laboratory package is provided in Appendix 5. All samples were analyzed using USEPA Method TO-15 for volatile organic compounds and collected over a period of approximately 8 hours.

The sample results are present on Table 10. micrograms per cubic meter (“ $\mu\text{g}/\text{M}^3$ ”).

Compared to the ambient air sample, none of the soil vapor samples indicate that cross-contamination was a problem as indicated by a compound found in all samples at similar concentrations (with the exception of Ethanol). Ethanol was found in the ambient air sample at a concentration of  $26.6 \mu\text{g}/\text{M}^3$  and in sample Vapor Point 1 at a concentration of  $25.6 \mu\text{g}/\text{M}^3$ . Ethanol was not found in the other two soil vapor samples and there were no other close compound associations between these two samples. Ethanol and Acetone were found with the highest concentrations. In the ambient air sample; Ethanol was found at a concentration of  $26.6$  and Acetone at  $17.1 \mu\text{g}/\text{M}^3$ . Acetone was found in soil vapor samples Vapor Point 1 and Vapor Point 2 at concentrations of  $299 \mu\text{g}/\text{M}^3$  and  $394 \mu\text{g}/\text{M}^3$ .

The following contaminants are notable:

##### Vapor Point 1

Trichlorofluoromethane at a concentration of  $635 \mu\text{g}/\text{M}^3$ .

Acetone at a concentration of  $299 \mu\text{g}/\text{M}^3$ .

##### Vapor Point 2

Acetone at a concentration of  $394 \mu\text{g}/\text{M}^3$ .

2,2,4-Trimethylpentane at a concentration of  $359 \mu\text{g}/\text{M}^3$ .

Dichlorodifluoromethane at a concentration of  $114 \mu\text{g}/\text{M}^3$ .

##### Vapor Point 3

2,2,4-Trimethylpentane at a concentration of  $11,200 \mu\text{g}/\text{M}^3$ .

Cyclohexane at a concentration of  $157 \mu\text{g}/\text{M}^3$ .

Vinyl Chloride at a concentration of  $153 \mu\text{g}/\text{M}^3$ .

### **4.3 IRM**

On June 12, 2019 Leader began implementing the IRM for the Site. The first phase of the IRM addressed (1) PCB contamination within the Tibbits Avenue right of way, (2) contamination found in Berm sample locations Berm 10 and Berm 13, (3) removal of various pieces of equipment and (4) reshaping and re-vegetating the berms. The second phase of the IRM included the following activities: decommissioning a truck tire wash pit; pressure washing the interior of the former crusher building; scraping residual automotive scrap debris and grease accumulations from concrete surfaces associated with the crusher building/equipment foundations and shredder equipment foundations; and removing automotive scrap debris and contaminated materials from around the crusher building and shredder operation. The IRM Work Plan and Work Plan Modification were approved by NYSDEC on October 23, 2018 and July 26, 2019 respectively and are provided as Appendix 6. The work plans include figures showing the different work areas.

To fulfill its obligation to notify the USEPA of the proposed remedial actions involving PCBs, Leader sent a draft of the IRM Work Plan (October 23, 2018) to USEPA Region II. The IRM Work Plan was submitted to USEPA Region II on July 11, 2018. On November 14 and November 15, 2018, Leader was contacted by USEPA. Leader submitted drawings to USEPA and discussed the project with USEPA, who indicated that comments regarding the IRM would be sent. None were received.

A complete discussion of the results of the IRM activities is provided in the Interim Remedial Measures Construction Completion Report.

### **4.4 Data Usability Report**

Leader prepared data usability reports for all analytical data (provided in Appendix 9). In general, the data was acceptable for use; however, some results were reported as below the laboratory reporting limit (“RL”) but were greater than the applicable SCO. These conditions occurred as a result of a dilution for another compound or matrix interferences. This was most problematic with the test pit samples and in particular the SVOC analysis, when comparing the results to the RRSCOs. Since these were on-Site sample results, the RIUSCO was the applicable SCO criteria for comparison. In these cases, the elevated RL was lower than RIUSCO allowing the data to be used.

### **4.5 Contaminants of Concern**

The COCs were identified by comparing the sample results to the applicable SCO’s or guidance values. The soil sample results from locations within the Site were compared to the; whereas the results from soil samples collected outside the fenced portion of the Site were compared to RRSCOs. Groundwater sample results are compared to the NYSDEC’s TOGS. NYSDOH does not have regulatory or guidance levels for soil vapor sample results. Where there is an

exceedance in groundwater, those compounds were compared to the soil groundwater protection SCOs discussed in Section 4.3.5.

#### **4.6 Off-site Soil Sample Analysis Results**

Off-Site most soil samples were collected from the ground surface and analyzed for PCBs. Four of the samples were analyzed for the entire suite of TCL list organics and inorganics.

##### **4.6.1 Volatile Organic Compounds**

Methylene chloride was the only VOC found. Methylene Chloride was detected at a concentration of 0.016 mg/Kg in Sample Surface 1, below the RUSCO of 100 mg/Kg.

##### **4.6.2 Semi-volatile Organic Compounds**

Seventeen SVOCs were found in the two samples analyzed. The following Table 11 provides the results of these findings.

**TABLE 11**  
**SVOC Identified in Off-Site Surface Soil Samples, Frequency of Detection Over RRSCO**  
**and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over RRSCO	Max. Concentration (mg/Kg)
Acenaphthene	1 out of 2 samples	0 out of 1 samples	0.046
Fluoranthene	2 out of 2 samples	0 out of 2 samples	3.6
Naphthalene	2 out of 2 samples	0 out of 2 samples	0.36
Benzo(a)anthracene	2 out of 2 samples	1 out of 2 samples	3.4
Benzo(a)pyrene	2 out of 2 samples	1 out of 2 samples	3.5
Benzo(b)fluoranthene	2 out of 2 samples	1 out of 2 samples	5.2
Benzo(k)fluoranthene	2 out of 2 samples	0 out of 2 samples	1.7
Chrysene	2 out of 2 samples	0 out of 2 samples	3.8
Acenaphthalene	2 out of 2 samples	0 out of 2 samples	2.7
Anthracene	2 out of 2 samples	0 out of 2 samples	1.4
Benzo(ghi)perylene	2 out of 2 samples	0 out of 2 samples	2.0
Fluorene	1 out of 2 samples	0 out of 1 samples	0.28
Phenanthrene	2 out of 2 samples	0 out of 2 samples	1.1
Indeno(1,2,3-cd)pyrene	1 out of 2 samples	1 out of 1 samples	2.3
Dibenzo(a,h)anthracene	2 out of 2 samples	1 out of 2 samples	0.66
Pyrene	2 out of 2 samples	0 out of 2 samples	4.6
Dibenzofuran	2 out of 2 samples	0 out of 2 samples	0.16
3-Methylphenol/4-Methylphenol	1 out of 2 samples	0 out of 1 samples	0.042

Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene have been identified as COCs because of their exceedances of the RRSCO.

### 4.6.3 Pesticides and Herbicides

Four pesticides were identified in two surface soil samples. See Table 12 below.

**TABLE 12**  
**Pesticides Identified in Off-Site Surface Soil Samples, Frequency of Detection Over RRSCO, and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over RRSCO	Max. Concentration (mg/Kg)
Endrin	1 out of 2 samples	0 out of 1 sample	0.0646
Dieldrin	2 out of 2 samples	0 out of 2 samples	0.193
4,4'-DDE	1 out of 2 samples	0 out of 1 sample	0.000988
4,4'-DDT	2 out of 2 samples	0 out of 2 samples	0.0228

None of the pesticides exceeded the RUSCO so they do not qualify as a COC.

### 4.6.4 PCBs

The soil samples collected from the surface soil sample locations had the following frequency of detecting PCB's. See Table 13 below.

**TABLE 13**  
**PCBs Identified in Off-Site Surface Soil Samples, Frequency of Detection Over RRSCO and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over RRSCO	Max. Concentration in (mg/Kg)
PCB (total concentration)	9 out of 9 samples	2 out of 9 samples	1.53

PCBs are a Site COC, the off-Site soil where PCBs were found was removed as a part of the completed IRM.

#### 4.6.5 Metals and Mercury

Of the 13 TAL metals and Mercury with RRSCOs, two metals and mercury exceeded the RRSCO. See Table 14 below.

**TABLE 14**  
**Metals Identified in Off-Site Surface Soil Samples, Frequency of Detection Over RRSCO and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over RRSCO	Max. Concentration (mg/Kg)
Copper	2 out of 2 samples	2 out of 2 samples	540
Lead	2 out of 2 samples	1 out of 2 samples	700
Mercury	2 out of 2 samples	1 out of 2 samples	1.3

Copper, Lead, and Mercury are COCs. It should be noted that Copper, Lead and Mercury were found in sample Surface 1, a location in the Tibbits Avenue IRM area. As a result, the soil at Surface 1 was removed.

#### 4.7 On-Site Soil Sample Analysis Results

Soil samples were collected from the Site's surface and subsurface soils.

##### 4.7.1 Volatile Organic Compounds

No VOCs were found at concentrations that exceeded the RIUSCO.

##### 4.7.2 Semi-volatile Organic Compounds

Two SVOC's were found in excess of the RIUSCO values. See Table 15 below

**TABLE 15**  
**SVOC Identified in On-Site Surface Soil Samples, Frequency of Detection Over RIUSCO, and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over RIUSCO	Max. Concentration in Units of mg/Kg
Benzo(a)pyrene	47 out of 84 samples	7 out of 47 samples	3.5
Chrysene	48 out of 84 samples	1 out of 48 samples	5.5

Based on the results, Benzo(a)pyrene and Chrysene are COCs.

### 4.7.3 Herbicides and Pesticides

No herbicides or pesticides were at found at concentrations exceeding the RIUSCO.

### 4.7.4 PCBs

PCBs were found in 59 samples, but only one sample contained PCBs at concentrations that exceeded the RIUSCO for total PCBs. The total PCB concentration was 41.6 mg/Kg at sample Berm 10. The PCB RIUSCO is 25 mg/Kg.

Based on this review PCBs are a COC, but it should be noted the IRM soil from the Berm 10 location and the surrounding soil was removed and disposed off-site.

### 4.7.5 Metals and Mercury

Metals and Mercury found in excess of the RIUSCO values included the following in Table 16.

**TABLE 16**  
**Metals Identified in On-Site Surface Soil Samples, Frequency of Detection Over RIUSCO and Maximum Concentration**

<b>Compound</b>	<b>Frequency of Detection</b>	<b>Frequency of Detection Over RIUSCO</b>	<b>Max. Concentration (mg/Kg)</b>
Arsenic	74 out of 84 samples	1 out of 74 samples	27
Mercury	58 out of 84 samples	2 out of 58 samples	82
Zinc	66 out of 84 samples	1 out of 66 samples	12,000

Arsenic, Mercury and Zinc are included as COCs. The soil containing Mercury found at sample location Berm 13 was removed from the Site as a part of the IRM.

### 4.7.6 Cyanide

Cyanide was not found exceeding the RIUSCO values.

## 4.8 Groundwater Sampling Results

Groundwater samples were collected as both grab samples and samples from monitoring wells.



#### 4.8.1 Volatile Organic Compounds

The following compounds were found in samples collected as grab samples.

**TABLE 17**  
**VOC Contaminants Identified in On-Site Groundwater Grab Samples, Frequency of Detection Over TOGS, and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over TOGS	Max. Concentration (µg/L)
Acetone	8 out of 9 samples	1 out of 8 samples	540
MTBE	5 out of 9 samples	1 out of 5 samples	20
Vinyl Chloride	1 out of 9 samples	0 out of 1 sample	0.4
Benzene	1 out of 9 samples	1 out of 1 sample	0.96

Samples from the monitoring wells were collected in February 2017 and in February 2019. The following is a summary of the results from both sampling events.

**TABLE 18**  
**VOC Contaminants Identified in On-Site Groundwater Monitoring Well Samples, Frequency of Detection Over TOGS and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over TOGS	Max. Concentration in Units of µg/L
Acetone	4 out of 19 samples	0 out of 4 samples	22
MTBE	10 out of 19 samples	0 out of 10 samples	9.8
Vinyl Chloride	4 out of 19 samples	0 out of 4 samples	0.87
Benzene	4 out of 19 samples	3 out of 4 samples	4.9
Chlorobenzene	2 out of 19 samples	0 out of 2 samples	1.8
1,4-Dichlorobenzene	2 out of 19 samples	1 out of 2 samples	5.9

Based on this review, the VOC COCs include: Acetone, Benzene, MTBE and 1,4-Dichlorobenzene.

#### 4.8.2 Semi-volatile Organic Compounds

The SVOCs found in the groundwater samples from the February 2017 and 2019 sampling events include the following compounds:

**TABLE 19**  
**SVOC Contaminants Identified in On-Site Groundwater Monitoring Well Samples, Frequency of Detection Over TOGS, and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over TOGS	Max. Concentration (µg/L)
Bis(2-ethyl hexyl)phthalate	2 out of 19 samples	0 out of 2 samples	3.6
Acenaphthene	2 out of 19 samples	0 out of 2 samples	0.58
2-Chloronaphthalene	1 out of 19 samples	0 out of 1 sample	0.03
Fluoranthene	6 out of 19 samples	0 out of 6 samples	0.24
Naphthalene	6 out of 19 samples	0 out of 6 samples	1.0
Benzo(a)anthracene	5 out of 19 samples	5 out of 5 samples	0.12
Benzo(a)pyrene	3 out of 19 samples	3 out of 3 samples	0.11
Benzo(b)fluoranthene	5 out of 19 samples	5 out of 5 samples	0.18
Benzo(k)fluoranthene	3 out of 19 samples	3 out of 3 samples	0.07
Chrysene	3 out of 19 samples	3 out of 3 samples	0.13
Anthracene	11 out of 19 samples	0 out of 11 samples	0.15
Fluorene	5 out of 19 samples	0 out of 5 samples	0.22
Phenanthrene	11 out of 19 samples	0 out of 11 samples	0.55
Indeno(1,2,3-cd)pyrene	3 out of 19 samples	3 out of 3 samples	0.09
Pyrene	5 out of 19 samples	0 out of 5 samples	0.35
Pentachlorophenol	1 out of 19 samples	0 out of 1 sample	0.33
Hexachlorobenzene	1 out of 19 samples	0 out of 1 sample	0.08

The SVOCs (also known as PAHS) include: Benzo(a)anthracene; Benzo(a)pyrene; Benzo(b)fluoranthene; Benzo(k)fluoranthene; Chrysene; Indeno(1,2,3-cd)pyrene; and Pyrene. The SVOCs are identified as groundwater COCs.

### 4.8.3 Pesticides and Herbicides in Groundwater

The pesticides and herbicides found in the analysis results from the February 2017 and 2019 include the following compounds in Table 20.

**TABLE 20**  
**Pesticide and Herbicide in On-Site Groundwater Samples, Frequency of Detection Over TOGS and Maximum Concentrations**

Compound	Frequency of Detection	Frequency of Detection Over TOGS	Max. Concentration (µg/L)
Heptachlor	3 out of 19 samples	0 out of 3 samples	0.015
4,4'-DDT	1 out of 19 samples	0 out of 1 samples	0.018

None of the pesticides and herbicides are identified as groundwater COCs, since there were no exceedances of the TOGS.

### 4.8.4 PCBs

The total concentration of PCBs found in groundwater samples are summarized in the following Table 21:

**TABLE 21**  
**PCBs Identified in On-Site Groundwater Samples, Frequency of Detection Over TOGS and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over TOGS	Max. Concentration in Units of µg/L
PCB (total)	4 out of 19 samples	1 out of 4 samples	0.584

PCBs are identified as a COC in the Site's groundwater.

#### 4.8.5 Metals and Mercury

Twenty-two out of twenty-three metals (and Mercury) analyzed were found in at least one sample at a concentration above the method detection limit. Mercury was the only compound never found. Eighteen of the metals with TOGS groundwater quality criteria were found with exceedances, and include the following on Table 22:

**TABLE 22**  
**Metal in On-Site Groundwater Samples, Frequency of Detection Over TOGS and Maximum Concentration**

Compound	Frequency of Detection	Frequency of Detection Over TOGS	Max. Concentration (µg/L)
Antimony	12 out of 19 samples	3 out of 12 samples	4.55
Iron	19 out of 19 samples	17 out of 19 samples	24,400
Manganese	19 out of 19 samples	19 out of 19 samples	6,262
Sodium	19 out of 19 samples	19 out of 19 samples	158,000

The COC metals identified include the following: Antimony, Iron, Manganese and Sodium.

#### 4.9 Soil Vapor Sample Analysis Results

The soil vapor sample results are shown on Table 10. NYSDOH does not have regulatory or guidance values for soil vapor (or sub-slab) sample results without complimentary indoor air samples. The ambient air sample collected on the same day as the soil vapor samples. Vinyl Chloride was found in the sample from Vapor Point 3 at a concentration of 153 micrograms per cubic meter (“µg/M<sup>3</sup>”). Vinyl Chloride was found in one out of three soil vapor samples above the laboratory reporting limits, but not in the ambient air.

2,2,4-Trimethylpentane was found in two of three soil vapor samples, but not in the ambient air sample. The concentrations of 2,2,4-Trimethylpentane found were greater than other identified contaminants. In addition to 2,2,4-Trimethylpentane, Vinyl Chloride is a soil vapor COC.

##### 4.9.1 Soil Sample Analysis Results Exceeding Groundwater Protection SCOs

The compounds found in the groundwater samples exceeding the TOGS standards were identified as: Acetone, Benzene, 1,4-Dichlorobenzene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)Fluoranthene, Chrysene, Indeno (1,2,3-cd)pyrene, PCB, Antimony, Iron, Manganese, and Sodium. The SCOs for the protection of groundwater

("GWSCO") for these compounds were then compared to the soil sample results. Antimony, Iron, Manganese and Sodium do not have GWSCO.

From the comparison with the GWSCO the following exceedances were found: Acetone, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)Fluoranthene, Chrysene, Indeno (1,2,3-cd)pyrene and PCB. The following compounds are identified as PAHs: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)Fluoranthene, Chrysene, Indeno (1,2,3-cd)pyrene.

#### Surface soil samples

- Surface soil sample locations:
  - PAHs were not found in the samples collected on the Crusher South locations but because of other contamination the analytical method detection limit was raised to a concentration greater than the GWSCO.
  - PCBs were found in the following samples: Surface 4, Surface 5, Surface 6, Crusher North, and Shredder Pad.

#### Subsurface samples

- Berm sample locations:
  - PAHs were found at Berm samples 2, 9, and 11.
  - PCBs were found at Berm samples 2, 3, 4, 7, 9, 10, 11, 12 and 13.
- Test pit sample locations:
  - Acetone was found in samples TP-1 (0-1 ft.) and (3-4 ft.) and TP-2 (5-7 ft.).
  - PAHs were found in samples TP-1 (3-4 ft.), TP-2 (5-7 ft.) and TP-3 (0-2 ft.).
  - PCBs were found in samples TP-1 (0-1 ft.) and (3-4 ft.) and TP-2 (5-7 ft.).
- Soil boring sample locations:
  - Acetone was found in samples SB-1 (0-2 ft.), SB-5 (6-8 ft.), SB-8 (0-2 ft.), SB-9 (0-2 ft.), SB-14 (0-2 ft.) and (12-14 ft.), SB-15 (2-4 ft.), SB-16 (2-4 ft.), SB-17 (2-4 ft.) and (6-8 ft.), SB-18 (4-6 ft.), SB-19 (0-2 ft.), SB-21 (0-2 ft.), SB-21 (2-4 ft.), and SB-23 (0-2 ft.).
  - PAHs were found in samples SB-8 (0-2 ft.), SB-23 (0-2 ft.), and SB-25 (0-2 ft.).
  - PCBs were found in samples SB-1 (0-2 ft.), SB-2 (0-2 ft.), SB-15 (2-4 ft.), SB-17 (2-4 ft.), SB-21 (0-2 ft.), and SB-22 (0-2 ft.).

Leader's investigation found that the presence of soil SVOC and PCB contaminants in the groundwater were limited to near detection limit concentrations and at locations that suggest off-site migration is not occurring, see Figures 14 and 16. Figure 16 shows groundwater elevation contours from measurements collected during the February 2017 groundwater sampling. SVOCs

at concentrations of less than 1.0 µg/L were found in several on-Site monitoring well samples, but not in PES-2, MW-1 or MW-3, indicating impacts at the furthest downgradient monitoring well locations. PCBs were found in the sample collected from PES-2 at a concentration of 0.032 µg/L with a JP qualifier, which indicates the concentration is above the method detection limit (0.032 µg/L) and below the laboratory reporting limit (0.082 µg/L). The P qualifier indicates the relative percent difference (“RPD”), (the difference between the matrix and matrix spike duplicate result), between the two analytical columns was greater than required. The result was found to be acceptable by the third-party data validator. Further complicating the result, the Field Blank sample which is a sample of laboratory-provided distilled water PCBs were found at a similar concentration as found in the sample from PES-2, at a concentration of 0.04µg/L. This suggests minor contamination may be present due to field or laboratory interferences.

An exceedance of the GWSCO is a qualifying criteria for including a contaminant as a COC. Acetone and PAHs are identified as COCs. PCB is not because it is not migrating from the Site. The appearance in the single sample from monitoring well PES-2 is not considered as meeting the criteria for inclusion because the result was below the reporting limit and PCB was also found in a field blank sample.

## **5.0 FATE AND TRANSPORT**

The fate and transport of the COCs involve both the physical and chemical attributes of the media where the COCs are found and the media in which they will be migrating through, as well as the physical and chemical attributes of the COCs. In general, the media involved at the Site includes saturated and unsaturated soil (including miscellaneous fill materials), soil vapor, and groundwater. The COCs include VOCs, SVOCs and metals.

Because the investigation included both on and off-site areas which have different environmental and human health risk receptors, the discussion of COCs should take into account these factors. As presented in the previous sections, the applicable SCOs were identified, which takes these factors into account. The Site COCs identified off-site at concentrations exceeding the RRSCO, include PAHs, PCBs, Copper, Lead and Mercury. Due to the completion of the off-site IRM, PCBs are no longer a COC off-site.

The on-site COCs identified include contaminants found in the soil, soil vapor and groundwater. The COCs found in the soil exceeding the RIUSCO include the following: PAHs, PCBs, Arsenic, Mercury and Zinc. Due to the completion of the on-Site IRM PCBs and Mercury are no longer considered COCs. The COCs found in the soil vapor include Vinyl Chloride and 2,2,4-Trimethylpentane.

### **5.1 Soil Contaminants**

The fate and transport of the COCs in the soil are dependent on the types of contaminants (organic compounds, inorganic compounds and metals, etc.) and the transport mechanisms involved. In general, the fate of the individual COCs is similar, even though they are chemically very different. PAHs (many times associated with petroleum products or combustion by-products) and PCBs are both organic compounds and tend to attach themselves to other organic compounds found in the soil. The relatively large molecular size of these compounds, high octanol-water partition coefficients, and low water solubility make them slow to migrate through the soil and groundwater. If present at a high concentration like that from a spill, the potential for migration increases based on the volume of the spill. There is also potential for the less soluble COCs to form a distinct non-aqueous phase liquid (“NAPL”). An oily sheen on the water surface is an example of a NAPL. PAHs and PCBs also have low vapor pressures, so they are less susceptible to volatilization if exposed to the ambient air or soil gas. Once in the environment they slowly migrate and degrade, and only degrade when specific pH, temperature, moisture, and bio-chemical conditions exist. As a result of these attributes, PAHs and PCBs are persistent and relatively immobile in the soil.

The fate and transport of metals is similar to PAHs and PCBs in that they are also persistent and take special conditions to make them mobile in the environment. Metals are typically not very soluble in water unless the pH of the water or leachate is at an extreme end of the pH spectrum. Assuming the pH allow for the migration of the metal, once the pH of the fluid changes the metals will precipitate out of solution forming a particle or film on another particle of soil or

rock, making them less prone to fluid migration. As a solute, the metals are likely to attach themselves to other metals or ions, for example, sulfide ions, hydroxide ions, silicate ions and calcium carbonate ions. Since the Site's soil is composed of metals and natural substances which provide these attachment ions, metal migration through the soil is often short. This lack of migration appears to be borne out when comparing the results from the surface soil samples, subsurface soil samples and groundwater samples.

There is no pattern of migration to suggest that the soil contaminants are impacting groundwater migrating from the Site (i.e. contaminants found in monitoring well samples from monitoring wells MW-1, MW-3 and PES-2). The February 2018 groundwater sample from PES-2 contained PCBs at a concentration which was below the reporting limit, as indicated by a "J" qualifier and that the Field Blank sample also contained a similar PCB concentration. As such the appearance of PCB does not support the conclusion that PCBs are migrating from the Site.

## **5.2 Groundwater Contaminants**

The COCs identified in the groundwater include VOCs, SVOCs and metals (elements).

The VOCs found in the groundwater include Benzene and 1,4-Dichlorobenzene. Benzene is a relatively mobile contaminant in groundwater, because of its moderate water solubility (compared to other VOCs) and low octanol/water coefficient. Benzene is also highly volatile and easily evaporates into a vapor phase in addition to degrading in the presence of oxygen. As a result, Benzene is less persistent than some other VOCs. In the presence of organic matter, Benzene will readily absorb on to organic rich soil, but once reaching the groundwater zone a plume could develop. Unlike Benzene, 1,4-Dichlorobenzene ("1,4-DCB") is relatively immobile in the groundwater but is also highly volatile. These characteristics make it more susceptible to evaporate and form a vapor phase. 1,4-DCB also readily degrades in groundwater provided oxygen is available. The low water solubility and high octanol/water coefficient suggests 1,4-DCB would rather absorb on to organic matter in the soil than to dissolve and migrate. Benzene and 1,4-DCB are not persistent as some VOCs in the environment, under aerobic conditions.

SVOCs (including PAHs) have a low water solubility and high octanol/water coefficient. As a result, these compounds will absorb on to organic matter and would prefer to stay where they are spilled. The PAHs as a group have a low vapor pressure and thus are not susceptible to evaporation. These factors suggest the compounds are persistent in the environment, but under some aerobic and anerobic conditions PAHs are prone to degradation.

The metals found in the groundwater include Antimony, Iron, Manganese, and Sodium. Iron, Manganese and Sodium are common metals found naturally in groundwater. Sodium may also be present at higher concentrations in shallow groundwater zones because of the use of salt to deice roadways. Antimony was found above the TOGs in the groundwater but Antimony does not have a soil SCO. The fate and transport of Antimony is highly dependent on the oxidation state of the element. Antimony can range from insoluble to highly soluble. The less soluble forms will fix onto soil particulates.



### 5.3 Soil Vapor

The COCs found within the Site's soil vapor include Vinyl Chloride ("VC") and 2,2,4-Trimethylpentane. These contaminants are present in the soil vapor because they have volatilized from soil or groundwater contamination or migrated onto the Site in a vapor phase. VC could be the result of the outgassing of PVC used in vehicles, household goods or PVC containing debris. The COCs in the soil vapor must have a source, from which it migrates through the soil. The migration of both VC and 2,2,4-Trimethylpentane will be limited to the extent of the source (i.e. groundwater plume) and the physics of vapor migration. The migration of soil vapor is dependent on primarily atmospheric pressure and temperature changes to drive the vapor from the source to either the ground surface or a point of lower pressure; i.e. an enclosed house during the heating season where the building's heating system is drawing air from the building and expelling it up the furnace or boiler flue/chimney. The low pressure created in the building draws vapor through the floor or basement slab into the building. The same scenario can develop by the solar heating of the soil and air, and atmospheric pressure changes. If contamination exists in the soil these vapors can migrate. Without these pressure and heating differentials the soil vapor is stagnant. Chemical/physical attributes of the COC are also in play and may retard the migration and promote degradation. In general, these compounds are similar in many aspects, but VC is highly mobile in soil whereas 2,2,4-Trimethylpentane is more apt to fix onto the soil and organic matter. Both are only slightly soluble in groundwater, yet highly volatile. Under aerobic conditions both should degrade.

### 5.4 Exposure Pathways

Exposure pathways are the routes the COCs take from the contaminant source to receptors. The routes include inhalation, ingestion and direct contact. Completed routes of exposure are limited because the contaminated material found in the soil is covered with one foot of gravel (or recycled concrete) beneath pavement or concrete.

The impacted soil found in the berms surrounding the majority of the Site was covered with clean soil. The soils containing PCB and Mercury in excess of the RIUSCO have been removed. Access to the Site is controlled so individuals not associated with the Site cannot create a route of exposure by disturbing the ground surface, which might expose subsurface soils and groundwater. Anyone at the Site must be either be an employee or a permitted visitor on the Site with the permission of the owner. The future use of the Site will be industrial.

The off-site areas including the right of way of the local streets adjacent to the Site are accessible to the general public for walking or bicycling but are not conducive to invasive activities where an exposure would be probable. PCB impacted soils in the off-site areas have been removed. In off-site surface and subsurface soil (Surface 1, Surface 2, and SB-25 locations), PAHs and metals remain that exceed the RRSCO. Concentrations found in these samples are not considered to be Site related and are consistent with the historical uses of the Site area.

### **5.4.1 Inhalation**

The inhalation route of exposure includes the inhalation of ambient air (outdoor) and indoor ambient air. In general, the inhalation of ambient air is not a concern to any receptors because of the dilution of the COCs into the ambient air from the soil vapor. Ambient air impacts have a greater potential to impact utility or construction workers during remediation and new or repair construction in those instances when the workers are in excavations on the Site. Off-site areas do not appear to be at risk since groundwater impacted by VOCs is not migrating off-site and VOCs are not present in the soil at concentrations that pose a risk.

The conditions in the relatively confined space of an excavation may worsen because of the lack of air circulation and the potential for groundwater to be present. When remediation is underway and the ground surface is being disturbed, anyone downwind of the contaminant source could potentially be impacted. These will be relatively short-term events and the conditions can be anticipated and controlled by wetting the material, spraying foam blankets, personal protective equipment, and immediately removing the contaminated material to an off-site disposal location. Post-remediation inhalation concerns will linger for those construction and utility workers entering on-site excavations and trenches. Proper work procedures and personnel protective equipment will significantly reduce health risks associated with the COCs.

The soil vapor may potentially impact the indoor air of any new buildings constructed with basements or floor slabs. Any new building would include an evaluation of conditions and an appropriate design to mitigate those concerns for any worker/employees, as needed. Sub-surface pits for water meters and sewer pumping stations could also be affected by soil vapor infiltrating these spaces, but since these are not occupied spaces and procedures should be put into place to monitor the air quality prior to entry by utility workers, these exposures are considered controlled.

### **5.4.2 Ingestion**

The ingestion of COCs occurs when windborne dust is inhaled, when there is hand to mouth transfer of soil/contaminants, or groundwater is ingested. Most of the soil ingestion scenarios are due to incidents where an individual is exposed to contaminated airborne dust or ingestion of soil because an individual did not wash their hands and face before eating. Until the Site is remediated (removing all sources of soil contamination) the ingestion of windborne dust could potentially impact all receptors if the subsurface soils are exposed. Visitors to the Site during these events could potentially be impacted especially when the soil is dry, and the wind is blowing at a high enough velocity to create windblown dust. Construction workers and utility workers will have a larger risk for exposure because their activities could expose the subsurface soil. All of these potential exposure pathways can be controlled using appropriate soil handling procedures and health and safety safeguards.

Off-site workers, residents and visitors will not have access to the Site before or during remediation thus substantially limiting exposure opportunities. The tree/brush lined Site

perimeter will act to block windblown dust and decrease surface wind velocities. During Site soil disturbance activities, air monitoring will be conducted, and dust mitigation methods will be used to further reduce the chance of dust release events. Workers conducting activities in the right of way along Cannon Street could be at risk, if their work involves disturbing the soil, but work procedures and common sanitation practices (washing hands prior to eating and after work) substantially reduces this risk. Visitors and residents could potentially be impacted during this right of way work, if the soil is left on the ground surface for prolonged periods of time without a covering system. In general, the quality of the soil is such that it poses little risk if an accidental exposure.

The accidental ingestion of groundwater is limited to only those construction workers and utility workers that may have to work in a wet excavation where splashing of the water may occur. Like ambient air impacts, the exposure risk to groundwater can be anticipated and controlled by the use of equipment to remove the groundwater. Also, personnel using personal protective equipment and good hygiene will limit the exposure. In general, the quality of the groundwater is such that it poses little risk if an accidental exposure occurs. Work procedures and common sanitation practices (washing hands prior to eating and after work) substantially reduces this risk.

### **5.4.3 Direct Contact**

Direct contact with the COCs occurs through contact with contaminated media. The direct contact of soil and groundwater scenarios are due to incidents where an individual did not wash after a potential exposure or did not wear the appropriate clothing for the work tasks. Receptors most prone to this sort of impact would include construction and utility workers involved with excavating or handling soil. Workers having direct contact with groundwater are limited to only those construction and utility workers that may have to work in a wet excavation where splashing of the water may result in their skin getting wet. Employees and visitors to the Site would typically not engage in activities which would include contact with the soil or groundwater. Like ambient air impacts, the direct contact exposure risk to contaminated soil or groundwater can be anticipated and reduced with good work practices and proper personal protective equipment.

Off-site residents/visitors would not be engaged in activities in the right of way that would give them a direct exposure risk. Workers and utility workers conducting activities in the right of way will have limited exposure to contaminated material unless the soil is disturbed.

## **6.0 QUALITATIVE RISK ASSESSMENT**

### **6.1 Potential Human Health Risks**

In Section 5, the fate and transport mechanisms and the potential exposure pathways to the targeted receptors was discussed. In this section, the exposed populations will be further reviewed in the context of the existing conditions and those conditions after remediation. The groups using the Site fall into the following categories: On-site – employees, visitors to the Site and construction/utility workers; Off-site – visitors and utility workers. Exposure to Construction workers is not considered an off-site health risk because the street right of way is not an area for new construction. Residents are not considered because no one resides on the off-site right of way areas.

The findings of the potential human health risk analysis are present on Table 23 for the site's current conditions and Table 24 for the Site post remediation.

### **6.2 Health Risk - Current Conditions**

#### **6.2.1 On-Site Human Health Risk**

The potential exposures to COCs are employees, visitors and utility worker to the Site through direct contact, inhalation and ingestion (see Table 23). Employees on the Site do not have risks because their normal work tasks do not involve exposure to soils found bgs where contaminated soils are present. Visitors to the Site will not have direct contact exposure to soil and groundwater. Utility workers have a potential direct contact exposure risk if their work involves disturbing the soil and having an excavation where groundwater may be encountered.

Utility workers in excavations that encounter contaminated soil or groundwater may have exposure risks. Due to the lack of underground utilities entering the contaminated portions of the Site, this risk is small. Employees and visitors do not have risks of inhalation exposures because they will not be entering excavations or exposed to groundwater.

Given the current conditions of the Site, ingestion is the only scenario that could potentially expose employees and visitors to COCs in the soil. For ingestion of soil to be problematic, there would need to be exposed to subsurface soil and wind velocities that lift soil particles from the ground surface. With the completion of the IRM, this route of exposure has been eliminated.

An employee's or visitor's exposure to groundwater is not believed to be a concern.

## **6.2.2 Off-site Human Health Risk**

Risks associated with off-site areas are limited to utility workers that will be conducting activities in the right of way where contaminated soils, have been identified. Residents/visitors to the right of way along Cannon Street, have limited exposure, since under normal conditions there is no exposed soil for direct contact or ingestion. Ingestion could potentially occur and impact residents and visitors, if utility workers create piles of excavated soil to remain exposed for periods of time where windblown dust could be created. Due to the limited contaminated soil in the right of way, this has a low probability for occurring.

The risks to those off-site involve the ingestion of airborne dust (soil) and direct contact to contaminated soil for off-site utility workers. The exposure risks associated with groundwater are not considered given that no contaminated groundwater is flowing off-site.

The risks of ingestion and direct contact exposure to utility workers are limited because of the small amount of contamination found in the off-site areas (locations Surface 2 and SB-25). The risk is further reduced if the workers follow proper health and safety procedures and common sanitation practices (washing hands prior to eating and after work).

## **6.3 Health Risks - Post Remediation Risk**

This section discusses the risks to the various groups once remediation has been completed. Table 24 summarizes the discussion.

No other remediation at the Site is required for the continued use of the property use for industrial purposes. For any modification or new buildings/structures an evaluation is required by the SMP to determine if contaminated soil or groundwater will be encountered, the generation of soil waste requiring off-site disposal, and regarding the risk of vapor intrusion and this may require the adding sub-slab venting systems.

The remediation was concluded following the IRM Work Plan. Any future work would be conducted following the SMP and notification to the NYSDEC and NYSDOH. Post remediation risks would be associated with activities involving disturbing the subsurface soil; inhalation, ingestion and direct contact. These exposures can be mitigated by following the SMP and having an activity specific health and safety plan.

The off-site exposure risks will not change, because the IRM effort off-site has been completed with the removal of PCB contaminated soil. The Site's SMP will be provided to The Town and will be notified of any further land use/deed restrictions. The SMP will identify the on site and off the soil contamination exists. The Town can alert utility contractors or employees of the potential risks based on the work to be completed.

## 6.4 Fish and Wildlife Assessment

The Site has been the location of industrial activities since before 1900 when the Site was a railroad yard. During the 1950's the Site was used as a scrap yard while surrounding areas were railroad yards, a Ford Motor Company manufacturing plant and a Honeywell manufacturing plant. The Hudson River is located approximately 400-feet east of the Site. Between the Site and the river is the Ford Motor Company's property. There are no outfalls or direct connections from the Site to the Hudson River.

Because of the proximity to local waterways, the Site is located within a FEMA flood hazard area with a 1-percent chance of annual flooding, see Figure 17. Because of the Site's location relative to the Hudson and Mohawk Rivers, the NYSDEC identifies the Site as being adjacent to an ecologically sensitive area, see Figure 18. There are no wetlands, woodlands or meadow areas on the Site. Based on the geography and use of the Site and surrounding area, a comparison to ecological SCOs is not warranted. This is also supported by the lack of a pathway from the Site for surface soil contaminants to migrate off Site. Contaminants from the Site are not migrating off-site in the groundwater.

To show the limited impact the Site has on the environmental and ecological resources, Appendix 3C "Fish and Wildlife Resources Impact Analysis Decision Key" was completed and is presented as Appendix 10. Based on this assessment of the river, fish, and wildlife, the Site in its current condition has no route for the contamination to migrate off-site; therefore, the Site does not represent an impact to the fish and wildlife. Off-site impacted soil may be the result of prior uses of those properties or the road reconstruction done on Cannon Street.

## **7.0 SITE CONCEPTUAL MODEL**

A conceptual model (“CM”) incorporates four important characteristics Site: the current use of the Site, physical attributes, extent of contamination, and routes of exposure to receptors in the area. The CM is used to evaluate the impacts to human and environmental health from which remedial alternatives can be developed and evaluated. Each of the four elements of the CM are described in the following sections some of which are summaries of previous discussions.

### **7.1 Summary of Current Use and Physical Attributes**

The Site is currently used to store roll-off dumpsters, as a location for trucks servicing EMR’s local accounts and a garage to conduct minor truck maintenance.

The Site covers approximately 10-acres and has five buildings/structures: a steel-sided garage used for truck maintenance, a steel-sided warehouse which is not used, an un-used office building (manufactured building/trailers), and three concrete block buildings, which are no longer being used. Two of the concrete buildings were formerly used as a part of the Site’s scrap processing equipment operation. The third building is vacant and has not been since EMR acquired the Site.

The Site is accessed from Cannon Street by concrete and asphalt driveways, which direct traffic to either the warehouse or to the north end of the Site where scrap sorting and processing was once conducted. This area of the Site is now used for roll-off container storage and the garage.

In addition to the asphalt and concrete surfaces, the remainder of the Site is covered with washed gravel and recycled concrete to a depth of approximately 12-inches, with the exception of an area on the east side of the Site between the garage and warehouse buildings. Surrounding all but the northeast side of the Site is an earthen berm that is 8 to 14 feet above the ground surface. On the west side of the Site the berm merges into the adjacent ground surface, which in some locations is higher than the Site and berm elevation. The berm is covered with vegetation.

Below the ground cover, the Site soils consist of a layer of fill ranging in depth from 1 to 12 feet bgs. The fill consists of stone, miscellaneous soils, and automotive scrap debris. The fill is the thickest in the vicinity of the former turnstile/mound area which rises approximately 5 feet over the ground surface. The native soils in the Site area consist of silts, sands and gravels. The water table is found at a depth of approximately 5-feet bgs.

### **7.2 Extent of Contamination**

The contamination at the Site is defined as contaminant concentrations exceeding the RIUSCO’s. The contamination was found in the berm soils, residuals around the former stationary equipment, and in shallow soils below the Site. Some of these contaminated soils were addressed as a part of the IRM of the berm soil and the surface soils around the former stationary equipment (the crusher and shredder equipment foundations). The remaining shallow soil

impacts involve the presence of Benzo (a) pyrene, Arsenic, Zinc and Mercury. Eight locations are impacted, see Figure 12.

The groundwater impacts most commonly found are Iron, Manganese, Sodium and some PAHs and VOCs (Acetone, Benzene and MTBE) found in monitoring wells on the north and northwest sides of the Site. None of these contaminants, with the exception of Iron, Manganese and Sodium, appear to be migrating from the Site. Iron, Manganese and Sodium are present in groundwater up-gradient and down-gradient of the Site. These metals are not related to an on-site source of contamination (see Figures 14 and 16).

The soil vapor samples collected on the Site contained petroleum-related constituents Benzene, Toluene and Xylene, and the VOCs, MEK, Acetone, and Vinyl Chloride.

Off-site soil samples were collected within the right of way of Tibbits Avenue and Cannon Street. The sample results were compared to RRSCOs and showed impacts from PCBs, with a slight appearance of PAHs and the metals Copper, Lead and Mercury, (see Figure 10). Other than the PCBs, the noted PAHs and metals do not appear to be related to the Site's operations.

### **7.3 Receptors**

An analysis was preferred to identify the potential pathways of exposure and how these pathways could be completed and result in an exposure. Since the completion of the IRM and IRM modifications at the Site, the exposure pathways include:

- Construction/utility workers: workers entering the Site where they would disturb the ground surface exposing subsurface soil or groundwater for underground utility work or other Site work may have inhalation, direct contact or risk for these ingestion exposures. The SMP and worker health and safety programs may significantly reduce the exposures.
- Off-site residents, visitor, and utility/municipal workers: workers disturbing the ground surface could create ingestion and direct contact exposures from the COCs found in the subsurface soil in the right of way. Prolonged storage of the excavated soil on the ground surface could result in exposures to residents and visitors (individuals walking or bicycling) in the right of way to dust from the soil piles.

Completion of the IRM eliminated all of the exposure routes involving surface soils and berm soils exceeding RIUSCOs for Mercury and PCB. The on-site subsurface soils with exceedances of the RIUSCOs are located beneath a one foot or more cover of gravel and soil and therefore not a concern. All future work on the Site would require following the SMP and the preparation of Health and Safety Plans to address these exposure concerns. Off-site subsurface soil contamination along Cannon Street is primarily in the upper 2-feet of soil and may be related to the reconstruction of Cannon Street or use of the roadway area by railroads, and not past Site activities.



## 8.0 SUMMARY

Leader identified contaminant concentrations in excess of the RIUSCOs in the berm soil, surface soil associated with building/structures supporting the former stationary equipment (crusher and shredder) and subsurface soils during the RIR. All of these areas have been addressed by the completion of the IRMs and IRM modifications. Remaining subsurface contaminated soils are believed to be limited and are presently beneath 1-foot or more of gravel/recycled concrete or soil.

Off-site surface soils in the Tibbits Avenue right of way were found to be impacted and several subsurface soil samples in the right of way along Cannon Street were found to be impacted. The surface soils along Tibbits Avenue have been removed as a part of the IRM. Subsurface soil contamination is limited to selected spots along Cannon Street and were not associated with Site operations, but mostly likely from soil disturbed from road reconstruction or former railroad activities in the area of the roadway.

Groundwater impacts were found present at the Site, but these involve primarily Iron, Manganese and Sodium. VOCs and SVOCs were found at low concentrations and do not appear to be migrating off-site.

The current use of the property and the current extent of contamination is such that there are no completed routes of exposure unless the ground surface is disturbed. The potential exposures to contaminated soil and groundwater for workers is significantly reduced through following good work practices, the SMP and the Site-specific Health and Safety Plan.

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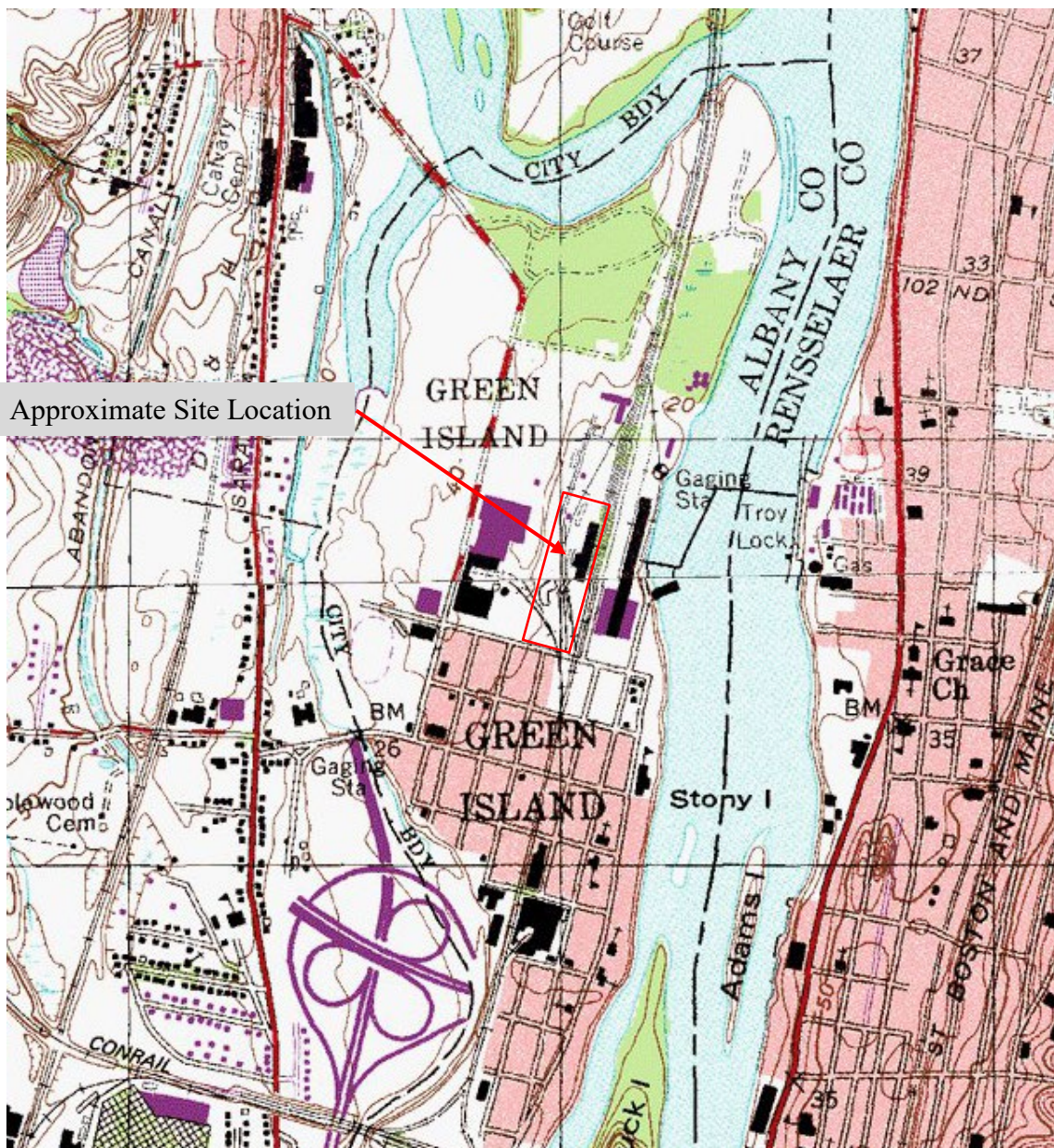
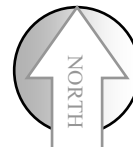
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Approximate Site Location

Title Site Location  
Freedman & Sons Property  
Green Island, NY

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup>. Floor  
Bellmawr, New Jersey 08031

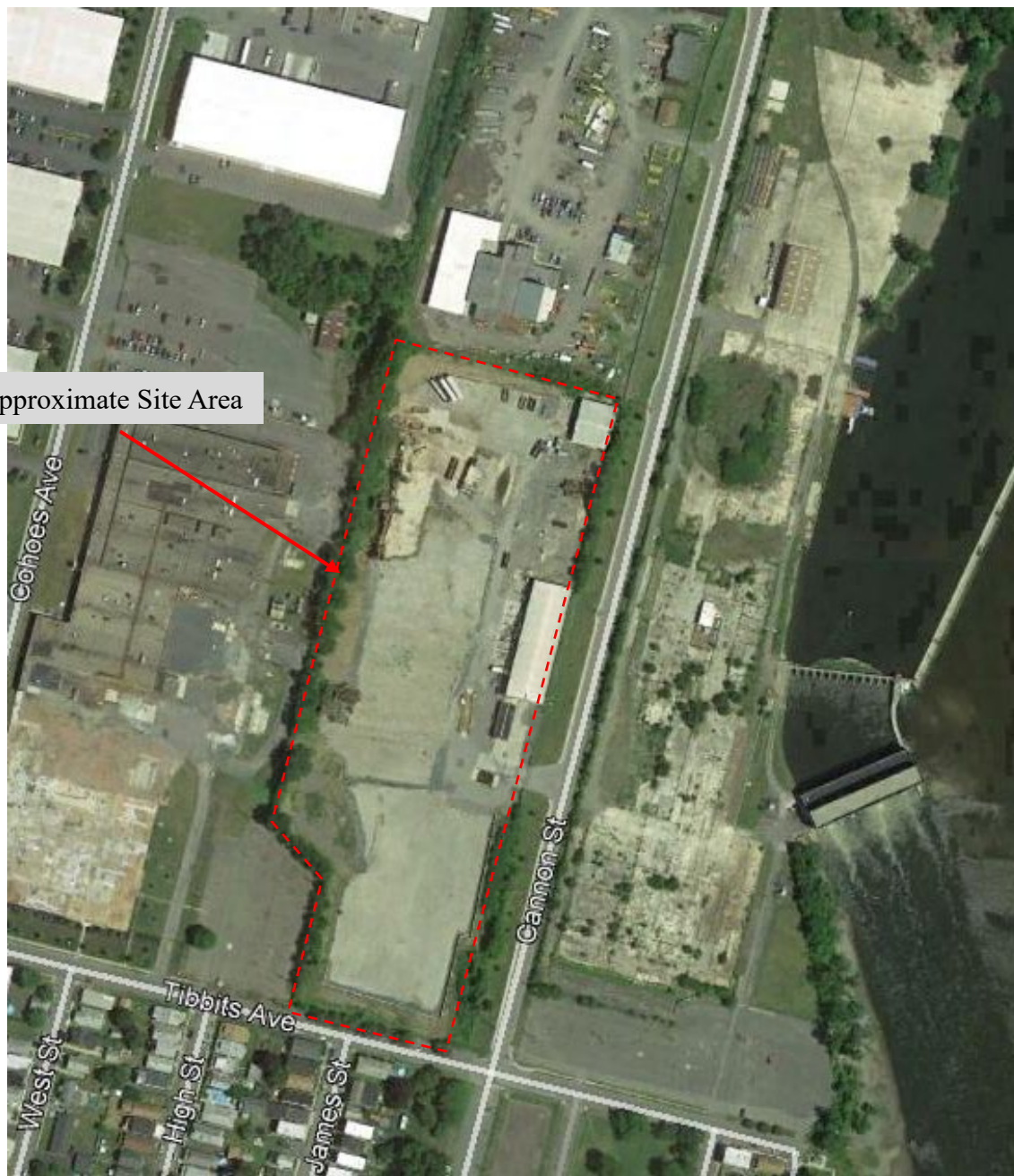
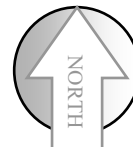
  
Leader Professional Services  
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Pittsford, NY 14534  
(585) 248-2413  
FAX (585) 248-2834

Project 842.002  
Date 10/16/19  
Scale As Shown

Drawn  
Checked MPR  
File Name Site Map

Figure  
**1**





Approximate Site Area

Title 2018 Aerial Photograph  
Freedman & Sons Property  
Green Island, NY

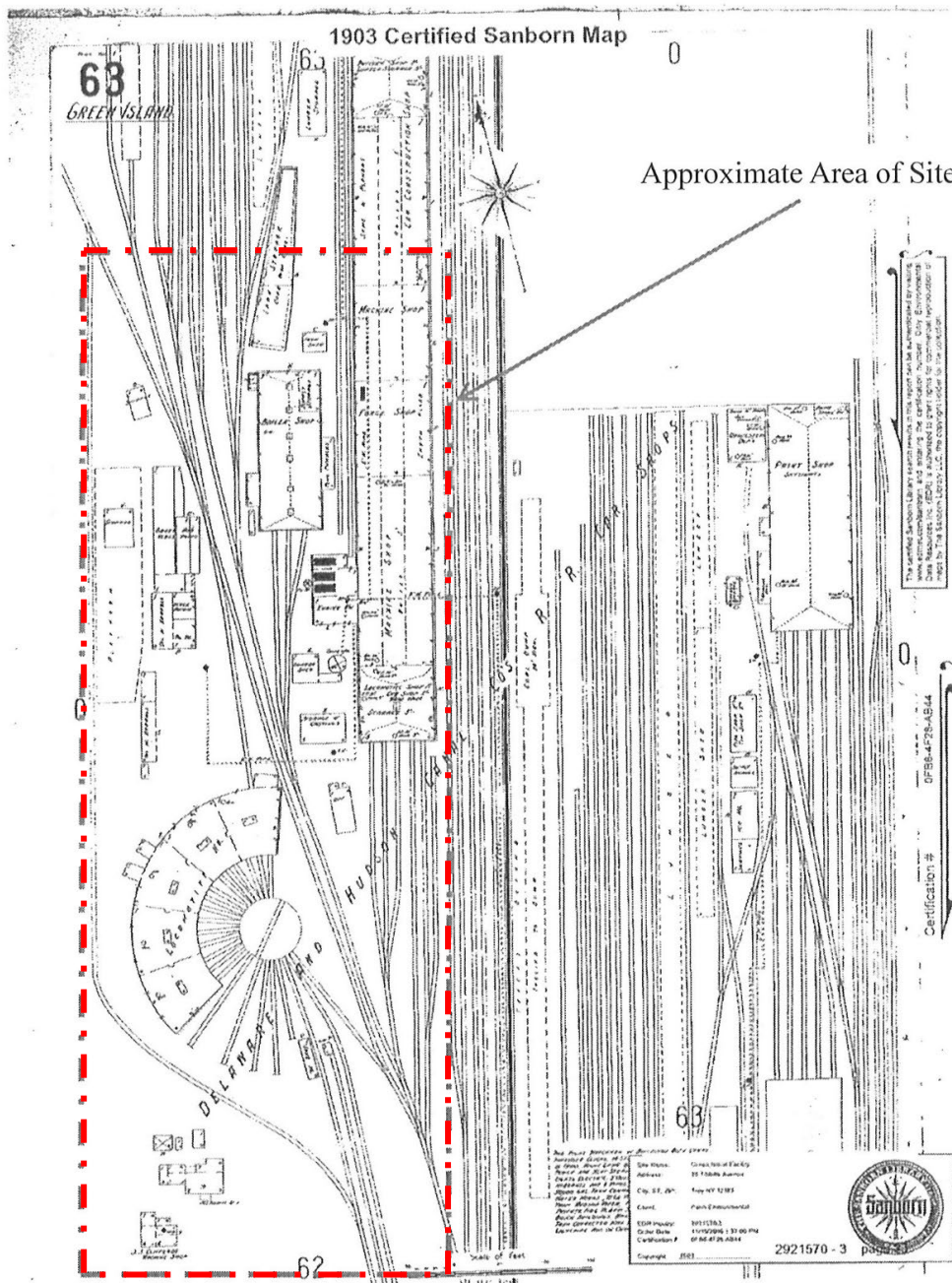
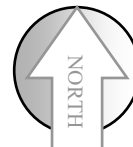
Prepared For Eastern Metal Recycling, LLC  
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FAX (585) 248-2834

Project 842.002  
Date 10/16/18  
Scale As Shown

Drawn \_\_\_\_\_  
Checked MPR  
File Name Site Map

Figure  
**2**



Title 1903 Sanborn Fire Insurance Map  
Freedman & Sons Property  
Green Island, NY

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup>. Floor  
Bellmawr, New Jersey 08031

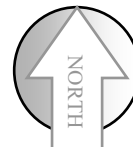
  
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Project 842.002  
Date 10/16/2019  
Scale As Shown

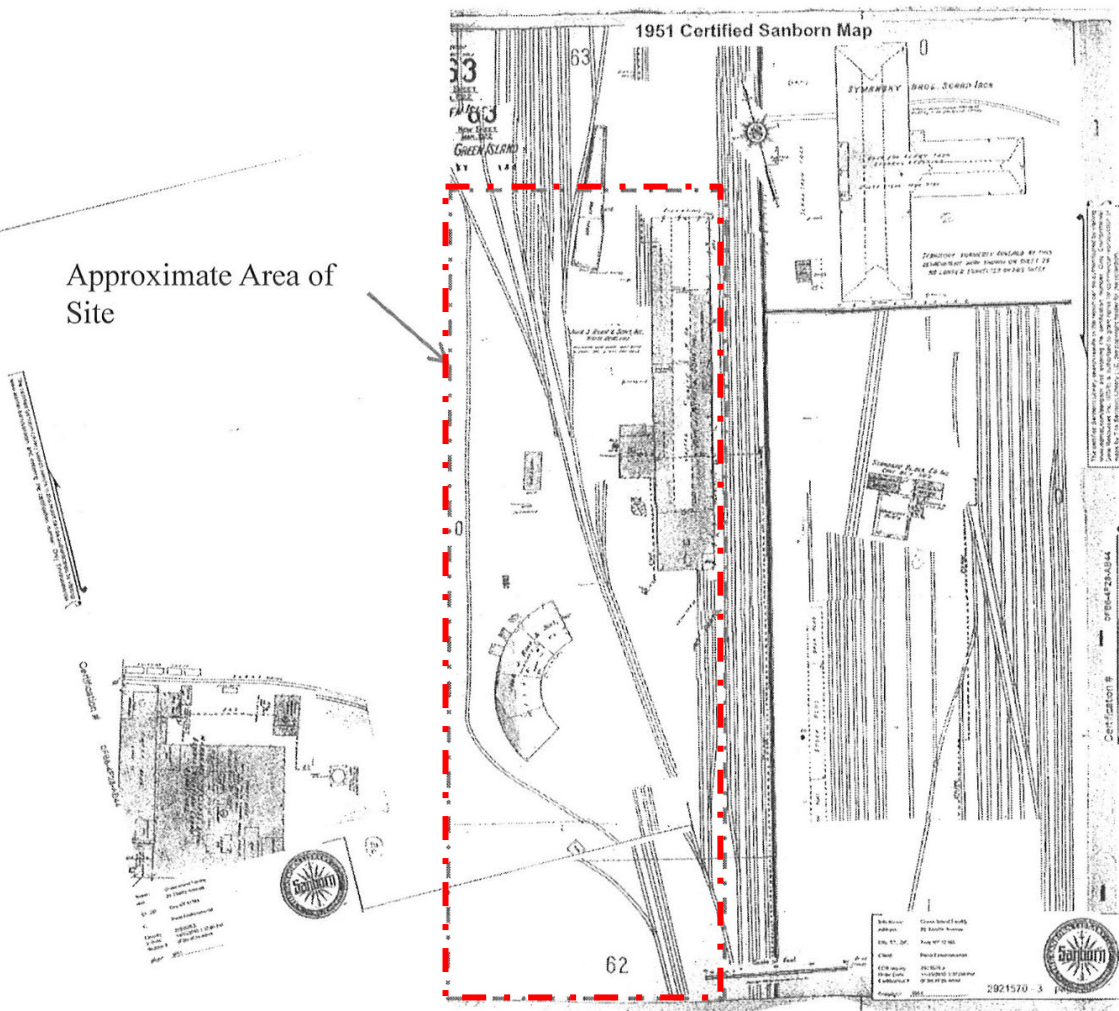
Drawn \_\_\_\_\_  
Checked MPR  
File Name Site Map

Figure 3





Approximate Area of Site



Title 1951 Sanborn Fire Insurance Map  
Freedman & Sons Property  
Green Island, NY

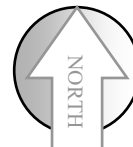
Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup>. Floor  
Bellmawr, New Jersey 08031

  
Leader Professional Services  
271 Marsh Road, Suite 2  
Pittsford, NY 14534  
(585) 248-2413  
FAX (585) 248-2834

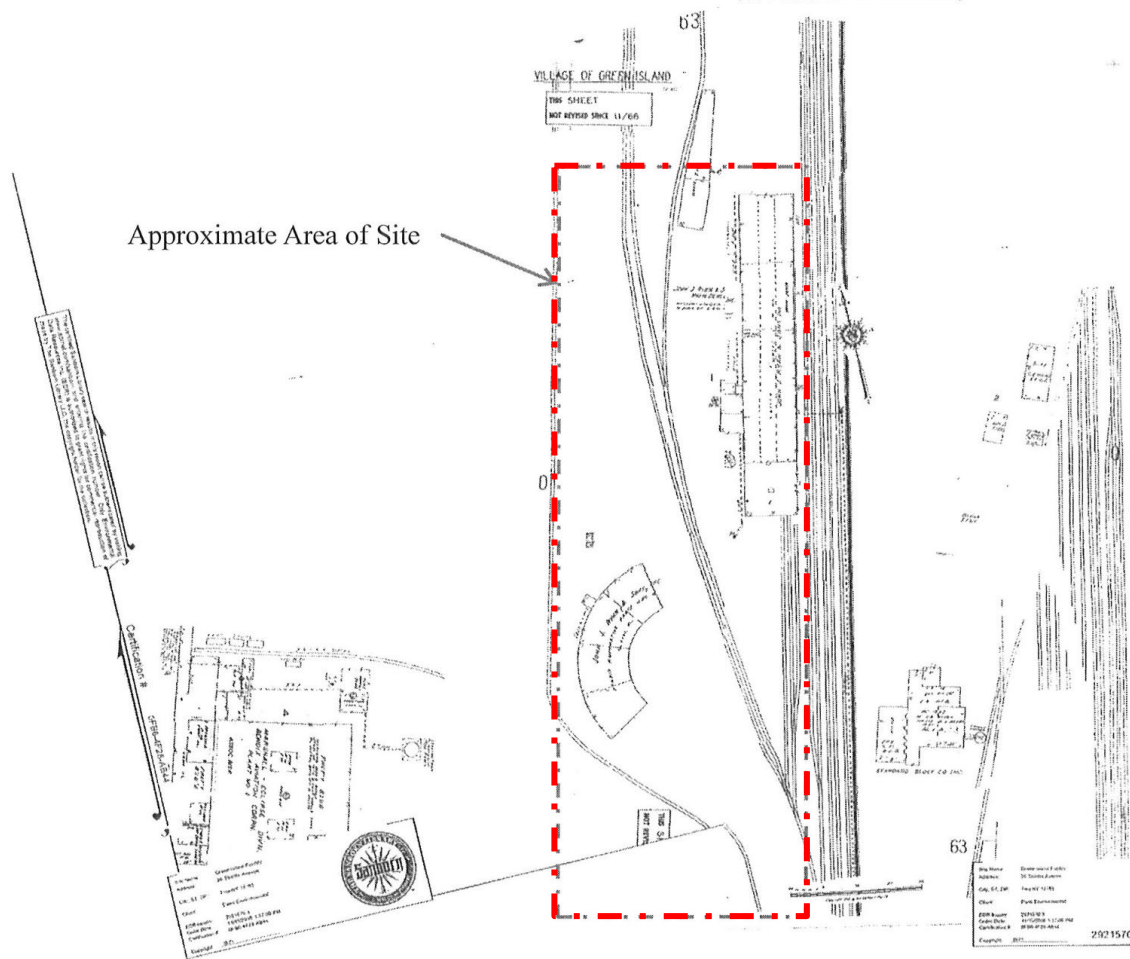
Project 842.002  
Date 10/16/2019  
Scale As Shown

Drawn \_\_\_\_\_  
Checked MPR  
File Name Site Map

Figure 4



1971 Certified Sanborn Map



Title 1971 Sanborn Fire Insurance Map  
Freedman & Sons Property  
Green Island, NY

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup>. Floor  
Bellmawr, New Jersey 08031

  
Leader Professional Services  
271 Marsh Road, Suite 2  
Pittsford, NY 14534  
(585) 248-2413  
FAX (585) 248-2834

Project 842.002  
Date 10/16/2019  
Scale As Shown

Drawn \_\_\_\_\_  
Checked MPR  
File Name Site Map

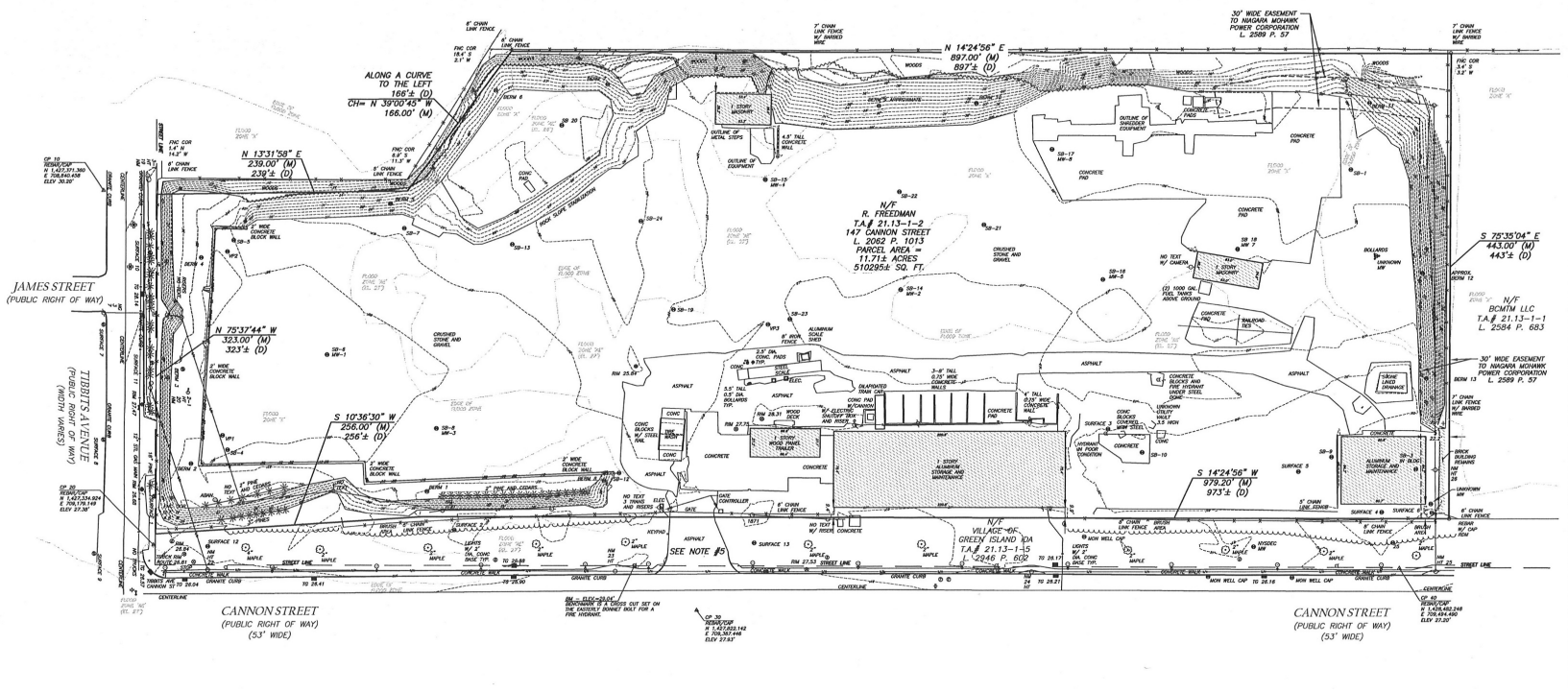
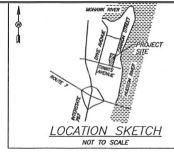
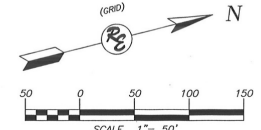
Figure 5

**LEGEND**

- \* CONFEROUS TREE
- ⊙ LIGHT POLE
- ⊙ UTILITY POLE
- ⊙ MISC. POST
- + SIGN
- \* CONFEROUS SHRUB
- ⊙ TREE STUMP
- ⊙ DECIDUOUS SHRUB
- ⊙ DECIDUOUS TREE
- ⊙ BORING LOCATION
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC MANHOLE
- ⊙ SANITARY MANHOLE
- ⊙ TELEPHONE MANHOLE
- ▭ DRAINAGE CATCHBASIN
- ⊙ DRAINAGE MANHOLE
- ⊙ FIRE HYDRANT
- ⊙ WATER VALVE

**SURVEY NOTES:**

- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE, AND IS SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES SAID ABSTRACT WOULD REVEAL.
- ONLY COPIES OF THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S STAMPED SEAL SHALL BE CONSIDERED VALID TRUE COPIES.
- THIS MAP MAY NOT BE USED IN CONJUNCTION WITH A "SURVEY AFFIDAVIT" OR SIMILAR DOCUMENT STATEMENT OR MECHANISM TO OBTAIN TITLE INSURANCE FOR ANY SUBSEQUENT OR FUTURE GRANTEEES.
- BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY APPEARS TO BE IN ZONE "M" (AREA HAVING A 1% ANNUAL FLOOD CHANCE, WITH A BASE FLOOD ELEVATION OF 27' AND 28' AS LABELED) AND ZONE "X" (AREA HAVING 0.2% ANNUAL FLOOD CHANCE) ACCORDING TO THE FLOOD INSURANCE RATE MAP NO. 36001C0089D, COMMUNITY NO. 360009 - VILLAGE OF GREEN ISLAND, PANEL NO. 0209 SUFFIX D, EFFECTIVE DATE MARCH 16, 2015, AND RATE MAP NO. 36001C0202D, COMMUNITY NO. 360009 - VILLAGE OF GREEN ISLAND, PANEL NO. 0202 SUFFIX D, EFFECTIVE DATE MARCH 16, 2015.
- ACCESS TO SITE VIA ASPHALT DRIVE FROM CANNON STREET CROSSING LANDS N/F VILLAGE OF GREEN ISLAND IDA. THIS ACCESS WAS GRANTED BY A NEW YORK STATE SUPREME COURT, COUNTY OF ALBANY, SETTLEMENT AGREEMENT DATED SEPTEMBER 22, 2008 IN WHICH THE VILLAGE AGREED TO GRANT A PERMANENT ACCESS EASEMENT TO R. FREEDMAN & SONS, INC. (DOCUMENT PROVIDED BY THE VILLAGE OF GREEN ISLAND).



Title	Site Plan Former Freedman & Sons Property Green Island, New York
Prepared For	Eastern Metal Recycling, LLC 143 Harding Avenue, 1 <sup>st</sup> Floor Bellmawr, New Jersey

**Leader**

Leader Professional Services, Inc  
271 Marsh Road-Suite 2  
Pittsford, New York 14534  
(585) 248-2413  
FAX (585) 248-2834

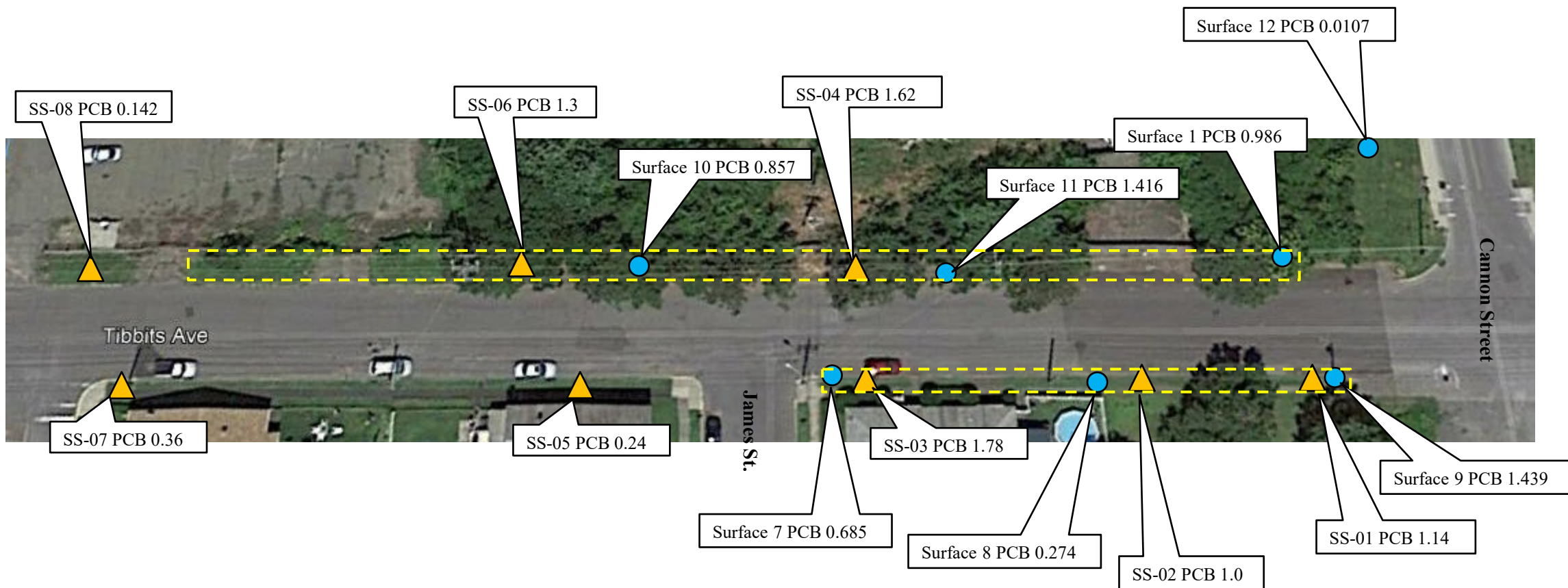
Project	842.002
Date	10/16/2019
Scale	As shown


Drawn	PVS
Checked	MPR
File Name	Site drawing

Figure



**6**






 SS-07 PCB 0.36    Sample Id. PCB Value in milligrams per kilogram


 IRM Completion Area

- 
   RI Surface Soil Sample Locations collected at a depth of approximately 0 to 2-inches below the ground surface.
- 
   Samples collected for Freedman and Sons, locations cannot be confirmed.

Title            Tibbits Avenue Sample Locations and IRM Area  
                   Former Freedman & Sons Property  
                   Green Island, New York

Prepared For    Eastern Metal Recycling, LLC  
                   143 Harding Avenue, 1<sup>st</sup> Floor  
                   Bellmawr, New Jersey



Leader Professional Services, Inc  
 271 Marsh Road-Suite 2  
 Pittsford, New York 14534  
 (585) 248-2413  
 FAX (585) 248-2834

Project            842.002  
 Date                10/16/2019  
 Scale               1" = 50'

Drawn             PVS  
 Checked           MPR  
 File Name  
 Off site drawing

Figure  
  
7

- Test Pit Locations
- LIGHT POLE
- ELECTRIC METER
- UTILITY POLE
- Berm Re-Slope and Vegetation
- CONIFEROUS SHRUB
- TREE STUMP
- Crusher and Shredder Area Work
- DECIDUOUS
- DECIDUOUS
- BORING LOC.
- Berm Sample Locations

### Test Pit Locations

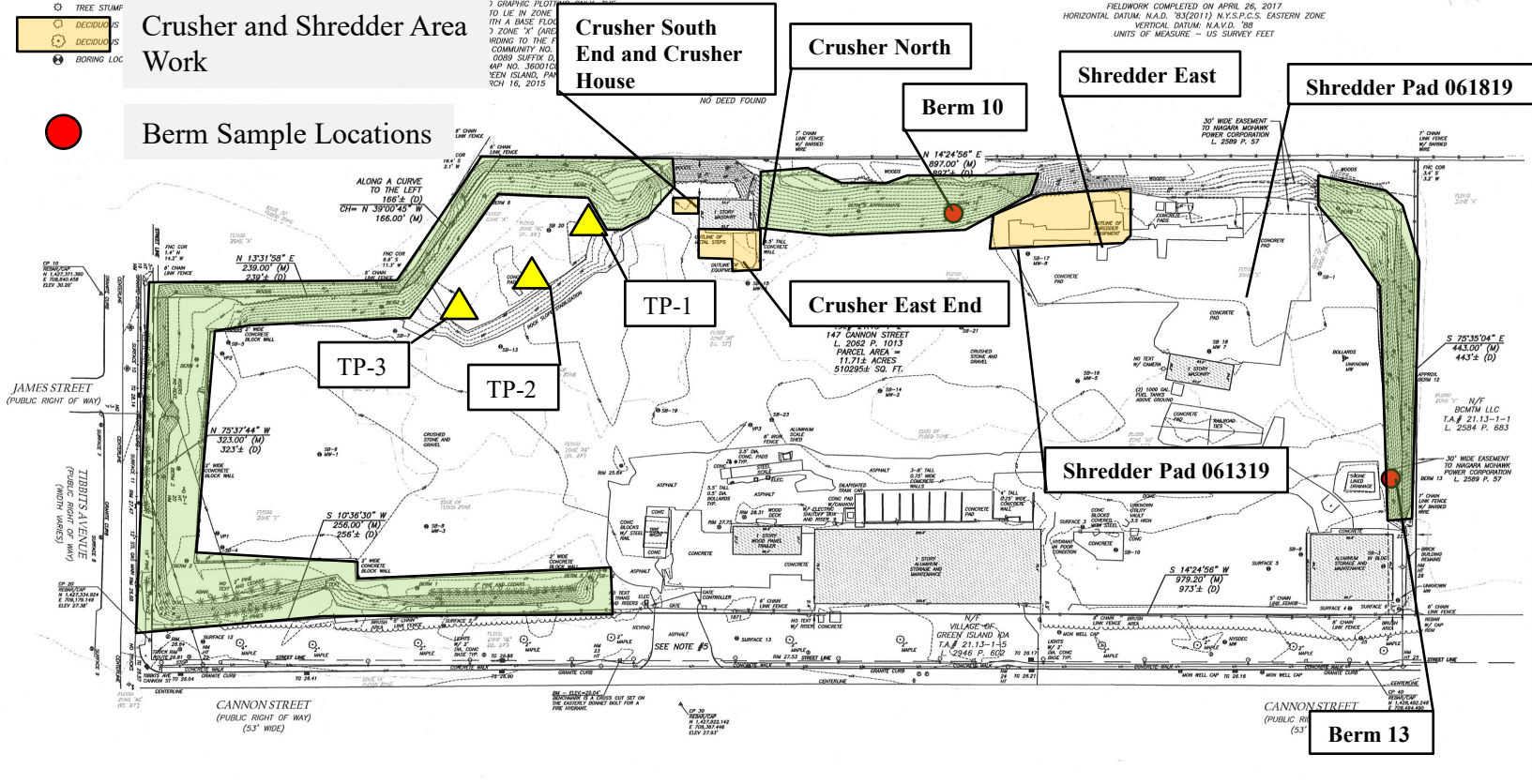
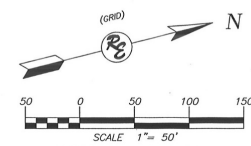
### Berm Re-Slope and Vegetation

### Crusher and Shredder Area Work

### Berm Sample Locations

**SURVEY NOTES:**

1. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE, AND IS SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES SAID ABSTRACT WOULD REVEAL.
2. ONLY COPIES OF THE ORIGINAL OF THIS SURVEY MARKED WITH AN "ED" SEAL SHALL BE VALID.
3. THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE SURVEYING ACT AND REGULATIONS THEREUNDER.
4. THIS SURVEY WAS CONDUCTED IN ACCORDANCE WITH THE SURVEYING ACT AND REGULATIONS THEREUNDER.
5. ACCESS TO SITE VIA ASPHALT DRIVE FROM CANNON STREET CROSSING LANDS N/E VILLAGE OF GREEN ISLAND I.D.A. THIS ACCESS WAS GRANTED BY A NEW YORK STATE SUPREME COURT, COUNTY OF ALBANY, SETTLEMENT AGREEMENT DATED SEPTEMBER 22, 2008 IN WHICH THE VILLAGE AGREED TO GRANT A PERMANENT ACCESS EASEMENT TO R. FREEDMAN & SONS, INC. (DOCUMENT PROVIDED BY THE VILLAGE OF GREEN ISLAND).



Title	On-Site IRM Areas and Sample Locations Former Freedman & Sons Property Green Island, New York
Prepared For	Eastern Metal Recycling, LLC 143 Harding Avenue, 1 <sup>st</sup> Floor Bellmawr, New Jersey

Leader Professional Services, Inc  
271 Marsh Road-Suite 2  
Pittsford, New York 14534  
(585) 248-2413  
FAX (585) 248-2834

Project	842.002
Date	4/3/2018
Scale	As shown

Drawn	PVS
Checked	MPP
File Name	Site drawing

Figure

# 8

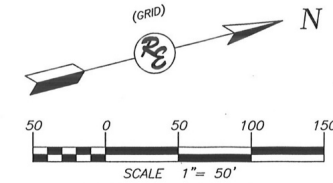


**LEGEND**

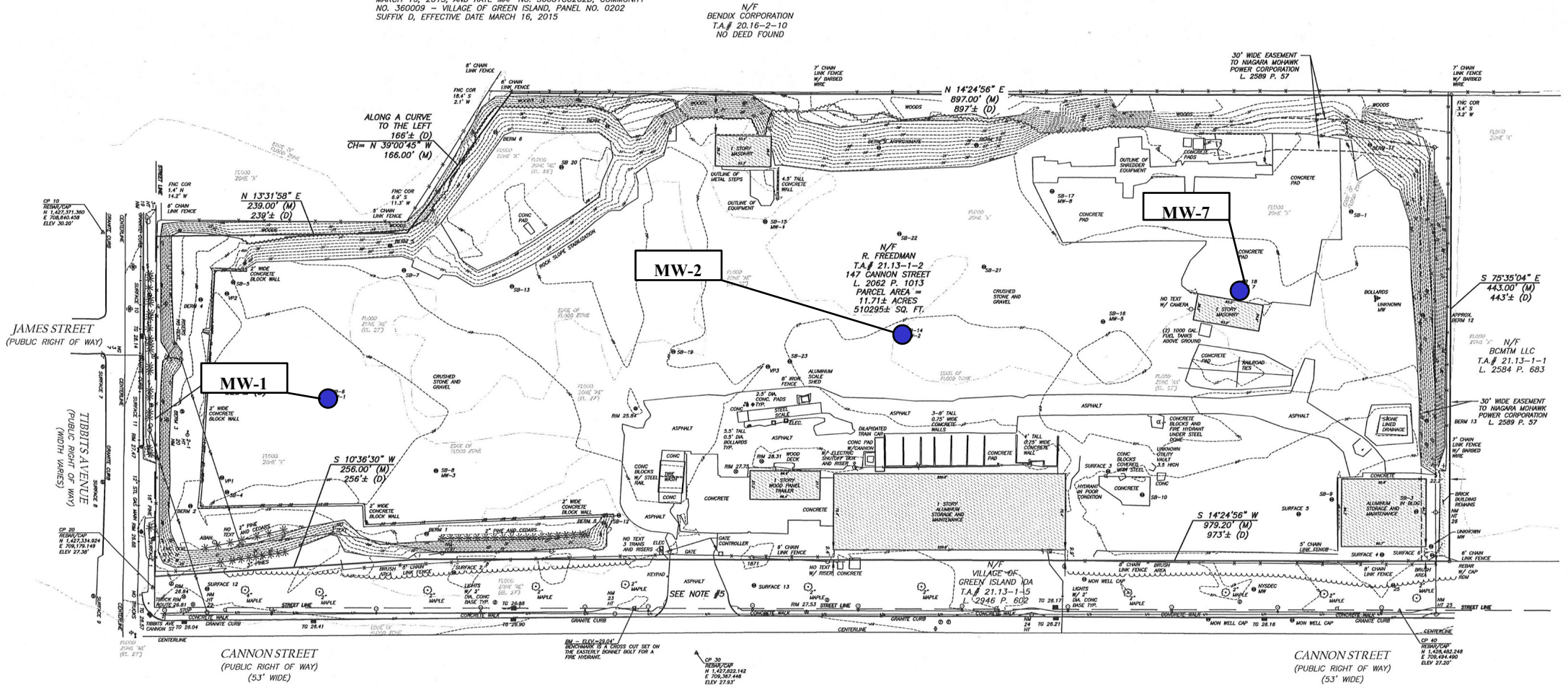
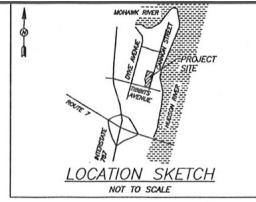
- ✳ CONIFEROUS TREE
- ⊕ LIGHT POLE
- ⊖ UTILITY POLE
- MISC. POST
- + SIGN
- ✳ CONIFEROUS SHRUB
- ⊕ TREE STUMP
- ⊖ DECIDUOUS SHRUB
- ⊖ DECIDUOUS TREE
- ⊖ BORING LOCATION
- ⊖ ELECTRIC METER
- ⊖ ELECTRIC METER
- ⊖ ELECTRIC MANHOLE
- ⊖ SANITARY MANHOLE
- ⊖ TELEPHONE MANHOLE
- ⊖ DRAINAGE CATCHBASIN
- ⊖ DRAINAGE MANHOLE
- ⊖ FIRE HYDRANT
- ⊖ WATER VALVE

**SURVEY NOTES:**

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4. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY APPEARS TO LIE IN ZONE "AE" (AREA HAVING A 1% ANNUAL FLOOD CHANCE, WITH A BASE FLOOD ELEVATION OF 27' AND 28' AS LABELED) AND ZONE "X" (AREA HAVING 0.2% ANNUAL FLOOD CHANCE) ACCORDING TO THE FLOOD INSURANCE RATE MAP NO. 36001C0089D, COMMUNITY NO. 360009 - VILLAGE OF GREEN ISLAND, PANEL NO. 0089 SUFFIX D, EFFECTIVE DATE MARCH 16, 2015, AND RATE MAP NO. 36001C0202D, COMMUNITY NO. 360009 - VILLAGE OF GREEN ISLAND, PANEL NO. 0202 SUFFIX D, EFFECTIVE DATE MARCH 16, 2015
5. ACCESS TO SITE VIA ASPHALT DRIVE FROM CANNON STREET CROSSING LANDS N/E VILLAGE OF GREEN ISLAND I.D.A. THIS ACCESS WAS GRANTED BY A NEW YORK STATE SUPREME COURT, COUNTY OF ALBANY SETTLEMENT AGREEMENT DATED SEPTEMBER 22, 2008 IN WHICH THE VILLAGE AGREED TO GRANT A PERMANENT ACCESS EASEMENT TO R. FREEDMAN & SON, INC. (DOCUMENT PROVIDED BY THE VILLAGE OF GREEN ISLAND).



FIELDWORK COMPLETED ON APRIL 26, 2017  
 HORIZONTAL DATUM: N.A.D. '83(2011) N.Y.S.P.C.S. EASTERN ZONE  
 VERTICAL DATUM: N.A.V.D. '88  
 UNITS OF MEASURE - US SURVEY FEET



● MW-1 Monitoring well location

Title Emerging Contaminant Groundwater Sampling Locations  
 Former Freedman & Sons Property  
 Green Island, New York

Prepared For Eastern Metal Recycling, LLC  
 143 Harding Avenue, 1<sup>st</sup> Floor  
 Bellmawr, New Jersey

**Leader**  
 Leader Professional Services, Inc  
 271 Marsh Road-Suite 2  
 Pittsford, New York 14534  
 (585) 248-2413  
 FAX (585) 248-2834

Project 842.002  
 Date 10/16/2019  
 Scale 1" = 160'

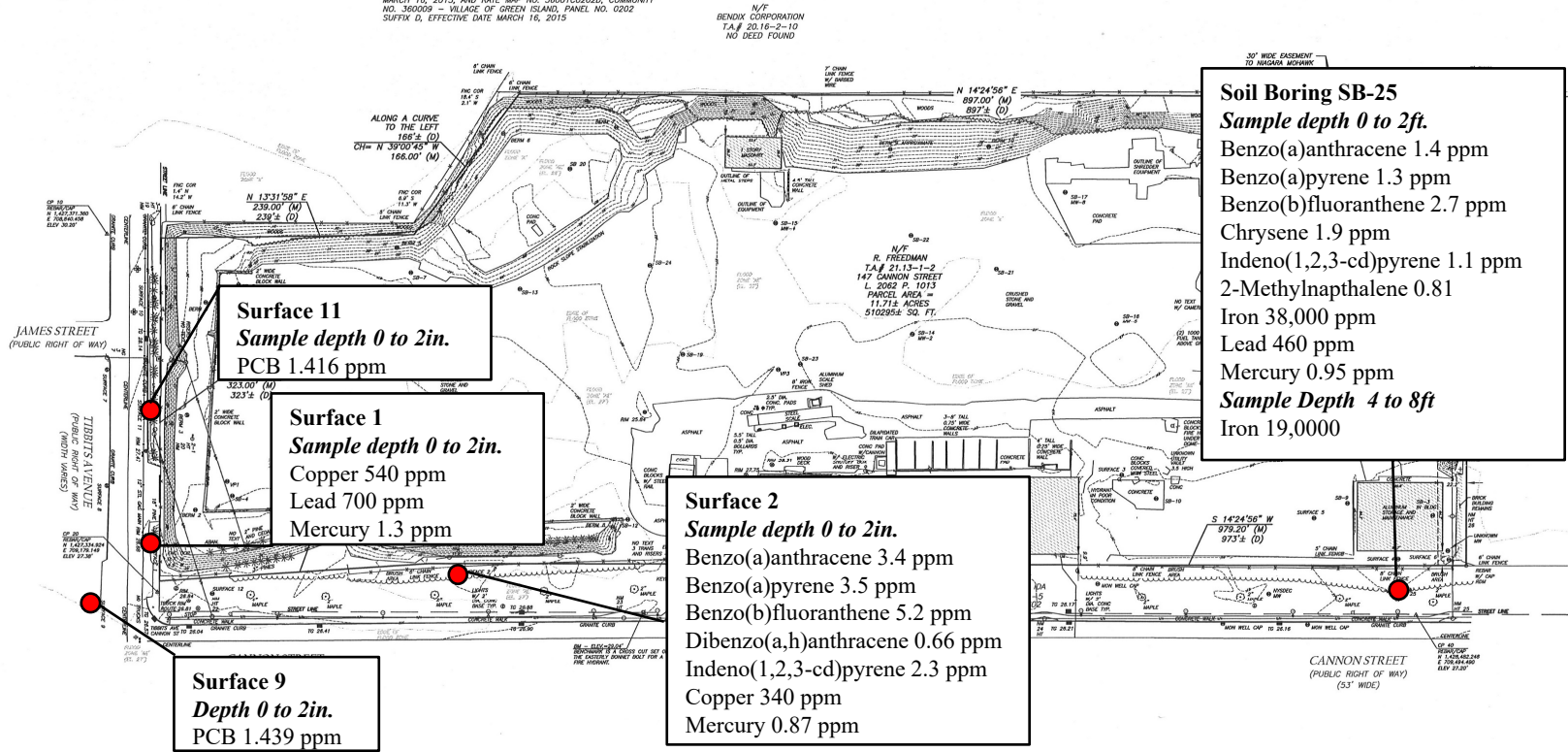
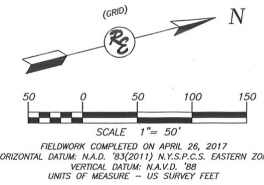
Drawn PVS  
 Checked MPR  
 File Name Sample location drwg

Figure 9

- LEGEND**
- \* CONIFEROUS TREE
  - LIGHT POLE
  - UTILITY POLE
  - MISC. POST
  - \* SIGN
  - \* CONIFEROUS SHRUB
  - TREE STUMP
  - DECIDUOUS SHRUB
  - DECIDUOUS TREE
  - ⊕ BORING LOCATION
  - ⊕ ELECTRIC METER
  - ⊕ ELECTRIC METER
  - ⊕ ELECTRIC MANHOLE
  - ⊕ SANITARY MANHOLE
  - ⊕ TELEPHONE MANHOLE
  - ⊕ DRAINAGE CATCHBASIN
  - ⊕ DRAINAGE MANHOLE
  - ⊕ FIRE HYDRANT
  - ⊕ WATER VALVE

**SURVEY NOTES:**

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- ACCESS TO SITE VIA ASPHALT DRIVE FROM CANNON STREET CROSSING LANDS N/F VILLAGE OF GREEN ISLAND I.D.A. THIS ACCESS WAS GRANTED BY A NEW YORK STATE SUPREME COURT, COUNTY OF ALBANY SETTLEMENT AGREEMENT DATED SEPTEMBER 22, 2008 IN WHICH THE VILLAGE AGREED TO GRANT A PERMANENT ACCESS EASEMENT TO R. FREEDMAN & SONS, INC. (DOCUMENT PROVIDED BY THE VILLAGE OF GREEN ISLAND).



Title Offsite Surface and Subsurface Locations  
Exceeding Restricted Residential SCO  
Former Freedman & Sons Property, Green Island, New York

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup> Floor  
Bellmawr, New Jersey

**Leader**  
Leader Professional Services, Inc  
271 Marsh Road-Suite 2  
Pittsford, New York 14534  
(585) 248-2413  
FAX (585) 248-2834

Project 842.002  
Date 3/17/2020  
Scale As shown

Drawn PVS  
Checked MPR  
File Name  
Site drawing

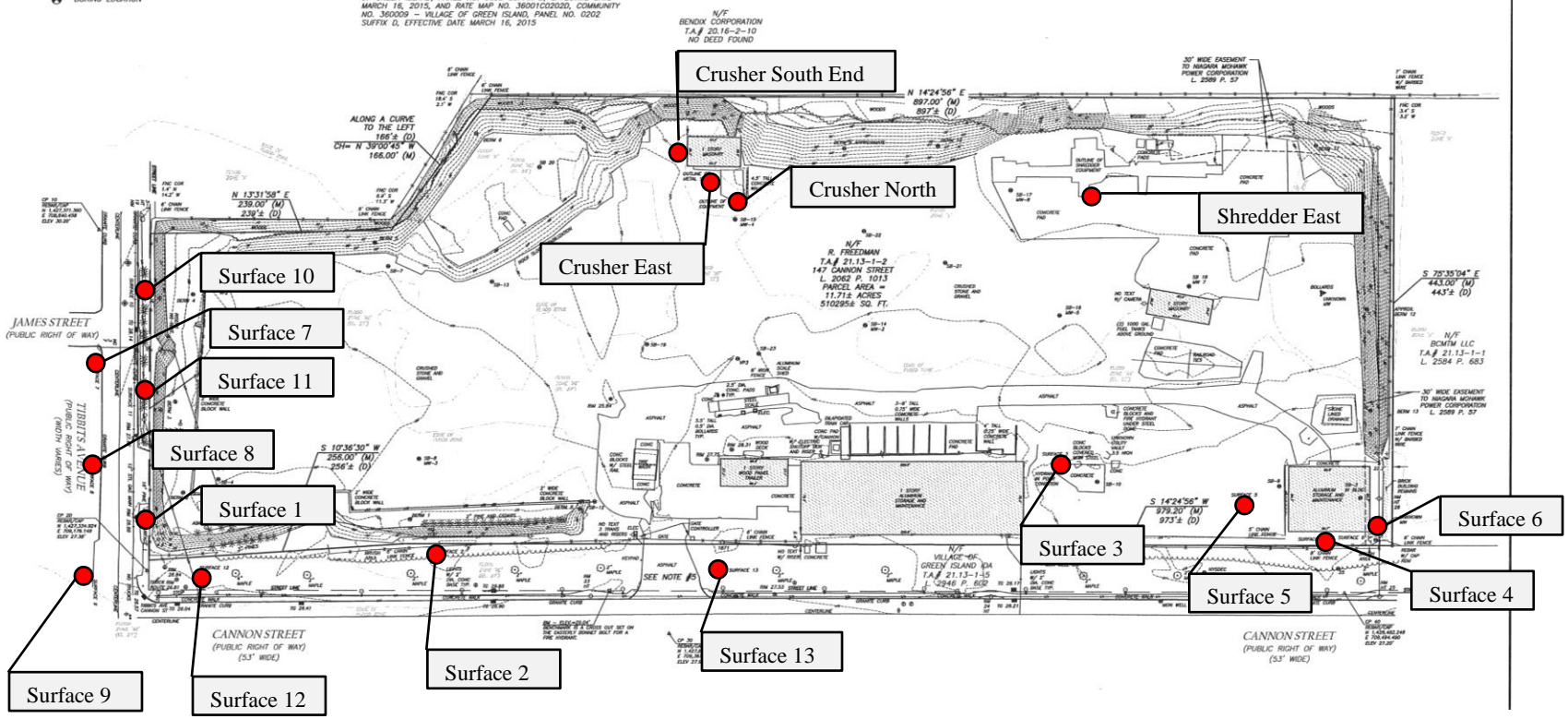
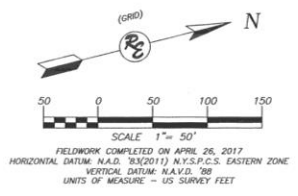
Figure 10



- LEGEND**
- ✱ CONIFEROUS TREE
  - ⊗ LIGHT POLE
  - ⊕ UTILITY POLE
  - ⊙ MISC. POST
  - + SIGN
  - \* CONIFEROUS SHRUB
  - ⊙ TREE STUMP
  - ⊙ DECIDUOUS SHRUB
  - ⊙ DECIDUOUS TREE
  - ⊙ BORING LOCATION
  - ⊕ ELECTRIC METER
  - ⊕ ELECTRIC METER
  - ⊕ ELECTRIC MANHOLE
  - ⊕ SANITARY MANHOLE
  - ⊕ TELEPHONE MANHOLE
  - ▭ DRAINAGE CATCH-BASIN
  - ⊕ DRAINAGE MANHOLE
  - ⊕ FIRE HYDRANT
  - ⊕ WATER VALVE

- SURVEY NOTES:**
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE, AND IS SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES SAID ABSTRACT WOULD REVEAL.
  - ONLY COPIES OF THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S STAMPED SEAL SHALL BE CONSIDERED VALID TRUE COPIES.
  - THIS MAP MAY NOT BE USED IN CONJUNCTION WITH A "SURVEY AFFIDAVIT" OR SIMILAR DOCUMENT STATEMENT OR MECHANISM TO OBTAIN TITLE INSURANCE FOR ANY SUBSEQUENT OR FUTURE GRANTEEES.
  - BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THE SUBJECT PROPERTY APPEARS TO BE IN ZONE "M" (AREA HAVING A 1% ANNUAL FLOOD CHANCE, WITH A BASE FLOOD ELEVATION OF 27' AND 28' AS LABELED) AND ZONE "X" (AREA HAVING 0.2% ANNUAL FLOOD CHANCE) ACCORDING TO THE FLOOD INSURANCE RATE MAP NO. 36001C0088D, COMMUNITY NO. 360009 - VILLAGE OF GREEN ISLAND, PANEL NO. 0209 SUFFIN D, EFFECTIVE DATE MARCH 16, 2015, AND RATE MAP NO. 36001C0202D, COMMUNITY NO. 360009 - VILLAGE OF GREEN ISLAND, PANEL NO. 0202 SUFFIN D, EFFECTIVE DATE MARCH 16, 2015.

5. ACCESS TO SITE VIA ASPHALT DRIVE FROM CANNON STREET CROSSING LANDS N/F VILLAGE OF GREEN ISLAND EIA. THIS ACCESS WAS GRANTED BY A NEW YORK STATE SUPREME COURT, COUNTY OF ALBANY SETTLEMENT AGREEMENT DATED SEPTEMBER 22, 2009 IN WHICH THE VILLAGE AGREED TO GRANT A PERMANENT ACCESS EASEMENT TO R. FREEDMAN & SONS, INC. (DOCUMENT PROVIDED BY THE VILLAGE OF GREEN ISLAND).



Title Surface Soil 0 to 2-inches Sampling Locations  
Former Freedman & Sons Property  
Green Island, New York

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup> Floor  
Bellmawr, New Jersey

**Leader**  
Leader Professional Services, Inc  
271 Marsh Road-Suite 2  
Pittsford, New York 14534  
(585) 248-2413  
FAX (585) 248-2834

Project 842.002  
Date 5/6/2020  
Scale As shown

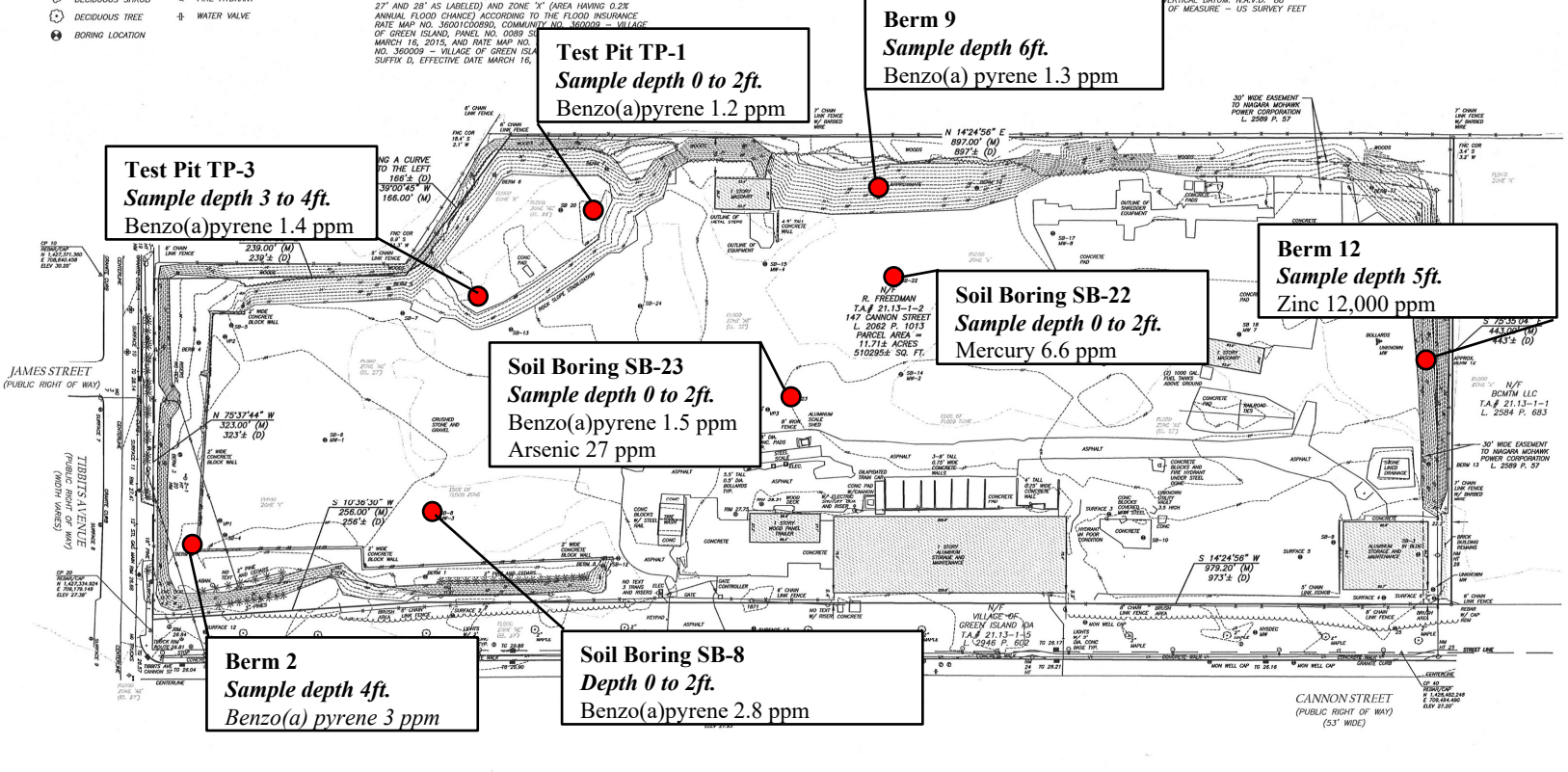
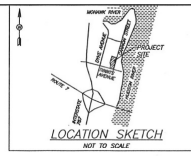
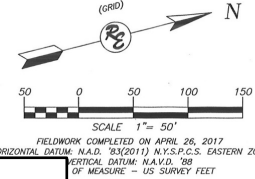
Drawn PVS  
Checked MPR  
File Name Site drawing

Figure 11

- LEGEND**
- \* CONIFEROUS TREE
  - ⊗ LIGHT POLE
  - ⊙ UTILITY POLE
  - MISC. POST
  - + SIGN
  - \* CONIFEROUS SHRUB
  - ⊗ TREE STUMP
  - ⊙ DECIDUOUS SHRUB
  - ⊙ DECIDUOUS TREE
  - ⊙ BORING LOCATION
  - ⊕ ELECTRIC METER
  - ⊕ ELECTRIC MANHOLE
  - ⊕ ELECTRIC MANHOLE
  - ⊕ SANITARY MANHOLE
  - ⊕ TELEPHONE MANHOLE
  - ⊕ DRAINAGE CATCHBASIN
  - ⊕ DRAINAGE MANHOLE
  - ⊕ FIRE HYDRANT
  - ⊕ WATER VALVE

**SURVEY NOTES:**

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- ACCESS TO SITE VIA ASPHALT DRIVE FROM CANNON STREET CROSSING LANDS N/F VILLAGE OF GREEN ISLAND. THIS ACCESS WAS GRANTED BY A NEW YORK STATE SUPREME COURT, COUNTY OF ALBANY SETTLEMENT AGREEMENT DATED SEPTEMBER 22, 2008 IN WHICH THE VILLAGE AGREED TO GRANT A PERMANENT ACCESS EASEMENT TO R. FREEDMAN & SONS, INC. (DOCUMENT PROVIDED BY THE VILLAGE OF GREEN ISLAND).



Title      Subsurface Sample Locations Exceeding the IUSCO  
Former Freedman & Sons Property  
Green Island, New York

Prepared For      Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup> Floor  
Bellmawr, New Jersey

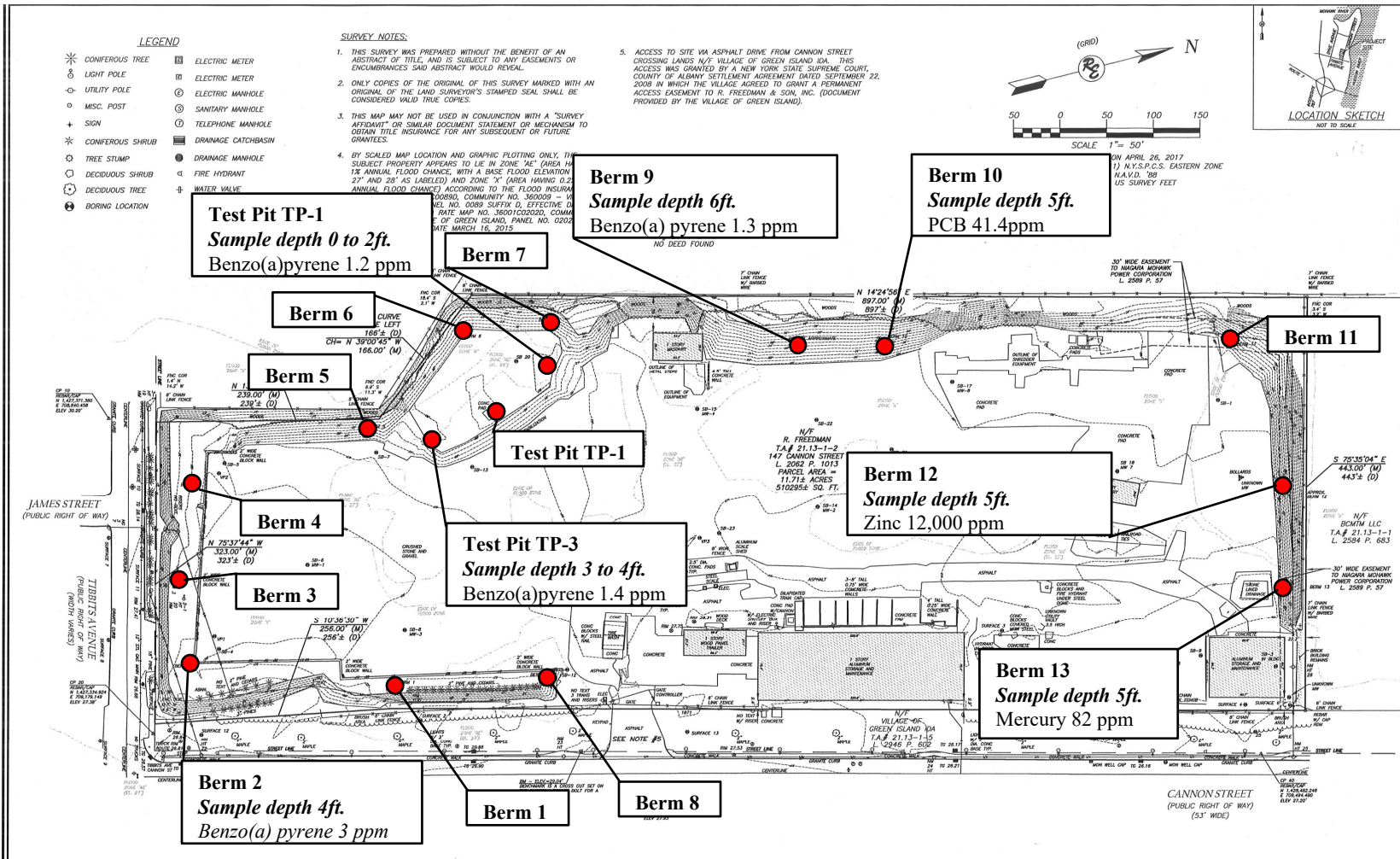
**Leader**  
Leader Professional Services, Inc  
271 Marsh Road-Suite 2  
Pittsford, New York 14534  
(585) 248-2413  
FAX (585) 248-2834

Project      842.002  
Date      3/17/2020  
Scale      As shown

Drawn      PVS  
Checked      MPR  
File Name      Site drawing

Figure      12





Title Test Pit Sample Locations and Results Exceeding IUSCO  
Former Freedman & Sons Property  
Green Island, New York

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup> Floor  
Bellmawr, New Jersey

**Leader**  
Leader Professional Services, Inc  
271 Marsh Road-Suite 2  
Pittsford, New York 14534  
(585) 248-2413  
FAX (585) 248-2834

Project 842.002  
Date 10/16/2019  
Scale As shown

Drawn PVS  
Checked MPR  
File Name Site drawing

Figure 13

**LEGEND**

- \* CONIFEROUS TREE
- LIGHT POLE
- UTILITY POLE
- MISC. POST
- + SIGN
- \* CONIFEROUS SHRUB
- ⊠ ELECTRIC METER
- ⊠ ELECTRIC METER
- ⊠ ELECTRIC MANHOLE
- ⊠ SANITARY MANHOLE
- ⊠ TELEPHONE MANHOLE
- ▭ DRAINAGE CATCHBASIN

**MW-2 Duplicate**

Hexachorobenzene 0.07J ppb  
 Benzo(a)pyrene 0.05J  
 Indeno (1,2,3-cd) pyrene 0.07J ppb  
 Chrysene 0.05J  
 Benzo(a)anthracene 0.06 ppb  
 Benzo(b)fluoranthene 0.07 ppb  
 Benzo(k)fluoranthene 0.06J ppb  
 Antimony 4.36 ppb  
 Iron 3,780 ppb  
 Manganese 2,243 ppb  
 Sodium 119,000 ppb

**MW-4**

Benzene 4.9 ppb  
 1,4 Dichlorobenzene 5.9 ppb  
 Benzo(a)pyrene 0.09J  
 Indeno (1,2,3-cd) pyrene 0.03J ppb  
 Chrysene 0.09J  
 Benzo(a)anthracene 0.12 ppb  
 Benzo(b)fluoranthene 0.15 ppb  
 Benzo(k)fluoranthene 0.06J ppb  
 PCB 0.584 ppb  
 Iron 24,400 ppb  
 Manganese 5,926 ppb  
 Sodium 158,000 ppb

**MW-8**

Benzo(a)anthracene 0.1 ppb  
 Benzo(a)pyrene 0.11 ppb  
 Benzo(b)fluoranthene 0.18 ppb  
 Benzo(k)fluoranthene 0.07 ppb  
 Chrysene 0.13 ppb  
 Indeno (1,2,3-cd)pyrene 0.09 ppb  
 Iron 567 ppb  
 Manganese 2637 ppb  
 Sodium 32,000 ppb

**MW-7**

Iron 10,500 ppb  
 Manganese 1,758 ppb  
 Sodium 79,100 ppb

**MW-6**

Benzo(a)anthracene 0.04 ppb  
 Benzo(b)fluoranthene 0.03 ppb  
 Antimony 4.55 ppb  
 Iron 9,940 ppb  
 Manganese 873.3 ppb  
 Sodium 49,000 ppb

**MW-1**

Antimony 4.33 ppb  
 Iron 5,790 ppb  
 Manganese 6,262 ppb  
 Sodium 45,800 ppb

**SB-19  
 VOCs only  
 MTBE 20 ppb**

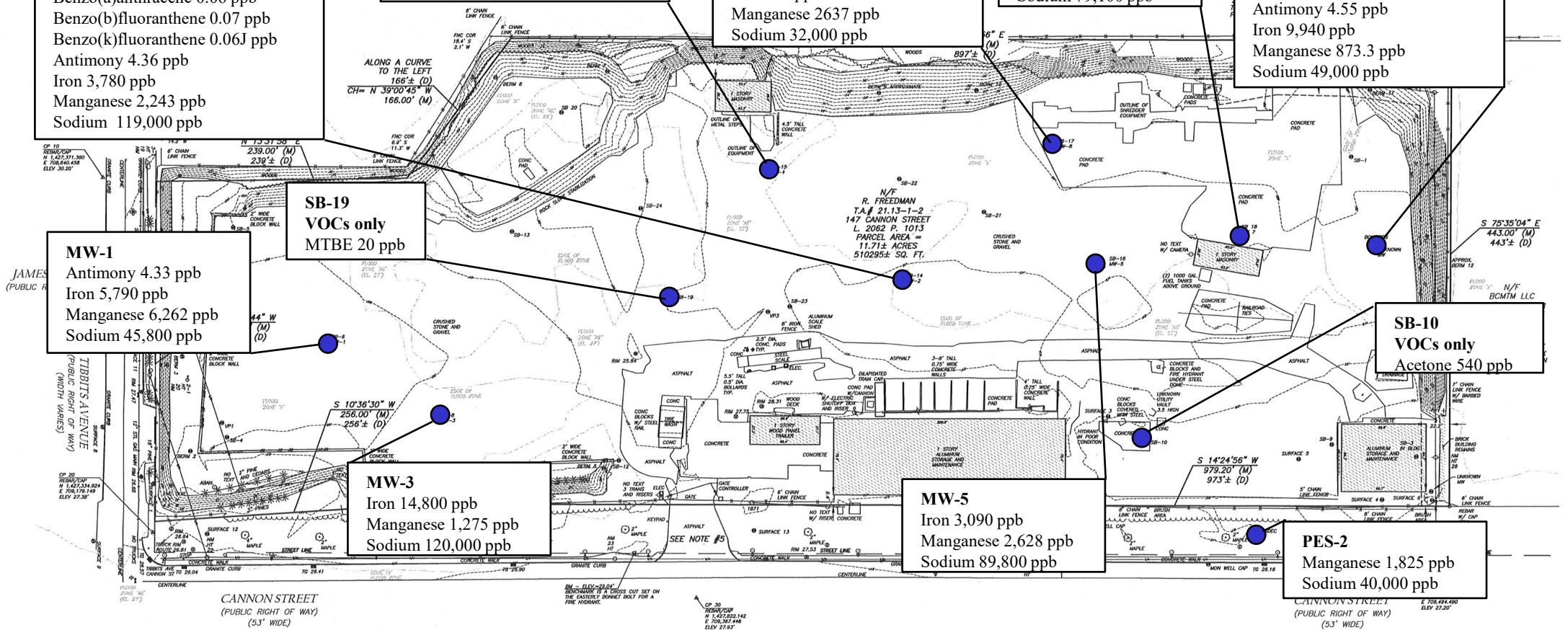
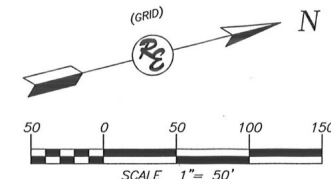
**SB-10  
 VOCs only  
 Acetone 540 ppb**

**MW-3**  
 Iron 14,800 ppb  
 Manganese 1,275 ppb  
 Sodium 120,000 ppb

**MW-5**  
 Iron 3,090 ppb  
 Manganese 2,628 ppb  
 Sodium 89,800 ppb

**PES-2**  
 Manganese 1,825 ppb  
 Sodium 40,000 ppb

5. ACCESS TO SITE VIA ASPHALT DRIVE FROM CANNON STREET CROSSING LANDS N/F VILLAGE OF GREEN ISLAND I.D.A. THIS ACCESS WAS GRANTED BY A NEW YORK STATE SUPREME COURT, COUNTY OF ALBANY SETTLEMENT AGREEMENT DATED SEPTEMBER 22, 2008 IN WHICH THE VILLAGE AGREED TO GRANT A PERMANENT ACCESS EASEMENT TO R. FREEDMAN & SON, INC. (DOCUMENT PROVIDED BY THE VILLAGE OF GREEN ISLAND).



Title	Groundwater Results Exceeding TOGS Former Freedman & Sons Property Green Island, New York
Prepared For	Eastern Metal Recycling, LLC 143 Harding Avenue, 1 <sup>st</sup> Floor Bellmawr, New Jersey

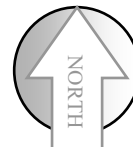
**Leader**  
 Leader Professional Services, Inc  
 271 Marsh Road-Suite 2  
 Pittsford, New York 14534  
 (585) 248-2413  
 FAX (585) 248-2834

Project	842.002
Date	10/16/2019
Scale	As shown

Drawn	PVS
Checked	MPR
File Name	GW drawing

Figure  
14





**Notes:**

MEK = Methyl ethyl ketone  
2,2,4-TMP = 2,2,4-Trimethylpentane  
TBA = Tertiary Butyl Alcohol



- Ambient/Outdoor Air Sample Location
- Soil Vapor Sample Locations

**Ambient Air**

**Vapor 3**  
Vinyl chloride 153 ppb  
MEK 64.1 ppb  
Benzene 18.6 ppb  
2,2,4-TMP 11,200 ppb  
Toluene 15.8 ppb

**Vapor 2**  
Acetone 3.94 ppb  
2,2,4-TMP 359 ppb  
Toluene 10.9 ppb  
Xylene 9.3 ppb

**Vapor 1**  
Acetone 299 ppb  
TBA 3.79 ppb  
MEK 84.6 ppb  
Toluene 1.49 ppb

Title Soil Vapor Sample Summary Results  
Sampling Locations  
Freedman & Sons Property, Green Island, NY

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup>. Floor  
Bellmawr, New Jersey 08031

  
Leader Professional Services  
271 Marsh Road, Suite 2  
Pittsford, NY 14534  
(585) 248-2413  
FAX (585) 248-2834

Project 842.002  
Date 10/16/19  
Scale As Shown

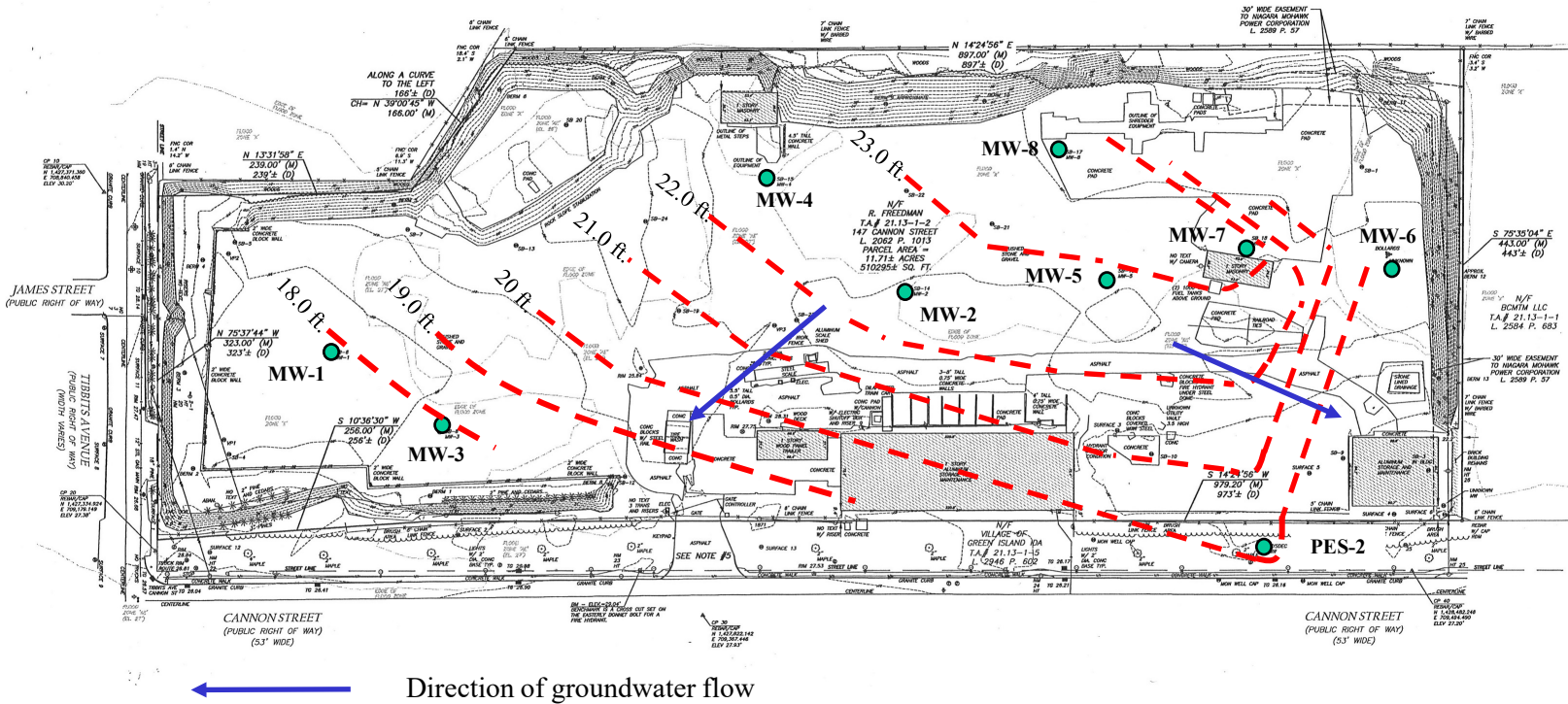
Drawn PVS  
Checked MPR  
File Name SV Map

Figure  
**15**

1-Feb-17



	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	PES-2
Elevation of Cap/Casing N.A.D. 1988	31.426	29.904	30.776	30.331	30.467	26.941	28.032	28.591	26.988
Elv. Ground Surface N.A.D. 1988	28.617	27.269	27.975	27.423	27.338	26.188	27.752	28.919	27.274
Depth to Groundwater in feet	13.64	7.35	13.08	7.9	7.64	7.61	4.86	5.05	7.05
Groundwater Elv. From Cap/Casing	17.786	22.554	17.696	22.431	22.827	19.331	23.172	23.541	19.938



Title  
Groundwater Surface Contour (2017) and Flow Direction  
Former Freedman and Sons Property  
Green Island, NY

Prepared For  
Webster Golf Club, Inc.  
440 Salt Road  
Webster, New York

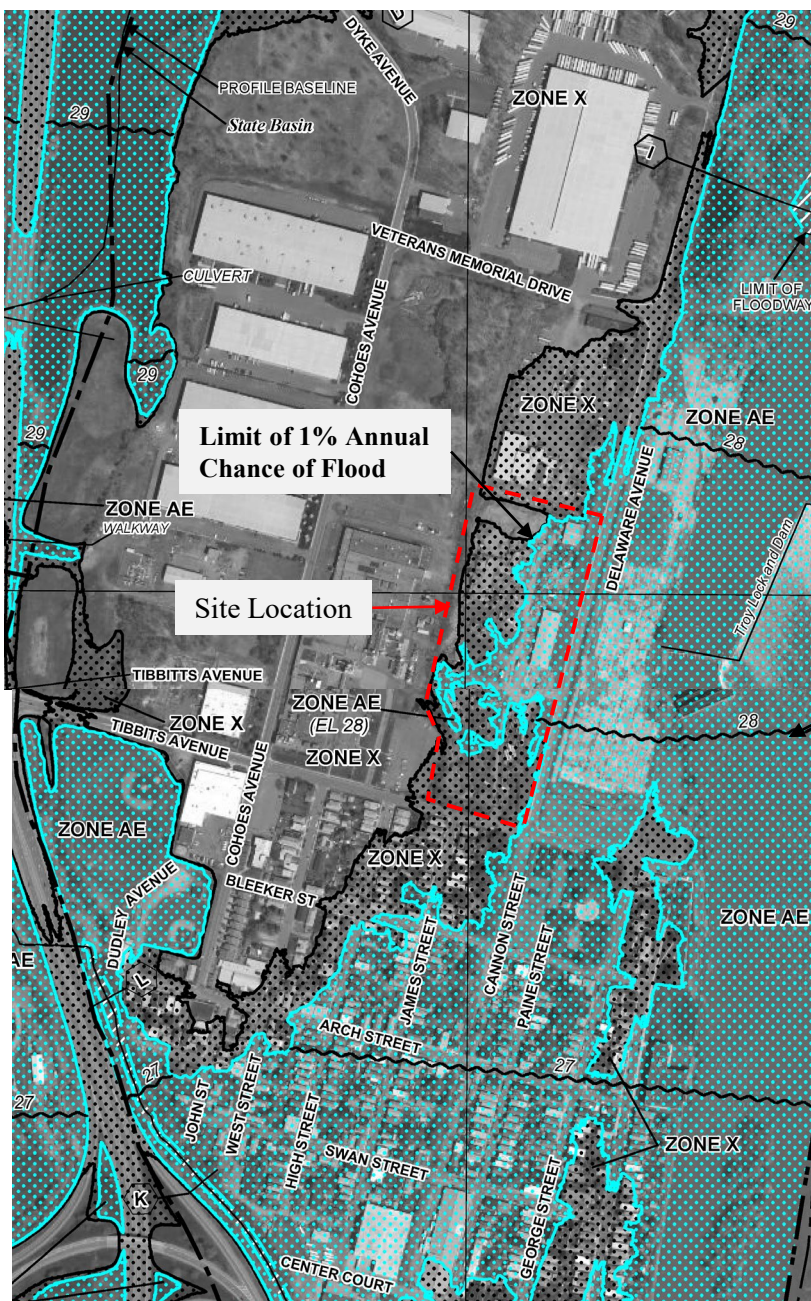
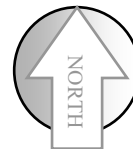
Leader Professional Services, Inc.  
271 Marsh Road-Suite 200  
Pittsford, New York 14534

Project 842.002  
Date 11/4/19  
Scale None

Drawn PVS  
Checked MPR  
File Name GW Contour

Figure  
**16**





Title FEMA Flood Hazard Map  
Freedman & Sons Property  
Green Island, NY

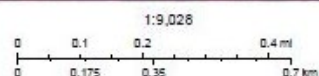
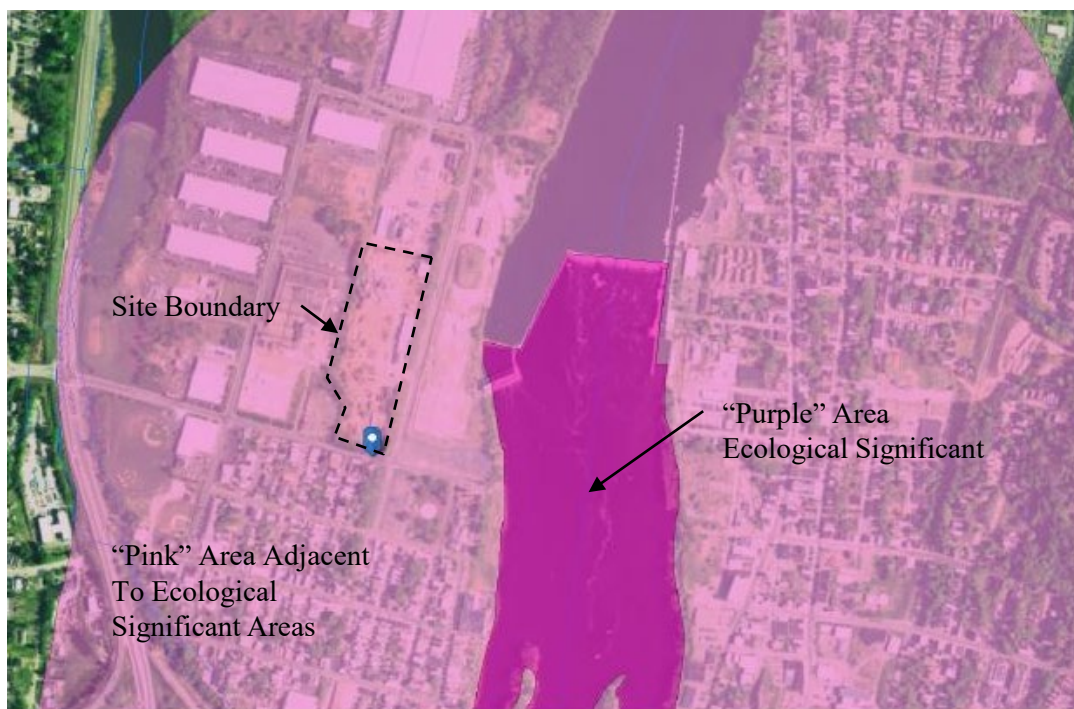
Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup>. Floor  
Bellmawr, New Jersey 08031

  
Leader Professional Services  
271 Marsh Road, Suite 2  
Pittsford, NY 14534  
(585) 248-2413  
FAX (585) 248-2834

Project 842.002  
Date 7521/17  
Scale As Shown

Drawn \_\_\_\_\_  
Checked MPR  
File Name Site Map

Figure  
**17**



Title Ecological Sensitive Areas Near the Site  
Freedman & Sons Property  
Green Island, NY

Prepared For Eastern Metal Recycling, LLC  
143 Harding Avenue, 1<sup>st</sup>. Floor  
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Project 842.002

Date

10/16/19

Scale

As Shown

Drawn

Checked

MPR

File Name

Site Map

Figure

18

**TABLE 1**  
**Off-Site Soil Sample Results from Surface Soil Samples**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-1	SURFACE-2	SURFACE-7	SURFACE-8	SURFACE-9	SURFACE-10	SURFACE-11	SURFACE-12	SURFACE-13								
				LAB ID:	L1702357-01	L1702357-02	L1702771-01	L1702771-02	L1702771-03	L1702771-04	L1702771-05	L1702771-06	L1702771-07								
				COLLECTION DATE:	1/24/2017	1/24/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017								
				SAMPLE DEPTH:																	
				SAMPLE MATRIX:																	
		IUSCO	RRSCO	UUSCO																	
ANALYTE	CAS	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS</b>																					
Methylene chloride	75-09-2	1000	100	0.05	0.0016	J	0.013	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,1-Dichloroethane	75-34-3	480	26	0.27	0.002	U	0.0019	U	-	-	-	-	-	-	-	-	-	-	-	-	
Chloroform	67-66-3	700	49	0.37	0.002	U	0.0019	U	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon tetrachloride	56-23-5	44	2.4	0.76	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dichloropropane	78-87-5				0.0047	U	0.0045	U	-	-	-	-	-	-	-	-	-	-	-	-	
Dibromochloromethane	124-48-1				0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,1,2-Trichloroethane	79-00-5				0.002	U	0.0019	U	-	-	-	-	-	-	-	-	-	-	-	-	
Tetrachloroethene	127-18-4	300	19	1.3	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Chlorobenzene	108-90-7	1000	100	1.1	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Trichlorofluoromethane	75-69-4				0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dichloroethane	107-06-2	60	3.1	0.02	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,1,1-Trichloroethane	71-55-6	1000	100	0.68	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bromodichloromethane	75-27-4				0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
trans-1,3-Dichloropropene	10061-02-6				0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
cis-1,3-Dichloropropene	10061-01-5				0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bromoform	75-25-2				0.0054	U	0.0051	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,1,1,2-Tetrachloroethane	79-34-5				0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Benzene	71-43-2	89	4.8	0.06	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Toluene	108-88-3	1000	100	0.7	0.002	U	0.0019	U	-	-	-	-	-	-	-	-	-	-	-	-	
Ethylbenzene	100-41-4	780	41	1	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Chloromethane	74-87-3				0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bromomethane	74-83-9				0.0027	U	0.0026	U	-	-	-	-	-	-	-	-	-	-	-	-	
Vinyl chloride	75-01-4	27	0.9	0.02	0.0027	U	0.0026	U	-	-	-	-	-	-	-	-	-	-	-	-	
Chloroethane	75-00-3				0.0027	U	0.0026	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,1-Dichloroethene	75-35-4	1000	100	0.33	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
trans-1,2-Dichloroethene	156-60-5	1000	100	0.19	0.002	U	0.0019	U	-	-	-	-	-	-	-	-	-	-	-	-	
Trichloroethene	79-01-6	400	21	0.47	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dichlorobenzene	95-50-1	1000	100	1.1	0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,3-Dichlorobenzene	541-73-1	560	49	2.4	0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,4-Dichlorobenzene	106-46-7	250	13	1.8	0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl tert butyl ether	1634-04-4	1000	100	0.93	0.0027	U	0.0026	U	-	-	-	-	-	-	-	-	-	-	-	-	
p/m-Xylene	179601-23-1				0.0027	U	0.0026	U	-	-	-	-	-	-	-	-	-	-	-	-	
o-Xylene	95-47-6				0.0027	U	0.0026	U	-	-	-	-	-	-	-	-	-	-	-	-	
cis-1,2-Dichloroethene	156-59-2	1000	100	0.25	0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Styrene	100-42-5				0.0027	U	0.0026	U	-	-	-	-	-	-	-	-	-	-	-	-	
Dichlorodifluoromethane	75-71-8				0.013	U	0.013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Acetone	67-64-1	1000	100	0.05	0.013	U	0.002	J	-	-	-	-	-	-	-	-	-	-	-	-	
Carbon disulfide	75-15-0				0.013	U	0.013	U	-	-	-	-	-	-	-	-	-	-	-	-	
2-Butanone	78-93-3	1000	100	0.12	0.013	U	0.013	U	-	-	-	-	-	-	-	-	-	-	-	-	
4-Methyl-2-pentanone	108-10-1				0.013	U	0.013	U	-	-	-	-	-	-	-	-	-	-	-	-	
2-Hexanone	591-78-6				0.013	U	0.013	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bromochloromethane	74-97-5				0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:  
mg/Kg= milligrams per kilogram  
U = Compound found < value shown  
J = Compound found < lab reporting limit  
E= Estimated value

**TABLE 1**  
**Off-Site Soil Sample Results from Surface Soil Samples**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-1	SURFACE-2	SURFACE-7	SURFACE-8	SURFACE-9	SURFACE-10	SURFACE-11	SURFACE-12	SURFACE-13								
				LAB ID:	L1702357-01	L1702357-02	L1702771-01	L1702771-02	L1702771-03	L1702771-04	L1702771-05	L1702771-06	L1702771-07								
				COLLECTION DATE:	1/24/2017	1/24/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017								
				SAMPLE DEPTH:																	
				SAMPLE MATRIX:																	
	CAS	IUSCO (mg/kg)	RRSCO (mg/kg)	UUSCO (mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
1,2-Dibromoethane	106-93-4				0.0054	U	0.0051	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dibromo-3-chloropropane	96-12-8				0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
Isopropylbenzene	98-82-8				0.0013	U	0.0013	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichlorobenzene	87-61-6				0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,2,4-Trichlorobenzene	120-82-1				0.0067	U	0.0064	U	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl Acetate	79-20-9				0.027	U	0.026	U	-	-	-	-	-	-	-	-	-	-	-	-	
Cyclohexane	110-82-7				0.027	U	0.026	U	-	-	-	-	-	-	-	-	-	-	-	-	
1,4-Dioxane	123-91-1	250	13	0.1	0.13	U	0.13	U	-	-	-	-	-	-	-	-	-	-	-	-	
Freon-113	76-13-1				0.027	U	0.026	U	-	-	-	-	-	-	-	-	-	-	-	-	
Methyl cyclohexane	108-87-2				0.0054	U	0.0051	U	-	-	-	-	-	-	-	-	-	-	-	-	
Total VOCs					0.0016	-	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																					
Unknown					-		0.00379	J	-	-	-	-	-	-	-	-	-	-	-	-	
No Tentatively Identified Compounds					-		-		-	-	-	-	-	-	-	-	-	-	-	-	
Unknown					0.0135	J	-		-	-	-	-	-	-	-	-	-	-	-	-	
Unknown					-		0.00563	J	-	-	-	-	-	-	-	-	-	-	-	-	
Total TIC Compounds					0.0135	J	0.00942	J	-	-	-	-	-	-	-	-	-	-	-	-	
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																					
Acenaphthene	83-32-9	1000	100	20	0.046	J	0.17	U	-	-	-	-	-	-	-	-	-	-	-	-	
Hexachlorobenzene	118-74-1	12	1.2	0.33	0.13	U	0.12	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bis(2-chloroethyl)ether	111-44-4				0.2	U	0.19	U	-	-	-	-	-	-	-	-	-	-	-	-	
2-Chloronaphthalene	91-58-7				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
3,3'-Dichlorobenzidine	91-94-1				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
2,4-Dinitrotoluene	121-14-2				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
2,6-Dinitrotoluene	606-20-2				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Fluoranthene	206-44-0	1000	100	100	1.1		3.6		-	-	-	-	-	-	-	-	-	-	-	-	
4-Chlorophenyl phenyl ether	7005-72-3				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
4-Bromophenyl phenyl ether	101-55-3				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bis(2-chloroisopropyl)ether	108-60-1				0.26	U	0.25	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bis(2-chloroethoxy)methane	111-91-1				0.24	U	0.23	U	-	-	-	-	-	-	-	-	-	-	-	-	
Hexachlorobutadiene	87-68-3				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Hexachlorocyclopentadiene	77-47-4				0.63	U	0.6	U	-	-	-	-	-	-	-	-	-	-	-	-	
Hexachloroethane	67-72-1				0.18	U	0.17	U	-	-	-	-	-	-	-	-	-	-	-	-	
Isophorone	78-59-1				0.2	U	0.19	U	-	-	-	-	-	-	-	-	-	-	-	-	
Naphthalene	91-20-3	1000	100	12	0.2	J	0.36		-	-	-	-	-	-	-	-	-	-	-	-	
Nitrobenzene	98-95-3				0.2	U	0.19	U	-	-	-	-	-	-	-	-	-	-	-	-	
NDPA/DPA	86-30-6				0.18	U	0.17	U	-	-	-	-	-	-	-	-	-	-	-	-	
n-Nitrosodi-n-propylamine	621-64-7				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Bis(2-ethylhexyl)phthalate	117-81-7				0.3		0.14	J	-	-	-	-	-	-	-	-	-	-	-	-	
Butyl benzyl phthalate	85-68-7				0.3		0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Di-n-butylphthalate	84-74-2				0.078	J	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Di-n-octylphthalate	117-84-0				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Diethyl phthalate	84-66-2				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	
Dimethyl phthalate	131-11-3				0.22	U	0.21	U	-	-	-	-	-	-	-	-	-	-	-	-	

Notes:  
mg/Kg= milligrams per kilogram  
U = Compound found < value shown  
J = Compound found < lab reporting limit  
E= Estimated value

**TABLE 1**  
**Off-Site Soil Sample Results from Surface Soil Samples**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-1	SURFACE-2	SURFACE-7	SURFACE-8	SURFACE-9	SURFACE-10	SURFACE-11	SURFACE-12	SURFACE-13										
				LAB ID:	L1702357-01	L1702357-02	L1702771-01	L1702771-02	L1702771-03	L1702771-04	L1702771-05	L1702771-06	L1702771-07										
				COLLECTION DATE:	1/24/2017	1/24/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017										
				SAMPLE DEPTH:																			
				SAMPLE MATRIX:																			
		IUSCO	RRSCO	UUSCO																			
ANALYTE	CAS	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q			
Benzo(a)anthracene	56-55-3	11	1	1	0.56		3.4		-		-		-		-		-		-		-		
Benzo(a)pyrene	50-32-8	1.1	1	1	0.66		3.5		-		-		-		-		-		-		-		
Benzo(b)fluoranthene	205-99-2	11	1	1	0.94		5.2		-		-		-		-		-		-		-		
Benzo(k)fluoranthene	207-08-9	110	3.9	0.8	0.29		1.7		-		-		-		-		-		-		-		
Chrysene	218-01-9	110	3.9	1	0.65		3.8		-		-		-		-		-		-		-		
Acenaphthylene	208-96-8	1000	100	100	0.041	J	2.7		-		-		-		-		-		-		-		
Anthracene	120-12-7	1000	100	100	0.1	J	1.4		-		-		-		-		-		-		-		
Benzo(ghi)perylene	191-24-2	1000	100	100	0.45		2		-		-		-		-		-		-		-		
Fluorene	86-73-7	1000	100	30	0.22	U	0.28		-		-		-		-		-		-		-		
Phenanthrene	85-01-8	1000	100	100	0.63		1.1		-		-		-		-		-		-		-		
Dibenzo(a,h)anthracene	53-70-3	1.1	0.33	0.33	0.12	J	0.66		-		-		-		-		-		-		-		
Indeno(1,2,3-cd)pyrene	193-39-5	11	0.5	0.5	0.49		2.3		-		-		-		-		-		-		-		
Pyrene	129-00-0	1000	100	100	0.96		4.6		-		-		-		-		-		-		-		
Biphenyl	92-52-4				0.5	U	0.048	J	-		-		-		-		-		-		-		
4-Chloroaniline	106-47-8				0.22	U	0.21	U	-		-		-		-		-		-		-		
2-Nitroaniline	88-74-4				0.22	U	0.21	U	-		-		-		-		-		-		-		
3-Nitroaniline	99-09-2				0.22	U	0.21	U	-		-		-		-		-		-		-		
4-Nitroaniline	100-01-6				0.22	U	0.21	U	-		-		-		-		-		-		-		
Dibenzofuran	132-64-9	1000	59	7	0.063	J	0.16	J	-		-		-		-		-		-		-		
2-Methylnaphthalene	91-57-6				0.18	J	0.3		-		-		-		-		-		-		-		
1,2,4,5-Tetrachlorobenzene	95-94-3				0.22	U	0.21	U	-		-		-		-		-		-		-		
Acetophenone	98-86-2				0.04	J	0.051	J	-		-		-		-		-		-		-		
2,4,6-Trichlorophenol	88-06-2				0.13	U	0.12	U	-		-		-		-		-		-		-		
p-Chloro-m-cresol	59-50-7				0.22	U	0.21	U	-		-		-		-		-		-		-		
2-Chlorophenol	95-57-8				0.22	U	0.21	U	-		-		-		-		-		-		-		
2,4-Dichlorophenol	120-83-2				0.2	U	0.19	U	-		-		-		-		-		-		-		
2,4-Dimethylphenol	105-67-9				0.22	U	0.21	U	-		-		-		-		-		-		-		
2-Nitrophenol	88-75-5				0.47	U	0.45	U	-		-		-		-		-		-		-		
4-Nitrophenol	100-02-7				0.31	U	0.29	U	-		-		-		-		-		-		-		
2,4-Dinitrophenol	51-28-5				1	U	1	U	-		-		-		-		-		-		-		
4,6-Dinitro-o-cresol	534-52-1				0.57	U	0.54	U	-		-		-		-		-		-		-		
Pentachlorophenol	87-86-5	55	6.7	0.8	0.18	U	0.17	U	-		-		-		-		-		-		-		
Phenol	108-95-2	1000	100	0.33	0.22	U	0.21	U	-		-		-		-		-		-		-		
2-Methylphenol	95-48-7	1000	100	0.33	0.22	U	0.21	U	-		-		-		-		-		-		-		
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	1000	100	0.33	0.32	U	0.042	J	-		-		-		-		-		-		-		
2,4,5-Trichlorophenol	95-95-4				0.22	U	0.21	U	-		-		-		-		-		-		-		
Carbazole	86-74-8				0.22	U	0.16	J	-		-		-		-		-		-		-		
Atrazine	1912-24-9				0.18	U	0.17	U	-		-		-		-		-		-		-		
Benzaldehyde	100-52-7				0.29	U	0.28	U	-		-		-		-		-		-		-		
Caprolactam	105-60-2				0.22	U	0.21	U	-		-		-		-		-		-		-		
2,3,4,6-Tetrachlorophenol	58-90-2				0.22	U	0.21	U	-		-		-		-		-		-		-		
Total SVOCs					8.198	-	37.501	-	-		-		-		-		-		-		-		
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																							
Unknown					-		0.827	J	-		-		-		-		-		-		-		

Notes:  
mg/Kg= milligrams per kilogram  
U = Compound found < value shown  
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**Off-Site Soil Sample Results from Surface Soil Samples**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-1	SURFACE-2	SURFACE-7	SURFACE-8	SURFACE-9	SURFACE-10	SURFACE-11	SURFACE-12	SURFACE-13								
				LAB ID:	L1702357-01	L1702357-02	L1702771-01	L1702771-02	L1702771-03	L1702771-04	L1702771-05	L1702771-06	L1702771-07								
				COLLECTION DATE:	1/24/2017	1/24/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017	1/26/2017								
				SAMPLE DEPTH:																	
				SAMPLE MATRIX:																	
ANALYTE	CAS	IUSCO (mg/kg)	RRSCO (mg/kg)	UUSCO (mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
Unknown Organic Acid					-		-		-		-		-		-		-		-		-
Unknown					-		0.628	J	-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown PAH					-		0.938	J	-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown					-		0.694	J	-		-		-		-		-		-		-
Unknown PAH					-		2.74	J	-		-		-		-		-		-		-
Unknown PAH					0.184	J	0.487	J	-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown PAH					-		1.27	J	-		-		-		-		-		-		-
Unknown					-		0.369	J	-		-		-		-		-		-		-
Unknown					-		0.348	J	-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown					-		0.473	J	-		-		-		-		-		-		-
Unknown PAH					-		0.373	J	-		-		-		-		-		-		-
Unknown					-		-		-		-		-		-		-		-		-
Unknown					-		-		-		-		-		-		-		-		-
Sulfur	013798-23-7				-		-		-		-		-		-		-		-		-
Unknown PAH					-		0.576	J	-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown PAH					-		0.511	J	-		-		-		-		-		-		-
Unknown Phenol					-		-		-		-		-		-		-		-		-
Unknown					-		-		-		-		-		-		-		-		-
Unknown PAH					0.45	J	0.574	J	-		-		-		-		-		-		-
Vitamin E	010191-41-0				-		-		-		-		-		-		-		-		-
Unknown PAH					-		1.23	J	-		-		-		-		-		-		-
Unknown PAH					-		0.678	J	-		-		-		-		-		-		-
Unknown					-		1.59	J	-		-		-		-		-		-		-
Unknown PAH					-		1.34	J	-		-		-		-		-		-		-
Unknown PAH					-		0.706	J	-		-		-		-		-		-		-
Unknown PAH					0.202	J	0.648	J	-		-		-		-		-		-		-
Unknown					0.55	J	-		-		-		-		-		-		-		-
Total SVOCs					1.386	-	17	-	-		-		-		-		-		-		-
<b>CHLORINATED HERBICIDES BY GC</b>																					
MCPP	93-65-2				4.36	U	4.22	U	-		-		-		-		-		-		-
MCPA	94-74-6				4.36	U	4.22	U	-		-		-		-		-		-		-
Dalapon	75-99-0				0.0436	U	0.0422	U	-		-		-		-		-		-		-
Dicamba	1918-00-9				0.0436	U	0.0422	U	-		-		-		-		-		-		-
Dichloroprop	120-36-5				0.0436	U	0.0422	U	-		-		-		-		-		-		-
2,4-D	94-75-7				0.218	U	0.211	U	-		-		-		-		-		-		-
2,4-DB	94-82-6				0.218	U	0.211	U	-		-		-		-		-		-		-

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**Off-Site Soil Sample Results from Surface Soil Samples**  
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**Green Island, New York**

				SAMPLE ID:	SURFACE-1		SURFACE-2		SURFACE-7		SURFACE-8		SURFACE-9		SURFACE-10		SURFACE-11		SURFACE-12		SURFACE-13	
				LAB ID:	L1702357-01		L1702357-02		L1702771-01		L1702771-02		L1702771-03		L1702771-04		L1702771-05		L1702771-06		L1702771-07	
				COLLECTION DATE:	1/24/2017		1/24/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017	
				SAMPLE DEPTH:																		
				SAMPLE MATRIX:																		
ANALYTE	CAS	IUSCO (mg/kg)	RRSCO (mg/kg)	UUSCO (mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,5-T	93-76-5				0.218	U	0.211	U	-		-		-		-		-		-		-	
2,4,5-TP (Silvex)	93-72-1	1000	100	3.8	0.218	U	0.211	U	-		-		-		-		-		-		-	
Dinoseb	88-85-7				0.0436	U	0.0422	U	-		-		-		-		-		-		-	
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																						
Delta-BHC	319-86-8	1000	100	0.04	0.00206	U	0.00198	U	-		-		-		-		-		-		-	
Lindane	58-89-9	23	1.3	0.1	0.000858	U	0.000826	U	-		-		-		-		-		-		-	
Alpha-BHC	319-84-6	6.8	0.48	0.02	0.000858	U	0.000826	U	-		-		-		-		-		-		-	
Beta-BHC	319-85-7	14	0.36	0.036	0.00206	U	0.00198	U	-		-		-		-		-		-		-	
Heptachlor	76-44-8	29	2.1	0.042	0.00103	U	0.000991	U	-		-		-		-		-		-		-	
Aldrin	309-00-2	1.4	0.097	0.005	0.00206	U	0.00198	U	-		-		-		-		-		-		-	
Heptachlor epoxide	1024-57-3				0.00376	JPI	0.00371	U	-		-		-		-		-		-		-	
Endrin	72-20-8	410	11	0.014	0.00728	U	0.000826	U	-		-		-		-		-		-		-	
Endrin aldehyde	7421-93-4				0.00257	U	0.00248	U	-		-		-		-		-		-		-	
Endrin ketone	53494-70-5				0.00206	U	0.00198	U	-		-		-		-		-		-		-	
Dieldrin	60-57-1	2.8	0.2	0.005	0.00817	PI	0.00299	PI	-		-		-		-		-		-		-	
4,4'-DDE	72-55-9	120	8.9	0.0033	0.00206	U	0.000988	JPI	-		-		-		-		-		-		-	
4,4'-DDD	72-54-8	180	13	0.0033	0.00206	U	0.00198	U	-		-		-		-		-		-		-	
4,4'-DDT	50-29-3	94	7.9	0.0033	0.0207	PI	0.0228		-		-		-		-		-		-		-	
Endosulfan I	959-98-8	920	24	2.4	0.00206	U	0.00198	U	-		-		-		-		-		-		-	
Endosulfan II	33213-65-9	920	24	2.4	0.00288	PI	0.00198	U	-		-		-		-		-		-		-	
Endosulfan sulfate	1031-07-8	920	24	2.4	0.000858	U	0.000826	U	-		-		-		-		-		-		-	
Methoxychlor	72-43-5				0.00386	U	0.00371	U	-		-		-		-		-		-		-	
Toxaphene	8001-35-2				0.0386	U	0.0371	U	-		-		-		-		-		-		-	
cis-Chlordane	5103-71-9	47	4.2	0.094	0.00257	U	0.00248	U	-		-		-		-		-		-		-	
trans-Chlordane	5103-74-2				0.00257	U	0.00248	U	-		-		-		-		-		-		-	
Chlordane	57-74-9				0.0167	U	0.0161	U	-		-		-		-		-		-		-	
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																						
Aroclor 1016	12674-11-2	25	1	0.1	0.0432	U	0.0408	U	0.0509	U	0.0456	U	0.054	U	0.0528	U	0.229	U	0.0381	U	0.0389	U
Aroclor 1221	11104-28-2	25	1	0.1	0.0432	U	0.0408	U	0.0509	U	0.0456	U	0.054	U	0.0528	U	0.229	U	0.0381	U	0.0389	U
Aroclor 1232	11141-16-5	25	1	0.1	0.0432	U	0.0408	U	0.0509	U	0.0456	U	0.054	U	0.0528	U	0.229	U	0.0381	U	0.0389	U
Aroclor 1242	53469-21-9	25	1	0.1	0.136		0.0489		0.118		0.0729		0.34		0.105		0.113	J	0.0381	U	0.0179	J
Aroclor 1248	12672-29-6	25	1	0.1	0.0432	U	0.0408	U	0.0509	U	0.0456	U	0.054	U	0.0528	U	0.229	U	0.0381	U	0.0389	U
Aroclor 1254	11097-69-1	25	1	0.1	0.401		0.103		0.314		0.106		0.625		0.392		1.08		0.0107	J	0.0203	J
Aroclor 1260	11096-82-5	25	1	0.1	0.449		0.0974		0.253		0.095		0.474		0.36		0.336		0.0381	U	0.011	J
Aroclor 1262	37324-23-5	25	1	0.1	0.0432	U	0.0408	U	0.0509	U	0.0456	U	0.054	U	0.0528	U	0.229	U	0.0381	U	0.0389	U
Aroclor 1268	11100-14-4	25	1	0.1	0.0432	U	0.0408	U	0.0509	U	0.0456	U	0.054	U	0.0528	U	0.229	U	0.0381	U	0.0389	U
PCBs, Total	1336-36-3	25	1	0.1	0.986		0.249		0.685		0.274		1.44		0.857		1.53	J	0.0107	J	0.0492	J
<b>TOTAL METALS</b>																						
Aluminum, Total	7429-90-5				7000		7200		-		-		-		-		-		-		-	
Antimony, Total	7440-36-0				6.4		6.4		-		-		-		-		-		-		-	
Arsenic, Total	7440-38-2	16	16	13	9.6		13		-		-		-		-		-		-		-	
Barium, Total	7440-39-3	10000	400	350	110		78		-		-		-		-		-		-		-	
Beryllium, Total	7440-41-7	2700	72	7.2	0.3	J	0.32	J	-		-		-		-		-		-		-	
Cadmium, Total	7440-43-9	60	4.3	2.5	2.2		0.81	J	-		-		-		-		-		-		-	

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				LAB ID:	L1702357-01		L1702357-02		L1702771-01		L1702771-02		L1702771-03		L1702771-04		L1702771-05		L1702771-06		L1702771-07	
				COLLECTION DATE:	1/24/2017		1/24/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017		1/26/2017	
				SAMPLE DEPTH:																		
				SAMPLE MATRIX:																		
ANALYTE	CAS	IUSCO (mg/kg)	RRSCO (mg/kg)	UUSCO (mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Calcium, Total	7440-70-2				11000		7900		-		-		-		-		-		-		-	
Chromium, Total	7440-47-3	6,800	180	30	55		34		-		-		-		-		-		-		-	
Cobalt, Total	7440-48-4				9.4		10		-		-		-		-		-		-		-	
Copper, Total	7440-50-8	10000	270	50	540		340		-		-		-		-		-		-		-	
Iron, Total	7439-89-6				34000		37000		-		-		-		-		-		-		-	
Lead, Total	7439-92-1	3900	400	63	700		370		-		-		-		-		-		-		-	
Magnesium, Total	7439-95-4				5300		3000		-		-		-		-		-		-		-	
Manganese, Total	7439-96-5	10000	2000	1600	600		540		-		-		-		-		-		-		-	
Mercury, Total	7439-97-6	5.7	0.81	0.18	1.3		0.87		-		-		-		-		-		-		-	
Nickel, Total	7440-02-0	10000	310	30	53		37		-		-		-		-		-		-		-	
Potassium, Total	7440-09-7				640		570		-		-		-		-		-		-		-	
Selenium, Total	7782-49-2	6800	180	3.9	2.1	U	2	U	-		-		-		-		-		-		-	
Silver, Total	7440-22-4	6800	180	2	0.41	J	0.98	U	-		-		-		-		-		-		-	
Sodium, Total	7440-23-5				110	J	77	J	-		-		-		-		-		-		-	
Thallium, Total	7440-28-0				2.1	U	2	U	-		-		-		-		-		-		-	
Vanadium, Total	7440-62-2				35		29		-		-		-		-		-		-		-	
Zinc, Total	7440-66-6	10000	10000	109	500		280		-		-		-		-		-		-		-	
<b>GENERAL CHEMISTRY</b>																						
Solids, Total	NONE				74.7		78.1		64.4		72		59.6		61.2		70.6		82.4		80.8	
Cyanide, Total	57-12-5	10000	27	27	0.65	J	0.34	J	-		-		-		-		-		-		-	

\* Comparison is not performed on parameters with non-numeric criteria.

NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Notes:

mg/Kg= milligrams per kilogram

U = Compound found < value shown

J = Compound found < lab reporting limit

E= Estimated value

**TABLE 2**  
**On-Site Soil Sample Results**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-3		SURFACE-4		SURFACE-4 DUP		SURFACE-5		SURFACE-6		COMPOSITE-1	
				LAB ID:	L1702357-03		L1702357-04		L1702357-05		L1702771-08		L1702771-09		L1702771-10	
				COLLECTION DATE:	1/24/2017		1/24/2017		1/24/2017		1/25/2017		1/25/2017		1/26/2017	
				SAMPLE DEPTH:												
				SAMPLE MATRIX:												
ANALYTE	CAS	IUSCO (mg/kg)	RRSCO (mg/kg)	UUSCO (mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	75-09-2	1000	100	0.05	0.0019	J	0.022	U	0.024	U	-	-	-	-	-	-
1,1-Dichloroethane	75-34-3	480	26	0.27	0.002	U	0.0032	U	0.0036	U	-	-	-	-	-	-
Chloroform	67-66-3	700	49	0.37	0.002	U	0.0032	U	0.0036	U	-	-	-	-	-	-
Carbon tetrachloride	56-23-5	44	2.4	0.76	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
1,2-Dichloropropane	78-87-5				0.0046	U	0.0076	U	0.0084	U	-	-	-	-	-	-
Dibromochloromethane	124-48-1				0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
1,1,2-Trichloroethane	79-00-5				0.002	U	0.0032	U	0.0036	U	-	-	-	-	-	-
Tetrachloroethene	127-18-4	300	19	1.3	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Chlorobenzene	108-90-7	1000	100	1.1	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Trichlorofluoromethane	75-69-4				0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
1,2-Dichloroethane	107-06-2	60	3.1	0.02	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
1,1,1-Trichloroethane	71-55-6	1000	100	0.68	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Bromodichloromethane	75-27-4				0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
trans-1,3-Dichloropropene	10061-02-6				0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
cis-1,3-Dichloropropene	10061-01-5				0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Bromoform	75-25-2				0.0053	U	0.0086	U	0.0097	U	-	-	-	-	-	-
1,1,1,2-Tetrachloroethane	79-34-5				0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Benzene	71-43-2	89	4.8	0.06	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Toluene	108-88-3	1000	100	0.7	0.002	U	0.0032	U	0.0036	U	-	-	-	-	-	-
Ethylbenzene	100-41-4	780	41	1	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Chloromethane	74-87-3				0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
Bromomethane	74-83-9				0.0026	U	0.0043	U	0.0048	U	-	-	-	-	-	-
Vinyl chloride	75-01-4	27	0.9	0.02	0.0026	U	0.0043	U	0.0048	U	-	-	-	-	-	-
Chloroethane	75-00-3				0.0026	U	0.0043	U	0.0048	U	-	-	-	-	-	-
1,1-Dichloroethene	75-35-4	1000	100	0.33	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
trans-1,2-Dichloroethene	156-60-5	1000	100	0.19	0.002	U	0.0032	U	0.0036	U	-	-	-	-	-	-
Trichloroethene	79-01-6	400	21	0.47	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
1,2-Dichlorobenzene	95-50-1	1000	100	1.1	0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
1,3-Dichlorobenzene	541-73-1	560	49	2.4	0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
1,4-Dichlorobenzene	106-46-7	250	13	1.8	0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
Methyl tert butyl ether	1634-04-4	1000	100	0.93	0.0026	U	0.0043	U	0.0048	U	-	-	-	-	-	-
p/m-Xylene	179601-23-1				0.0026	U	0.0043	U	0.0048	U	-	-	-	-	-	-
o-Xylene	95-47-6				0.0026	U	0.0043	U	0.0048	U	-	-	-	-	-	-
cis-1,2-Dichloroethene	156-59-2	1000	100	0.25	0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
Styrene	100-42-5				0.0026	U	0.0043	U	0.0048	U	-	-	-	-	-	-
Dichlorodifluoromethane	75-71-8				0.013	U	0.022	U	0.024	U	-	-	-	-	-	-
Acetone	67-64-1	1000	100	0.05	0.013	U	0.022	U	0.024	U	-	-	-	-	-	-
Carbon disulfide	75-15-0				0.013	U	0.022	U	0.024	U	-	-	-	-	-	-
2-Butanone	78-93-3	1000	100	0.12	0.013	U	0.022	U	0.024	U	-	-	-	-	-	-
4-Methyl-2-pentanone	108-10-1				0.013	U	0.022	U	0.024	U	-	-	-	-	-	-
2-Hexanone	591-78-6				0.013	U	0.022	U	0.024	U	-	-	-	-	-	-
Bromochloromethane	74-97-5				0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-

Notes:

- mg/Kg= milligrams per kilogram
- U = Compound found < value shown
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- E= Estimated value

**TABLE 2**  
**On-Site Soil Sample Results**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-3		SURFACE-4		SURFACE-4 DUP		SURFACE-5		SURFACE-6		COMPOSITE-1	
				LAB ID:	L1702357-03		L1702357-04		L1702357-05		L1702771-08		L1702771-09		L1702771-10	
				COLLECTION DATE:	1/24/2017		1/24/2017		1/24/2017		1/25/2017		1/25/2017		1/26/2017	
				SAMPLE DEPTH:												
				SAMPLE MATRIX:												
	CAS	IUSCO (mg/kg)	RRSCO (mg/kg)	UUSCO (mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,2-Dibromoethane	106-93-4				0.0053	U	0.0086	U	0.0097	U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	96-12-8				0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
Isopropylbenzene	98-82-8				0.0013	U	0.0022	U	0.0024	U	-	-	-	-	-	-
1,2,3-Trichlorobenzene	87-61-6				0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1				0.0066	U	0.011	U	0.012	U	-	-	-	-	-	-
Methyl Acetate	79-20-9				0.026	U	0.043	U	0.048	U	-	-	-	-	-	-
Cyclohexane	110-82-7				0.026	U	0.043	U	0.048	U	-	-	-	-	-	-
1,4-Dioxane	123-91-1	250	13	0.1	0.13	U	0.22	U	0.24	U	-	-	-	-	-	-
Freon-113	76-13-1				0.026	U	0.043	U	0.048	U	-	-	-	-	-	-
Methyl cyclohexane	108-87-2				0.0053	U	0.0086	U	0.0097	U	-	-	-	-	-	-
Total VOCs					0.0019	-	-	-	-	-	-	-	-	-	-	-
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown					-	-	-	-	-	-	-	-	-	-	-	-
No Tentatively Identified Compounds					-	-	0	U	0	U	-	-	-	-	-	-
Unknown					0.00378	J	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	-	-	-	-	-	-	-	-	-
Total TIC Compounds					0.00378	J	-	-	-	-	-	-	-	-	-	-
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	83-32-9	1000	100	20	0.35	U	0.28	U	0.31	U	0.37	U	0.45	U	0.17	U
Hexachlorobenzene	118-74-1	12	1.2	0.33	0.26	U	0.21	U	0.23	U	0.28	U	0.34	U	0.12	U
Bis(2-chloroethyl)ether	111-44-4				0.39	U	0.32	U	0.35	U	0.41	U	0.51	U	0.19	U
2-Chloronaphthalene	91-58-7				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
3,3'-Dichlorobenzidine	91-94-1				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2,4-Dinitrotoluene	121-14-2				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2,6-Dinitrotoluene	606-20-2				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Fluoranthene	206-44-0	1000	100	100	0.13	J	0.23		0.68		0.26	J	1		0.14	
4-Chlorophenyl phenyl ether	7005-72-3				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
4-Bromophenyl phenyl ether	101-55-3				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Bis(2-chloroisopropyl)ether	108-60-1				0.52	U	0.43	U	0.47	U	0.55	U	0.68	U	0.25	U
Bis(2-chloroethoxy)methane	111-91-1				0.47	U	0.38	U	0.42	U	0.5	U	0.61	U	0.23	U
Hexachlorobutadiene	87-68-3				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Hexachlorocyclopentadiene	77-47-4				1.2	U	1	U	1.1	U	1.3	U	1.6	U	0.6	U
Hexachloroethane	67-72-1				0.35	U	0.28	U	0.31	U	0.37	U	0.45	U	0.17	U
Isophorone	78-59-1				0.39	U	0.32	U	0.35	U	0.41	U	0.51	U	0.19	U
Naphthalene	91-20-3	1000	100	12	0.066	J	0.25	J	0.065	J	0.12	J	0.082	J	0.21	U
Nitrobenzene	98-95-3				0.39	U	0.32	U	0.35	U	0.41	U	0.51	U	0.19	U
NDPA/DPA	86-30-6				0.35	U	0.28	U	0.31	U	0.37	U	0.45	U	0.17	U
n-Nitrosodi-n-propylamine	621-64-7				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Bis(2-ethylhexyl)phthalate	117-81-7				3.2		1.8		0.75		6.2		1.2		0.28	
Butyl benzyl phthalate	85-68-7				0.43	U	0.54		0.46		0.46	U	0.56	J	0.21	U
Di-n-butylphthalate	84-74-2				0.085	J	0.36	U	0.083	J	0.46	U	0.14	J	0.21	U
Di-n-octylphthalate	117-84-0				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Diethyl phthalate	84-66-2				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Dimethyl phthalate	131-11-3				0.43	U	0.36	U	0.12	J	0.12	J	0.57	U	0.21	U

Notes:

- mg/Kg= milligrams per kilogram
- U = Compound found < value shown
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**TABLE 2**  
**On-Site Soil Sample Results**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

		SAMPLE ID:		SURFACE-3	SURFACE-4	SURFACE-4 DUP	SURFACE-5	SURFACE-6	COMPOSITE-1							
		LAB ID:		L1702357-03	L1702357-04	L1702357-05	L1702771-08	L1702771-09	L1702771-10							
		COLLECTION DATE:		1/24/2017	1/24/2017	1/24/2017	1/25/2017	1/25/2017	1/26/2017							
		SAMPLE DEPTH:														
		SAMPLE MATRIX:														
		IUSCO	RRSCO	UUSCO												
ANALYTE	CAS	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
Benzo(a)anthracene	56-55-3	11	1	1	0.079	J	0.12	J	0.3		0.13	J	0.36	J	0.063	J
Benzo(a)pyrene	50-32-8	1.1	1	1	0.12	J	0.16	J	0.31		0.25	J	0.39	J	0.061	J
Benzo(b)fluoranthene	205-99-2	11	1	1	0.2	J	0.2	J	0.48		0.52		0.89		0.097	J
Benzo(k)fluoranthene	207-08-9	110	3.9	0.8	0.26	U	0.21	U	0.16	J	0.12	J	0.29	J	0.12	U
Chrysene	218-01-9	110	3.9	1	0.13	J	0.14	J	0.37		0.26	J	0.51		0.07	J
Acenaphthylene	208-96-8	1000	100	100	0.35	U	0.28	U	0.31	U	0.08	J	0.45	U	0.17	U
Anthracene	120-12-7	1000	100	100	0.26	U	0.21	U	0.23	U	0.28	U	0.34	U	0.12	U
Benzo(ghi)perylene	191-24-2	1000	100	100	0.17	J	0.15	J	0.27	J	0.21	J	0.34	J	0.17	U
Fluorene	86-73-7	1000	100	30	0.43	U	0.057	J	0.39	U	0.46	U	0.57	U	0.21	U
Phenanthrene	85-01-8	1000	100	100	0.074	J	0.18	J	0.29		0.1	J	0.37		0.063	J
Dibenzo(a,h)anthracene	53-70-3	1.1	0.33	0.33	0.26	U	0.21	U	0.058	J	0.28	U	0.34	U	0.12	U
Indeno(1,2,3-cd)pyrene	193-39-5	11	0.5	0.5	0.12	J	0.13	J	0.29	J	0.19	J	0.36	J	0.17	U
Pyrene	129-00-0	1000	100	100	0.17	J	0.21		0.54		0.75		0.98		0.13	
Biphenyl	92-52-4				0.99	U	0.81	U	0.89	U	1	U	1.3	U	0.48	U
4-Chloroaniline	106-47-8				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2-Nitroaniline	88-74-4				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
3-Nitroaniline	99-09-2				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
4-Nitroaniline	100-01-6				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Dibenzofuran	132-64-9	1000	59	7	0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2-Methylnaphthalene	91-57-6				0.083	J	0.25	J	0.081	J	0.17	J	0.1	J	0.25	U
1,2,4,5-Tetrachlorobenzene	95-94-3				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Acetophenone	98-86-2				0.43	U	0.36	U	0.39	U	0.11	J	0.1	J	0.21	U
2,4,6-Trichlorophenol	88-06-2				0.26	U	0.21	U	0.23	U	0.28	U	0.34	U	0.12	U
p-Chloro-m-cresol	59-50-7				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2-Chlorophenol	95-57-8				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2,4-Dichlorophenol	120-83-2				0.39	U	0.32	U	0.35	U	0.41	U	0.51	U	0.19	U
2,4-Dimethylphenol	105-67-9				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2-Nitrophenol	88-75-5				0.94	U	0.77	U	0.84	U	0.99	U	1.2	U	0.45	U
4-Nitrophenol	100-02-7				0.61	U	0.5	U	0.55	U	0.64	U	0.79	U	0.29	U
2,4-Dinitrophenol	51-28-5				2.1	U	1.7	U	1.9	U	2.2	U	2.7	U	1	U
4,6-Dinitro-o-cresol	534-52-1				1.1	U	0.93	U	1	U	1.2	U	1.5	U	0.54	U
Pentachlorophenol	87-86-5	55	6.7	0.8	0.35	U	0.28	U	0.31	U	0.37	U	0.45	U	0.17	U
Phenol	108-95-2	1000	100	0.33	0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2-Methylphenol	95-48-7	1000	100	0.33	0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	1000	100	0.33	0.62	U	0.51	U	0.56	U	0.66	U	0.82	U	0.3	U
2,4,5-Trichlorophenol	95-95-4				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Carbazole	86-74-8				0.43	U	0.36	U	0.065	J	0.46	U	0.095	J	0.21	U
Atrazine	1912-24-9				0.35	U	0.28	U	0.31	U	0.37	U	0.45	U	0.17	U
Benzaldehyde	100-52-7				0.57	U	0.47	U	0.23	J	0.61	U	0.27	J	0.28	U
Caprolactam	105-60-2				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
2,3,4,6-Tetrachlorophenol	58-90-2				0.43	U	0.36	U	0.39	U	0.46	U	0.57	U	0.21	U
Total SVOCs					4.627	-	4.417	-	5.602	-	9.59	-	8.037	-	0.904	-
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown					-		-		1.18	J	-		1.25	J	-	-

Notes:  
mg/Kg= milligrams per kilogram  
U = Compound found < value shown  
J = Compound found < lab reporting limit  
E= Estimated value

**TABLE 2**  
**On-Site Soil Sample Results**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-3	SURFACE-4	SURFACE-4 DUP	SURFACE-5	SURFACE-6	COMPOSITE-1						
				LAB ID:	L1702357-03	L1702357-04	L1702357-05	L1702771-08	L1702771-09	L1702771-10						
				COLLECTION DATE:	1/24/2017	1/24/2017	1/24/2017	1/25/2017	1/25/2017	1/26/2017						
				SAMPLE DEPTH:												
				SAMPLE MATRIX:												
ANALYTE	CAS	IUSCO (mg/kg)	RRSCO (mg/kg)	UUSCO (mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Organic Acid					-		-		0.37	J	0.513	J	-		-	
Unknown					-		0.474	J	-		3.1	J	-		-	
Unknown Alkane					-		0.367	J	-		-		-		-	
Unknown Alkane					-		-		0.717	J	-		-		-	
Unknown Alkane					-		0.391	J	-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					-		0.914	J	-		-		-		-	
Unknown					-		-		1.49	J	-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					-		0.376	J	-		-		-		-	
Unknown Alkane					-		0.308	J	-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown					-		-		1.72	J	-		-		-	
Unknown					-		-		1.1	J	-		2.14	J	-	
Unknown Alkane					-		0.454	J	-		-		-		-	
Unknown					-		-		0.571	J	-		2.68	J	-	
Unknown PAH					-		-		-		-		-		-	
Unknown					-		-		0.483	J	-		-		-	
Unknown					-		-		1.08	J	-		-		-	
Sulfur	013798-23-7				-		0.741	NJ	-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					-		0.301	J	-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Phenol					-		0.592	J	-		5.5	J	-		0.288	J
Unknown					-		-		0.658	J	-		-		-	
Unknown PAH					-		-		-		-		-		-	
Vitamin E	010191-41-0				-		-		0.43	NJ	-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown					-		-		1.61	J	-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown					0.42	J	-		-		-		-		-	
Total SVOCs					0.42	-	4.444	-	10.796	-	6.587	-	9.683	-	0.288	-
<b>CHLORINATED HERBICIDES BY GC</b>																
MCPP	93-65-2				4.31	U	7.03	U	7.92	U	4.62	U	5.72	U	4.16	U
MCPA	94-74-6				4.31	U	7.03	U	7.92	U	4.62	U	5.72	U	4.16	U
Dalapon	75-99-0				0.0431	U	0.0703	U	0.0792	U	0.0462	U	0.0572	U	0.0416	U
Dicamba	1918-00-9				0.0431	U	0.0703	U	0.0792	U	0.0462	U	0.0572	U	0.0416	U
Dichloroprop	120-36-5				0.0431	U	0.0703	U	0.0792	U	0.0462	U	0.0572	U	0.0416	U
2,4-D	94-75-7				0.216	U	0.352	U	0.396	U	0.231	U	0.286	U	0.208	U
2,4-DB	94-82-6				0.216	U	0.352	U	0.396	U	0.231	U	0.286	U	0.208	U

Notes:  
mg/Kg= milligrams per kilogram  
U = Compound found < value shown  
J = Compound found < lab reporting limit  
E= Estimated value

**TABLE 2**  
**On-Site Soil Sample Results**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:	SURFACE-3		SURFACE-4		SURFACE-4 DUP		SURFACE-5		SURFACE-6		COMPOSITE-1	
				LAB ID:	L1702357-03		L1702357-04		L1702357-05		L1702771-08		L1702771-09		L1702771-10	
				COLLECTION DATE:	1/24/2017		1/24/2017		1/24/2017		1/25/2017		1/25/2017		1/26/2017	
				SAMPLE DEPTH:												
				SAMPLE MATRIX:												
		IUSCO	RRSCO	UUSCO												
ANALYTE	CAS	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,5-T	93-76-5				0.216	U	0.352	U	0.396	U	0.231	U	0.286	U	0.208	U
2,4,5-TP (Silvex)	93-72-1	1000	100	3.8	0.216	U	0.352	U	0.396	U	0.231	U	0.286	U	0.208	U
Dinoseb	88-85-7				0.0431	U	0.0703	U	0.0792	U	0.0462	U	0.0572	U	0.0416	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																
Delta-BHC	319-86-8	1000	100	0.04	0.00212	U	0.0033	U	0.00376	U	0.00216	U	0.00275	U	0.00202	U
Lindane	58-89-9	23	1.3	0.1	0.000882	U	0.00137	U	0.00157	U	0.000898	U	0.00115	U	0.00084	U
Alpha-BHC	319-84-6	6.8	0.48	0.02	0.000882	U	0.00137	U	0.00157	U	0.000898	U	0.00115	U	0.00084	U
Beta-BHC	319-85-7	14	0.36	0.036	0.00212	U	0.0033	U	0.00376	U	0.00216	U	0.00275	U	0.00202	U
Heptachlor	76-44-8	29	2.1	0.042	0.00106	U	0.00165	U	0.00188	U	0.00108	U	0.00138	U	0.00101	U
Aldrin	309-00-2	1.4	0.097	0.005	0.00212	U	0.0033	U	0.00376	U	0.00216	U	0.00275	U	0.00202	U
Heptachlor epoxide	1024-57-3				0.00397	U	0.00618	U	0.00706	U	0.00404	U	0.00516	U	0.00378	U
Endrin	72-20-8	410	11	0.014	0.0097	P	0.044	P	0.0646		0.000898	U	0.0345		0.00052	J
Endrin aldehyde	7421-93-4				0.00265	U	0.00412	U	0.0047	U	0.00269	U	0.00344	U	0.00252	U
Endrin ketone	53494-70-5				0.00212	U	0.0033	U	0.00376	U	0.00216	U	0.00275	U	0.00202	U
Dieldrin	60-57-1	2.8	0.2	0.005	0.014		0.106	P	0.193	P	0.00135	U	0.00172	U	0.00126	U
4,4'-DDE	72-55-9	120	8.9	0.0033	0.00212	U	0.0033	U	0.00376	U	0.00216	U	0.00275	U	0.00202	U
4,4'-DDD	72-54-8	180	13	0.0033	0.00212	U	0.0033	U	0.00376	U	0.00216	U	0.00275	U	0.00202	U
4,4'-DDT	50-29-3	94	7.9	0.0033	0.0117	PI	0.0539	PI	0.0907	PI	0.00404	U	0.00516	U	0.00378	U
Endosulfan I	959-98-8	920	24	2.4	0.00212	U	0.0033	U	0.00376	U	0.00216	U	0.00275	U	0.00202	U
Endosulfan II	33213-65-9	920	24	2.4	0.00212	U	0.00458	PI	0.00565	PI	0.00216	U	0.00275	U	0.00202	U
Endosulfan sulfate	1031-07-8	920	24	2.4	0.000882	U	0.00137	U	0.00157	U	0.000898	U	0.00115	U	0.00084	U
Methoxychlor	72-43-5				0.00397	U	0.00618	U	0.00706	U	0.00404	U	0.00516	U	0.00378	U
Toxaphene	8001-35-2				0.0397	U	0.0618	U	0.0706	U	0.0404	U	0.0516	U	0.0378	U
cis-Chlordane	5103-71-9	47	4.2	0.094	0.00265	U	0.00412	U	0.0047	U	0.00269	U	0.00344	U	0.00252	U
trans-Chlordane	5103-74-2				0.00265	U	0.00412	U	0.0047	U	0.00269	U	0.00344	U	0.00252	U
Chlordane	57-74-9				0.0172	U	0.0268	U	0.0306	U	0.0175	U	0.0224	U	0.0164	U
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																
Aroclor 1016	12674-11-2	25	1	0.1	0.211	U	0.7	U	0.791	U	0.224	U	0.284	U	0.0404	U
Aroclor 1221	11104-28-2	25	1	0.1	0.211	U	0.7	U	0.791	U	0.224	U	0.284	U	0.0404	U
Aroclor 1232	11141-16-5	25	1	0.1	0.211	U	0.7	U	0.791	U	0.224	U	0.284	U	0.0404	U
Aroclor 1242	53469-21-9	25	1	0.1	0.493		0.7	U	0.791	U	1.87		0.62		0.0637	
Aroclor 1248	12672-29-6	25	1	0.1	0.211	U	0.7	U	0.791	U	0.224	U	0.284	U	0.0404	U
Aroclor 1254	11097-69-1	25	1	0.1	0.67		0.7	U	0.791	U	1.25		1.25		0.0634	
Aroclor 1260	11096-82-5	25	1	0.1	0.388		4.72		6.81		0.607		1.48		0.0277	J
Aroclor 1262	37324-23-5	25	1	0.1	0.211	U	0.7	U	0.791	U	0.224	U	0.284	U	0.0404	U
Aroclor 1268	11100-14-4	25	1	0.1	0.211	U	0.7	U	0.791	U	0.224	U	0.284	U	0.0404	U
PCBs, Total	1336-36-3	25	1	0.1	1.55		4.72		6.81		3.73		3.35		0.155	J
<b>TOTAL METALS</b>																
Aluminum, Total	7429-90-5				8500		10000		12000		9700		11000		8200	
Antimony, Total	7440-36-0				34		1.5	J	1.8	J	13		26		0.79	J
Arsenic, Total	7440-38-2	16	16	13	9.5		8		9.7		8.3		11		4.9	
Barium, Total	7440-39-3	10000	400	350	720		240		260		230		180		100	
Beryllium, Total	7440-41-7	2700	72	7.2	0.36	J	0.25	J	0.26	J	0.26	J	0.4	J	0.3	J
Cadmium, Total	7440-43-9	60	4.3	2.5	5.7		2.9		3.1		6.8		8.6		0.45	J

Notes:  
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**TABLE 2**  
**On-Site Soil Sample Results**  
**Former Freedman and Son Site**  
**Site Code # 401033**  
**Green Island, New York**

				SAMPLE ID:		SURFACE-3		SURFACE-4		SURFACE-4 DUP		SURFACE-5		SURFACE-6		COMPOSITE-1	
				LAB ID:		L1702357-03		L1702357-04		L1702357-05		L1702771-08		L1702771-09		L1702771-10	
				COLLECTION DATE:		1/24/2017		1/24/2017		1/24/2017		1/25/2017		1/25/2017		1/26/2017	
				SAMPLE DEPTH:													
				SAMPLE MATRIX:													
				IUSCO		RRSCO		UUSCO									
ANALYTE	CAS	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
Calcium, Total	7440-70-2				42000		91000		110000		37000		14000		86000		
Chromium, Total	7440-47-3	6,800	180	30	180		44		49		71		2600		21		
Cobalt, Total	7440-48-4				11		9.2		11		12		31		5.2		
Copper, Total	7440-50-8	10000	270	50	8500		690		710		1900		1800		360		
Iron, Total	7439-89-6				89000		58000		72000		38000		63000		17000		
Lead, Total	7439-92-1	3900	400	63	1800		610		680		1100		1200		67		
Magnesium, Total	7439-95-4				13000		18000		24000		6700		5500		6900		
Manganese, Total	7439-96-5	10000	2000	1600	740		640		680		480		820		360		
Mercury, Total	7439-97-6	5.7	0.81	0.18	0.79		0.7		0.81		2.9		2		0.15		
Nickel, Total	7440-02-0	10000	310	30	230		54		63		100		1400		18		
Potassium, Total	7440-09-7				890		1200		1100		740		1000		1400		
Selenium, Total	7782-49-2	6800	180	3.9	2.1	U	3.3	U	3.7	U	0.37	J	1.9	J	0.37	J	
Silver, Total	7440-22-4	6800	180	2	1.9		0.49	J	1.9	U	2.6		1.5		0.96	U	
Sodium, Total	7440-23-5				1600		210	J	210	J	220		280		650		
Thallium, Total	7440-28-0				2.1	U	3.3	U	3.7	U	2.1	U	2.7	U	1.9	U	
Vanadium, Total	7440-62-2				26		45		49		35		27		17		
Zinc, Total	7440-66-6	10000	10000	109	3800		470		510		2100		3100		280		
<b>GENERAL CHEMISTRY</b>																	
Solids, Total	NONE				75.4		46.3		41.4		71.2		58		78.8		
Cyanide, Total	57-12-5	10000	27	27	0.54	J	1	J	2	J	-	-	-	-	-	-	

\* Comparison is not performed on parameters with non-numeric criteria.

NY-RESI: New York NYCRR Part 375 Industrial Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Notes:

mg/Kg= milligrams per kilogram

U = Compound found < value shown

J = Compound found < lab reporting limit

E= Estimated value



**TABLE 3**  
**On-Site Surface Soil and Debris Sample Results**  
**Freedman and Son**  
**Site #401033**  
**Green Island, New York**

			SAMPLE ID: Crusher North		Crusher South End Dup		Crusher South End		Crusher East Side		Shredder East		Shredder Pad		Shredder Pad		Chrusser House		
			LAB ID: 192703-01		192703-02		192703-03		192703-04		192703-05		192707-03		192779-03		192779-04		
			COLLECTION DATE: 6/14/2019		6/14/2019		6/14/2019		6/14/2019		6/14/2019		6/13/2019		6/18/2019		6/18/2019		
			SAMPLE DEPTH: 0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 0.5-in.		0 to 0.5-in.		0 to 0.5-in.		
			SAMPLE MATRIX: SOIL		SOIL		SOIL		SOIL		SOIL		Concrete		Concrete		Concrete		
	Groundwater Protection	IUSCO	UUSCO																
ANALYTE		(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																			
Acenaphthene	98	1000	20	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Hexachlorobenzene	3.2	12	0.33	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Bis(2-chloroethyl)ether		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
2-Chloronaphthalene		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
3,3'-Dichlorobenzidine		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
2,4-Dinitrotoluene		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
2,6-Dinitrotoluene		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Fluoranthene	1000	1000	100	0.863		<3.220		<3.500		0.807		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
4-Chlorophenyl phenyl ether		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
4-Bromophenyl phenyl ether		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Bis(2-chloroisopropyl)ether		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Bis(2-chloroethoxy)methane		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Hexachlorobutadiene		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Hexachlorocyclopentadiene		NA	NA	<2.99		<12.900		<14.000		<3.170		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Hexachloroethane		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Isophorone		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Naphthalene	12	1000	12	<0.747		<3.220		<3.500		<0.794	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Nitrobenzene		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
NDPA/DPA		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
n-Nitrosodi-n-propylamine		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Bis(2-ethylhexyl)phthalate		NA	NA	7.56		<3.220		<3.500		2.7		22.4		Not Analyzed		Not Analyzed		Not Analyzed	
Butyl benzyl phthalate		NA	NA	0.88		<3.220		<3.500		0.775		3.35		Not Analyzed		Not Analyzed		Not Analyzed	
Di-n-butylphthalate		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Di-n-octylphthalate		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Diethyl phthalate		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Dimethyl phthalate		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Benzo(a)anthracene	1	11	1	0.688	J	<3.220		<3.500		0.59	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Benzo(a)pyrene	22	1.1	1	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Benzo(b)fluoranthene	1.7	11	1	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Benzo(k)fluoranthene	1.7	110	0.8	0.548	J	<3.220		<3.500		0.524	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Chrysene	1	110	1	0.662	J	<3.220		<3.500		0.591		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Acenaphthylene	107	1000	100	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Anthracene	1000	1000	100	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Benzo(ghi)perylene	1000	1000	100	<0.747		<3.220		<3.500		0.555	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Fluorene	386	1000	30	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Phenanthrene	1000	1000	100	<0.747		<3.220		<3.500		0.491	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Dibenzo(a,h)anthracene	1000	1.1	0.33	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Pyrene	1000	1000	100	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Biphenyl		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
4-Chloroaniline		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
2-Nitroaniline		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
3-Nitroaniline		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
4-Nitroaniline		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
Dibenzofuran	210	NA	7	<0.747		<3.220		<3.500		<0.794	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed	
2-Methylnaphthalene		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed	

Notes:  
J =Value is < than reporting limit but > method detection limit.  
D= sample and duplicate results > relative percent difference  
M = Matrix spike recovery outside QC limits.  
P=Concentration differs >40% between columns.

**TABLE 3**  
**On-Site Surface Soil and Debris Sample Results**  
**Freedman and Son**  
**Site #401033**  
**Green Island, New York**

	SAMPLE ID: Crusher North		Crusher South End Dup		Crusher South End		Crusher East Side		Shredder East		Shredder Pad		Shredder Pad		Chrusher House			
	LAB ID: 192703-01		192703-02		192703-03		192703-04		192703-05		192707-03		192779-03		192779-04			
	COLLECTION DATE: 6/14/2019		6/14/2019		6/14/2019		6/14/2019		6/14/2019		6/13/2019		6/18/2019		6/18/2019			
	SAMPLE DEPTH: 0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 0.5-in.		0 to 0.5-in.		0 to 0.5-in.			
	SAMPLE MATRIX: SOIL		SOIL		SOIL		SOIL		SOIL		Concrete		Concrete		Concrete			
	Groundwater Protection	IUSCO	UUSCO		UUSCO		UUSCO		UUSCO		UUSCO		UUSCO		UUSCO			
ANALYTE		(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
1,2,4,5-Tetrachlorobenzene		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Acetophenone		NA	NA	<0.747		<3.220		<3.500		0.422	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2,4,6-Trichlorophenol		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
p-Chloro-m-cresol		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2-Chlorophenol		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2,4-Dichlorophenol		NA	NA	<2.990		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2,4-Dimethylphenol		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2-Nitrophenol		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
4-Nitrophenol		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2,4-Dinitrophenol		NA	NA	<0.747		<12.900		<14.000		<3.170		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
4,6-Dinitro-o-cresol		NA	NA	<0.747		<6.450		<7.010		<1.590		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Pentachlorophenol	0.8	55	0.8	<1.490		<6.450		<7.010		<1.590		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Phenol	0.33	1000	0.33	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2-Methylphenol	0.33	NA	0.33	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
3-Methylphenol/4-Methylphenol	0.33	NA	0.33	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2,4,5-Trichlorophenol		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Carbazole		NA	NA	<0.747		<3.220		<3.500		<0.794	J	<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Atrazine		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Benzaldehyde		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Caprolactam		NA	NA	<0.747		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
2,3,4,6-Tetrachlorophenol		NA	NA	<1.490		<3.220		<3.500		<0.794		<1.65		Not Analyzed		Not Analyzed		Not Analyzed
Total SVOCs				11.201	-	0.0	-	0.0	-	7.455	-	25.75	-	0	-	0	-	0
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																		
Total TIC Compounds		NA	NA	120		271		743		76.5		216		Not Analyzed		Not Analyzed		Not Analyzed
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																		
Delta-BHC	0.25	1000	0.04	0.0388		<0.00319		<0.00352		0.0438	P	0.00281	JPMD	Not Analyzed		Not Analyzed		Not Analyzed
Lindane	0.1	23	0.1	0.0138	0	0.00319		<0.00352		<0.0125		0.00359	PMD	Not Analyzed		Not Analyzed		Not Analyzed
Alpha-BHC	0.02	6.8	0.02	<0.0115		0.00207	P	0.00288	P	<0.0125		0.00828	PM	Not Analyzed		Not Analyzed		Not Analyzed
Beta-BHC	0.09	14	0.036	0.0146	P	0.0123		0.013		0.0195		0.00936	PMD	Not Analyzed		Not Analyzed		Not Analyzed
Heptachlor	0.38	29	0.042	0.00828		0.00365		0.0022	P	0.0154		0.0249	MD	Not Analyzed		Not Analyzed		Not Analyzed
Aldrin	0.19	1.4	0.005	<0.0115		0.00337	P	0.00499	P	<0.0125		<0.0033		Not Analyzed		Not Analyzed		Not Analyzed
Heptachlor epoxide		NA	NA	0.00898	P	0.00182	P	0.00251	P	0.0123	P	0.00273	JPMD	Not Analyzed		Not Analyzed		Not Analyzed
Endrin	0.06	410	0.014	<0.115		<0.00319		<0.00352		<0.0125		<0.0033		Not Analyzed		Not Analyzed		Not Analyzed
Endrin aldehyde		NA	NA	0.0245	P	0.00492	P	0.0085	P	0.0329	P	0.00465	PM	Not Analyzed		Not Analyzed		Not Analyzed
Endrin ketone		NA	NA	<0.0115		<0.00319		<0.00352		<0.0125		<0.0033		Not Analyzed		Not Analyzed		Not Analyzed
Dieldrin	0.1	2.8	0.005	0.0314		0.0028	P	<0.00352	P	0.0547		0.00358	PMD	Not Analyzed		Not Analyzed		Not Analyzed
4,4'-DDE	17	120	0.0033	0.0259		<0.00319		0.00451		0.0345		0.00636		Not Analyzed		Not Analyzed		Not Analyzed
4,4'-DDD	14	180	0.0033	0.00759	P	<0.00319		<0.00352		0.0216		<0.0033		Not Analyzed		Not Analyzed		Not Analyzed
4,4'-DDT	136	94	0.0033	0.121		<0.00319		<0.00352		0.177		0.0181		Not Analyzed		Not Analyzed		Not Analyzed
Endosulfan I	102	920	2.4	<0.0115		<0.00319		<0.00352		<0.0125		<0.0033	MD	Not Analyzed		Not Analyzed		Not Analyzed
Endosulfan II	102	920	2.4	<0.0115		<0.00319		<0.00352		<0.0125		<0.0033	M	Not Analyzed		Not Analyzed		Not Analyzed
Endosulfan sulfate	1000	920	2.4	0.0115	P	<0.00319		0.00355	P	0.0152	P	0.00695	M	Not Analyzed		Not Analyzed		Not Analyzed
Methoxychlor		NA	NA	0.0828		0.00697		0.0108	P	0.0395	P	0.0111	PMD	Not Analyzed		Not Analyzed		Not Analyzed
Toxaphene		NA	NA	<0.115		<0.0319		<0.0352		<0.125		<0.033		Not Analyzed		Not Analyzed		Not Analyzed
trans-Chlordane		NA	NA	<0.0115		<0.00319		<0.00352		0.0556		0.0141	M	Not Analyzed		Not Analyzed		Not Analyzed
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																		
Aroclor 1016	3.2	25	0.1	<0.23		<0.0319		<0.0352		<0.249		<0.0659		<0.561		<0.148		<0.136

Notes:  
J = Value is < than reporting limit but > method detection limit.  
D = sample and duplicate results > relative percent difference  
M = Matrix spike recovery outside QC limits.  
P = Concentration differs >40% between columns.

**TABLE 3**  
**On-Site Surface Soil and Debris Sample Results**  
**Freedman and Son**  
**Site #401033**  
**Green Island, New York**

	SAMPLE ID: Crusher North		Crusher South End Dup		Crusher South End		Crusher East Side		Shredder East		Shredder Pad		Shredder Pad		Chrusher House			
	LAB ID: 192703-01		192703-02		192703-03		192703-04		192703-05		192707-03		192779-03		192779-04			
	COLLECTION DATE: 6/14/2019		6/14/2019		6/14/2019		6/14/2019		6/14/2019		6/13/2019		6/18/2019		6/18/2019			
	SAMPLE DEPTH: 0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 2-in.		0 to 0.5-in.		0 to 0.5-in.		0 to 0.5-in.			
	SAMPLE MATRIX: SOIL		SOIL		SOIL		SOIL		SOIL		Concrete		Concrete		Concrete			
	Groundwater Protection	IUSCO	UUSCO															
ANALYTE		(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
Aroclor 1221		3.2	25	0.1	<0.23	<0.0319		<0.0352		<0.249		<0.0659		<0.561		<0.148		<0.136
Aroclor 1232		3.2	25	0.1	<0.23	<0.0319		<0.0352		<0.249		<0.0659		<0.561		<0.148		<0.136
Aroclor 1242		3.2	25	0.1	<0.23	0.0666		0.0801		<0.249		0.431		3.94		0.373		0.241
Aroclor 1248		3.2	25	0.1	1.22	<0.0319		<0.0352		0.885		<0.0659		<0.561		<0.148		<0.136
Aroclor 1254		3.2	25	0.1	2.11	0.146		0.0442		1.64		0.226		2.65		0.361		0.4
Aroclor 1260		3.2	25	0.1	<0.23	<0.0319		<0.0352		<0.249		<0.0659		<0.561		<0.148		<0.136
Aroclor 1262		3.2	25	0.1	<0.23	<0.0319		<0.0352		<0.249		<0.0659		<0.561		<0.148		<0.136
Aroclor 1268		3.2	25	0.1	<0.23	<0.0319		<0.0352		<0.249		<0.0659		<0.561		<0.148		<0.136
PCBs, Total		3.2	25	NA	3.33	0.2126		0.1243		2.525		0.657		6.59		0.734		0.641
<b>TOTAL METALS</b>																		
Aluminum, Total		NA	NA	7010		10300		9200		5880		11600		Not Analyzed		Not Analyzed		Not Analyzed
Antimony, Total		NA	NA	94.3		1.77		<3.72		15.4		14.2	DM	Not Analyzed		Not Analyzed		Not Analyzed
Arsenic, Total		16	16	13		35.9		3.02		36.8		5.57	D	Not Analyzed		Not Analyzed		Not Analyzed
Barium, Total		820	10000	350		364		92.1		55.3		266		761	M	Not Analyzed		Not Analyzed
Beryllium, Total		47	2700	7.2		<0.279		0.972	J	1.24	J	0.237	J	0.446	J	Not Analyzed		Not Analyzed
Cadmium, Total		7.5	60	2.5		43.5		2.41		1.43		34.6		23.6		Not Analyzed		Not Analyzed
Calcium, Total		NA	NA	10700		37600		5,900		29500		15200		D		Not Analyzed		Not Analyzed
Chromium, Total		800	NA	NA		8490		30.8		498		222		D		Not Analyzed		Not Analyzed
Cobalt, Total		NA	NA	45.2		8.27		9.58		29.9		35.2				Not Analyzed		Not Analyzed
Copper, Total		1720	10000	50		2000		157		122		1440		1040		Not Analyzed		Not Analyzed
Iron, Total		NA	NA	316000		17400		9620		266000		119000				Not Analyzed		Not Analyzed
Lead, Total		450	3900	63		1220		136		72.5		943		8200		D		Not Analyzed
Magnesium, Total		NA	NA	2900		7630		4270		8220		6110				Not Analyzed		Not Analyzed
Manganese, Total		2000	10000	1600		2760		286		118		2310		1040		D		Not Analyzed
Mercury, Total		0.73	5.7	0.18		7.29		0.166		0.145		10.7		2.22		Not Analyzed		Not Analyzed
Nickel, Total		130	10000	30		520		18.7		16		222		204		Not Analyzed		Not Analyzed
Potassium, Total		NA	NA	985		1510		1260		879		1180				Not Analyzed		Not Analyzed
Selenium, Total		4	6800	3.9		<1.11		1.09		<1.24		<1.27		3.3		DM		Not Analyzed
Silver, Total		8.3	6800	2		<27.9		<1.65		<0.620		<12.7		<5.71		Not Analyzed		Not Analyzed
Sodium, Total		NA	NA	340		169	J	127	J	242		912		M		Not Analyzed		Not Analyzed
Thallium, Total		NA	NA	2.28		1.71		<1.55		<1.59		<1.43				Not Analyzed		Not Analyzed
Vanadium, Total		NA	NA	194		25.6		26.7		122		25.1				Not Analyzed		Not Analyzed
Zinc, Total		2480	10000	109		4090		449		296		5020		10300		Not Analyzed		Not Analyzed
<b>GENERAL CHEMISTRY</b>																		
Cyanide, Total		40	27	27		1.07		<0.554		<0.544		1.23	J	<0.560		M		Not Analyzed

Notes:  
J =Value is < than reporting limit but > method detection limit.  
D= sample and duplicate results > relative percent difference  
M = Matrix spike recovery outside QC limits.  
P=Concentration differs >40% between columns.

**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

ANALYTE	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	SB-1 (0-2)		SB-1 (0-2)		SB-1 (0-2)		SB-2 (0-2)		SB-2 (0-2)		SB-2 (0-2)	
					Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Monitoring Well ID					L1641701-01		L1641701-01 R1		L1701349-08		L1641701-02		L1641701-02 R1		L1701349-09	
LAB ID:					L1641701-01		L1641701-01 R1		L1701349-08		L1641701-02		L1641701-02 R1		L1701349-09	
COLLECTION DATE:					12/14/2016		12/14/2016		1/12/2017		12/19/2016		12/19/2016		1/12/2017	
CONCENTRATION UNITS					(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)		(mg/kg)	
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	0.05	1000	100	0.05	-	-	-	-	0.012	U	-	-	-	-	0.012	U
1,1-Dichloroethane	0.27	480	26	0.27	-	-	-	-	0.0019	U	-	-	-	-	0.0018	U
Chloroform	0.37	700	49	0.37	-	-	-	-	0.0019	U	-	-	-	-	0.0018	U
Carbon tetrachloride	0.76	44	2.4	0.76	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
1,2-Dichloropropane					-	-	-	-	0.0044	U	-	-	-	-	0.0042	U
Dibromochloromethane					-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
1,1,2-Trichloroethane					-	-	-	-	0.0019	U	-	-	-	-	0.0018	U
Tetrachloroethene	1.3	300	19	1.3	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
Chlorobenzene	1.1	1000	100	1.1	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
Trichlorofluoromethane					-	-	-	-	0.0063	U	-	-	-	-	0.006	U
1,2-Dichloroethane	0.02	60	3.1	0.02	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
Bromodichloromethane					-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
trans-1,3-Dichloropropene					-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
cis-1,3-Dichloropropene					-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
1,3-Dichloropropene, Total					-	-	-	-	-	-	-	-	-	-	-	-
Bromoform					-	-	-	-	0.005	U	-	-	-	-	0.0048	U
1,1,2,2-Tetrachloroethane					-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
Benzene	0.06	89	4.8	0.06	-	-	-	-	0.00096	J	-	-	-	-	0.0017	
Toluene	0.7	1000	100	0.7	-	-	-	-	0.0055	-	-	-	-	-	0.012	
Ethylbenzene	1	780	41	1	-	-	-	-	0.0093	-	-	-	-	-	0.0041	
Chloromethane					-	-	-	-	0.0063	U	-	-	-	-	0.006	U
Bromomethane					-	-	-	-	0.0025	U	-	-	-	-	0.0024	U
Vinyl chloride	0.02	27	0.9	0.02	-	-	-	-	0.0025	U	-	-	-	-	0.0024	U
Chloroethane					-	-	-	-	0.0025	U	-	-	-	-	0.0024	U
1,1-Dichloroethene	0.33	1000	100	0.33	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	-	-	-	-	0.0019	U	-	-	-	-	0.0018	U
Trichloroethene	0.47	400	21	0.47	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	-	-	-	-	0.0063	U	-	-	-	-	0.006	U
1,3-Dichlorobenzene	2.4	560	49	2.4	-	-	-	-	0.0063	U	-	-	-	-	0.006	U
1,4-Dichlorobenzene	1.8	250	13	1.8	-	-	-	-	0.0063	U	-	-	-	-	0.006	U
Methyl tert butyl ether	0.93	1000	100	0.93	-	-	-	-	0.0025	U	-	-	-	-	0.0024	U
p/m-Xylene					-	-	-	-	0.027	-	-	-	-	-	0.011	
o-Xylene					-	-	-	-	0.02	-	-	-	-	-	0.0064	
Xylenes, Total	1.6	1000	100	0.26	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	0.25	1000	100	0.25	-	-	-	-	0.0012	U	-	-	-	-	0.0012	U
1,2-Dichloroethene, Total					-	-	-	-	-	-	-	-	-	-	-	-
Styrene					-	-	-	-	0.004	-	-	-	-	-	0.0048	
Dichlorodifluoromethane					-	-	-	-	0.012	U	-	-	-	-	0.012	U
Acetone	0.05	1000	100	0.05	-	-	-	-	0.14	-	-	-	-	-	0.03	
Carbon disulfide					-	-	-	-	0.0044	J	-	-	-	-	0.0015	J
2-Butanone	0.12	1000	100	0.12	-	-	-	-	0.025	-	-	-	-	-	0.012	U
4-Methyl-2-pentanone					-	-	-	-	0.012	U	-	-	-	-	0.012	U
2-Hexanone					-	-	-	-	0.012	U	-	-	-	-	0.012	U
Bromochloromethane					-	-	-	-	0.0063	U	-	-	-	-	0.006	U
1,2-Dibromoethane					-	-	-	-	0.005	U	-	-	-	-	0.0048	U
n-Butylbenzene	12	1000	100	12	-	-	-	-	-	-	-	-	-	-	-	
sec-Butylbenzene	11	1000	100	11	-	-	-	-	-	-	-	-	-	-	-	
tert-Butylbenzene	5.9	1000	100	5.9	-	-	-	-	-	-	-	-	-	-	-	
1,2-Dibromo-3-chloropropane					-	-	-	-	0.0063	U	-	-	-	-	0.006	U
Isopropylbenzene					-	-	-	-	0.0046	-	-	-	-	-	0.0011	J
p-Isopropyltoluene					-	-	-	-	-	-	-	-	-	-	-	
Naphthalene	12	1000	100	12	-	-	-	-	-	-	-	-	-	-	-	
n-Propylbenzene	3.9	1000	100	3.9	-	-	-	-	-	-	-	-	-	-	-	
1,2,3-Trichlorobenzene					-	-	-	-	0.0063	U	-	-	-	-	0.006	U
1,2,4-Trichlorobenzene					-	-	-	-	0.0063	U	-	-	-	-	0.006	U

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)		SB-1 (0-2)		SB-1 (0-2)		SB-1 (0-2)		SB-2 (0-2)		SB-2 (0-2)		SB-2 (0-2)		
		Monitoring Well ID								MW-6		MW-6		MW-6		
		LAB ID:		L1641701-01		L1641701-01 R1		L1701349-08		L1641701-02		L1641701-02 R1		L1701349-09		
		COLLECTION DATE:		12/14/2016		12/14/2016		1/12/2017		12/19/2016		12/19/2016		1/12/2017		
		Groundwater Protection Soil Cleanup Objective		IUSCO		RRSCO		UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-		-		-	
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-		-		-	
Methyl Acetate					-		-		0.025	U	-		-		0.024	U
Cyclohexane					-		-		0.025	U	-		-		0.00042	J
1,4-Dioxane	0.1	250	13	0.1	-		-		0.12	U	-		-		0.12	U
Freon-113					-		-		0.025	U	-		-		0.024	U
Methyl cyclohexane					-		-		0.011		-		-		0.00049	J
Total VOCs					-	-	-	-	0.25176	-	-	-	-	-	0.07351	-

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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)					
				Monitoring Well ID				MW-6	MW-6	MW-6					
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09					
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017					
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>															
Pentane, 2-methyl-					-		-		-		-		-		
Unknown Alkane					-		-		-		-		-		
Unknown Benzene					-		-		0.0553	J	-		-		
Pentane, 2,3,3-trimethyl-					-		-		0.0715	NJ	-		-		
Unknown Benzene					-		-		0.0331	J	-		-		
Unknown					-		-		-		-		-		
Unknown Aromatic					-		-		0.0543	J	-		-		
Unknown Benzene					-		-		0.0786	J	-		-		
Undecane, 2,6-dimethyl-					-		-		-		-		-		
Unknown Cycloalkane					-		-		-		-		-		
Pentane					-		-		-		-		-		
Tridecane, 7-methyl-					-		-		-		-		-		
Unknown					-		-		-		-		-		
Unknown Benzene					-		-		0.0717	J	-		-		
Unknown					-		-		-		-		-		
Dodecane, 2,6,10-trimethyl-					-		-		-		-		-		
Unknown Cyclohexane					-		-		-		-		-		
Unknown Benzene					-		-		0.05	J	-		-		
Pentane, 2,3,4-trimethyl-					-		-		0.05	NJ	-		-		
Unknown Naphthalene					-		-		-		-		-		
Fluorodichloromethane					-		-		-		-		-		
Unknown Alkane					-		-		-		-		-		
Ethane, 1-chloro-1-fluoro-					-		-		-		-		-		
Butane, 2-Methyl-					-		-		-		-		-		
n-Hexane					-		-		-		-		-		
Unknown Alkane					-		-		-		-		-		
Decane, 3,7-dimethyl-					-		-		-		-		-		
Unknown Benzene					-		-		0.0341	J	-		-		
Undecane					-		-		-		-		-		
Unknown					-		-		-		-		-		
Unknown					-		-		-		-		-		
Cyclotrisiloxane, Hexamethyl-					-		-		-		-		-		
Unknown Alkane					-		-		0.157	J	-		-		
Unknown Naphthalene					-		-		-		-		-		
Dimethyl sulfide					-		-		-		-		-		
Unknown					-		-		-		-		-		

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	
				Monitoring Well ID				MW-6	MW-6	MW-6						
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09						
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Tridecane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
1-Pentene					-		-		-		-		-		-	
Ethane, 1,1-Difluoro-					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Cyclohexane					-		-		-		-		-		-	
Unknown																
Unknown																
Unknown Benzene																
No Tentatively Identified Compounds																
Tridecane, 7-methyl-																
Unknown Alkane																
Unknown Aromatic																
Pentane, 2,3,4-trimethyl-																
Unknown Naphthalene																
Dodecane, 2,6,10-trimethyl-																
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown																
Unknown																
Unknown																
Unknown																
Unknown																
Unknown Naphthalene																
Fluorodichloromethane																
Unknown																
Unknown																
Ethane, 1-chloro-1-fluoro-																
Unknown																
Pentane, 2-methyl-																
Unknown																
Unknown																
Unknown																
Unknown Cyclohexane																
Total TIC Compounds									0.6556							

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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)					
				Monitoring Well ID				MW-6	MW-6	MW-6					
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09					
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017					
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>															
Acenaphthene	98	1000	100	20	0.15		-		0.032	J	-		-		
Hexachlorobenzene	3.2	12	1.2	0.33	0.53		-		0.13	U	-		-		
Bis(2-chloroethyl)ether					0.16	U	-		0.2	U	-		-		
2-Chloronaphthalene					0.18	U	-		0.22	U	-		-		
3,3'-Dichlorobenzidine					0.18	U	-		0.22	U	-		-		
2,4-Dinitrotoluene					0.18	U	-		0.22	U	-		-		
2,6-Dinitrotoluene					0.18	U	-		0.22	U	-		-		
Fluoranthene	1000	1000	100	100	1.5		-		0.35		-		-		
4-Chlorophenyl phenyl ether					0.18	U	-		0.22	U	-		-		
4-Bromophenyl phenyl ether					0.18	U	-		0.22	U	-		-		
Bis(2-chloroisopropyl)ether					0.22	U	-		0.27	U	-		-		
Bis(2-chloroethoxy)methane					0.2	U	-		0.24	U	-		-		
Hexachlorobutadiene					0.18	U	-		0.22	U	-		-		
Hexachlorocyclopentadiene					0.53	U	-		0.64	U	-		-		
Hexachloroethane					0.15	U	-		0.18	U	-		-		
Isophorone					0.16	U	-		0.2	U	-		-		
Naphthalene	12	1000	100	12	1.5		-		1.8		-		-		
Nitrobenzene					0.16	U	-		0.2	U	-		-		
NDPA/DPA					0.15	U	-		0.18	U	-		-		
n-Nitrosodi-n-propylamine					0.18	U	-		0.22	U	-		-		
Bis(2-ethylhexyl)phthalate					61	E	69		14	E	16		-		
Butyl benzyl phthalate					0.93		-		0.91		-		-		
Di-n-butylphthalate					0.18		-		0.25		-		-		
Di-n-octylphthalate					1.4		-		0.22	U	-		-		
Diethyl phthalate					0.18	U	-		0.22	U	-		-		
Dimethyl phthalate					0.18	U	-		0.22	U	-		-		
Benzo(a)anthracene	1	11	1	1	0.59		-		0.19		-		-		
Benzo(a)pyrene	22	1.1	1	1	0.51		-		0.22		-		-		
Benzo(b)fluoranthene	1.7	11	1	1	0.89		-		0.33		-		-		
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.28		-		0.095	J	-		-		
Chrysene	1	110	3.9	1	0.74		-		0.25		-		-		
Acenaphthylene	107	1000	100	100	0.09	J	-		0.05	J	-		-		
Anthracene	1000	1000	100	100	0.26		-		0.096	J	-		-		
Benzo(ghi)perylene	1000	1000	100	100	0.41		-		0.19		-		-		
Fluorene	386	1000	100	30	0.19		-		0.059	J	-		-		
Phenanthrene	1000	1000	100	100	0.92		-		0.24		-		-		
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.1	J	-		0.041	J	-		-		
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.41		-		0.18		-		-		
Pyrene	1000	1000	100	100	1.3		-		0.4		-		-		
Biphenyl					0.062	J	-		0.054	J	-		-		
4-Chloroaniline					0.18	U	-		0.22	U	-		-		
2-Nitroaniline					0.18	U	-		0.22	U	-		-		
3-Nitroaniline					0.18	U	-		0.22	U	-		-		
4-Nitroaniline					0.18	U	-		0.22	U	-		-		
Dibenzofuran	210	1000	59	7	0.1	J	-		0.22	U	-		-		
2-Methylnaphthalene					1.3		-		2		-		-		
1,2,4,5-Tetrachlorobenzene					0.2		-		0.08	J	-		-		
Acetophenone					0.18	U	-		0.22	U	-		-		

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				SAMPLE ID (Depth ft.)	SB-1 (0-2)		SB-1 (0-2)		SB-1 (0-2)		SB-2 (0-2)		SB-2 (0-2)		SB-2 (0-2)	
				Monitoring Well ID							MW-6		MW-6		MW-6	
				LAB ID:	L1641701-01		L1641701-01 R1		L1701349-08		L1641701-02		L1641701-02 R1		L1701349-09	
				COLLECTION DATE:	12/14/2016		12/14/2016		1/12/2017		12/19/2016		12/19/2016		1/12/2017	
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					0.11	U	-		-		0.13	U	-		-	
p-Chloro-m-cresol					0.18	U	-		-		0.22	U	-		-	
2-Chlorophenol					0.18	U	-		-		0.22	U	-		-	
2,4-Dichlorophenol					0.16	U	-		-		0.2	U	-		-	
2,4-Dimethylphenol					0.18	U	-		-		0.22	U	-		-	
2-Nitrophenol					0.4	U	-		-		0.48	U	-		-	
4-Nitrophenol					0.26	U	-		-		0.31	U	-		-	
2,4-Dinitrophenol					0.88	U	-		-		1.1	U	-		-	
4,6-Dinitro-o-cresol					0.48	U	-		-		0.58	U	-		-	
Pentachlorophenol	0.8	55	6.7	0.8	0.15	U	-		-		0.18	U	-		-	
Phenol	0.33	1000	100	0.33	2		-		-		0.22	U	-		-	
2-Methylphenol	0.33	1000	100	0.33	0.18	U	-		-		0.22	U	-		-	
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	1.3		-		-		0.32	U	-		-	
2,4,5-Trichlorophenol					0.18	U	-		-		0.22	U	-		-	
Carbazole					0.11	J	-		-		0.22	U	-		-	
Atrazine					0.15	U	-		-		0.18	U	-		-	
Benzaldehyde					0.24	U	-		-		0.3	U	-		-	
Caprolactam					0.18	U	-		-		0.22	U	-		-	
2,3,4,6-Tetrachlorophenol					0.18	U	-		-		0.22	U	-		-	
Total SVOCs					78.952	-	69	-	-	-	21.817	-	16	-	-	-

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				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	
				Monitoring Well ID				MW-6	MW-6	MW-6						
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09						
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Benzene					1.29	J	-		0.733	J	-		-		-	
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Vitamin E					-		-		-		-		-		-	
Unknown Benzene					6.57	J	-		10.2	J	-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Benzene					-		-		1.01	J	-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Benzene					-		-		0.981	J	-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Cyclic Octaatomic Sulfur					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Benzene					2.09	J	-		3.34	J	-		-		-	
Unknown Alcohol					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Benzene					2.26	J	-		3.18	J	-		-		-	
Unknown Phenol					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Benzene					1.54	J	-		1.33	J	-		-		-	
Unknown					-		-		-		-		-		-	
Sulfur					-		-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-		-	

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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E= Estimated  
R1 = Repeated analysis  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)						
				Monitoring Well ID				MW-6	MW-6	MW-6						
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09						
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene					0.662	J	-				4.69	J	-		-	
Unknown Sulfur					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Phenol					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Phosphate					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Benzene					2.8	J	-				2.28	J	-		-	
2,2',3,3',4,5',6-Heptachlor...					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		-		-		1.47	J	-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					-		-		-		0.726	J	-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		-		-		0.622	J	-		-	
Unknown					-		-		-		3.63	J	-		-	
Unknown Alkane					-		-		-		0.734	J	-		-	
Unknown Benzene					4.3	J	-		-		6.34	J	-		-	
Unknown					-		-		-		1.67	J	-		-	
Unknown Benzene					1.66	J	-		-		2.6	J	-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Phenol					1.84	J	-		-		-		-		-	

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	SB-1 (0-2)		SB-1 (0-2)		SB-1 (0-2)		SB-2 (0-2)		SB-2 (0-2)		SB-2 (0-2)	
					Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)												
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown					-		-		-		0.66	J	-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown					-		-		-		0.682	J	-		-	
Unknown					0.153	J	-		-		-		-		-	
Unknown					-		-		-		1.62	J	-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown																
Unknown Alkane																
Unknown Alkane																
Sulfur																
Unknown PAH																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Alkane																
Cyclic Octaatomic Sulfur																
Unknown Benzene																
Unknown Alkane																
Unknown Naphthalene																
Unknown Benzene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Benzene																
Unknown Alkane																
No Tentatively Identified Compounds																
Unknown PAH																
Unknown Alkane																

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)						
				Monitoring Well ID				MW-6	MW-6	MW-6						
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09						
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
<b>ANALYTE</b>	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane																
Unknown Naphthalene																
Unknown																
Unknown Alkane																
Unknown																
Sulfur																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown Naphthalene																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Naphthalene																
Unknown Naphthalene																
Cyclic Octatomic Sulfur																
Unknown Alkane																
Total SVOCs TICs					25.165				48.498							

Notes:  
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J = Compound found below lab report limit  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)	
				Monitoring Well ID				MW-6	MW-6	MW-6						
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09						
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>CHLORINATED HERBICIDES BY GC</b>																
MCPP					-		-		-		-		-		-	
MCPA					-		-		-		-		-		-	
Dalapon					-		-		-		-		-		-	
Dicamba					-		-		-		-		-		-	
Dichloroprop					-		-		-		-		-		-	
2,4-DB					-		-		-		-		-		-	
Dinoseb					-		-		-		-		-		-	
2,4-D					0.189	U	-		0.189	U	-		-		-	
2,4,5-T					0.189	U	-		0.189	U	-		-		-	
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.189	U	-		0.189	U	-		-		-	
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																
Delta-BHC	0.25	1000	100	0.04	0.00176	U	-		0.00181	U	-		-		-	
Lindane	0.1	23	1.3	0.1	0.000735	U	-		0.000756	U	-		-		-	
Alpha-BHC	0.02	6.8	0.48	0.02	0.000735	U	-		0.000756	U	-		-		-	
Beta-BHC	0.09	14	0.36	0.036	0.00176	U	-		0.00181	U	-		-		-	
Heptachlor	0.38	29	2.1	0.042	0.000882	U	-		0.000907	U	-		-		-	
Aldrin	0.19	1.4	0.097	0.005	0.00176	U	-		0.00181	U	-		-		-	
Heptachlor epoxide					0.00331	U	-		0.0034	U	-		-		-	
Endrin	0.06	410	11	0.014	0.000735	U	-		0.000756	U	-		-		-	
Endrin aldehyde					0.0022	U	-		0.00227	U	-		-		-	
Endrin ketone					0.00176	U	-		0.00181	U	-		-		-	
Dieldrin	0.1	2.8	0.2	0.005	0.0011	U	-		0.00113	U	-		-		-	
4,4'-DDE	17	120	8.9	0.0033	0.00176	U	-		0.00181	U	-		-		-	
4,4'-DDD	14	180	13	0.0033	0.00176	U	-		0.00181	U	-		-		-	
4,4'-DDT	136	94	7.9	0.0033	0.00331	U	-		0.0034	U	-		-		-	
Endosulfan I	102	920	24	2.4	0.00176	U	-		0.00181	U	-		-		-	
Endosulfan II	102	920	24	2.4	0.00176	U	-		0.00181	U	-		-		-	
Endosulfan sulfate	1000	920	24	2.4	0.000735	U	-		0.000756	U	-		-		-	
Methoxychlor					0.00331	U	-		0.0034	U	-		-		-	
Toxaphene					0.0331	U	-		0.034	U	-		-		-	
cis-Chlordane	2.9	47	4.2	0.094	0.0022	U	-		0.00227	U	-		-		-	
trans-Chlordane					0.0022	U	-		0.00227	U	-		-		-	
Chlordane					0.0143	U	-		0.0147	U	-		-		-	
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																
Aroclor 1016	3.2	25	1	0.1	0.364	U	-		1.9	U	-		-		-	
Aroclor 1221	3.2	25	1	0.1	0.364	U	-		1.9	U	-		-		-	
Aroclor 1232	3.2	25	1	0.1	0.364	U	-		1.9	U	-		-		-	
Aroclor 1242	3.2	25	1	0.1	3.09		-		11.2		-		-		-	
Aroclor 1248	3.2	25	1	0.1	0.364	U	-		1.9	U	-		-		-	
Aroclor 1254	3.2	25	1	0.1	2.2		-		5.11		-		-		-	
Aroclor 1260	3.2	25	1	0.1	0.904		-		2.57		-		-		-	
Aroclor 1262	3.2	25	1	0.1	0.364	U	-		1.9	U	-		-		-	
Aroclor 1268	3.2	25	1	0.1	0.364	U	-		1.9	U	-		-		-	
PCBs, Total	3.2	25	1	0.1	6.19		-		18.9		-		-		-	

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-1 (0-2)	SB-1 (0-2)	SB-1 (0-2)	SB-2 (0-2)	SB-2 (0-2)	SB-2 (0-2)						
				Monitoring Well ID				MW-6	MW-6	MW-6						
				LAB ID:	L1641701-01	L1641701-01 R1	L1701349-08	L1641701-02	L1641701-02 R1	L1701349-09						
				COLLECTION DATE:	12/14/2016	12/14/2016	1/12/2017	12/19/2016	12/19/2016	1/12/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>																
Aluminum, Total					8900		-		-		9500		-		-	
Antimony, Total					5.4		-		-		15		-		-	
Arsenic, Total	16	16	16	13	8.1		-		-		14		-		-	
Barium, Total	820	10000	400	350	110		-		-		340		-		-	
Beryllium, Total	47	2700	72	7.2	0.51		-		-		0.28	J	-		-	
Cadmium, Total	7.5	60	4.3	2.5	3.6		-		-		16		-		-	
Calcium, Total					27000		-		-		17000		-		-	
Chromium, Total					270		-		-		240		-		-	
Cobalt, Total					13		-		-		23		-		-	
Copper, Total	1720	10000	270	50	850		-		-		3000		-		-	
Iron, Total					67000		-		-		150000		-		-	
Lead, Total	450	3900	400	63	470		-		-		1900		-		-	
Magnesium, Total					4900		-		-		3700		-		-	
Manganese, Total	2000	10000	2000	1600	710		-		-		960		-		-	
Mercury, Total	0.73	5.7	0.81	0.18	0.77		-		-		4		-		-	
Nickel, Total	130	10000	310	30	160		-		-		280		-		-	
Potassium, Total					960		-		-		620		-		-	
Selenium, Total	4	6800	180	3.9	1.8	U	-		-		0.42	J	-		-	
Silver, Total	8.3	6800	180	2	1.1		-		-		2.3		-		-	
Sodium, Total					990		-		-		1000		-		-	
Thallium, Total					1.8	U	-		-		0.62	J	-		-	
Vanadium, Total					13		-		-		29		-		-	
Zinc, Total	2480	10000	10000	109	1200		-		-		5000		-		-	
<b>GENERAL CHEMISTRY</b>																
Solids, Total					87.8		-		-	79.4	87		-		83.1	
Cyanide, Total	40	10000	27	27	0.64	J	-	-	-	-	0.72	J	-		-	

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-2 (2-4)	SB-2 (2-4)	SB-2 (8-10)	SB-3 (0-2)	SB-3 (0-2)	SB-3 (4-6.5)				
				Monitoring Well ID	MW-6	MW-6	MW-6							
				LAB ID:	L1641701-03	L1641701-03 R1	L1641701-04	L1641701-05	L1701867-09	L1701867-10				
				COLLECTION DATE:	12/19/2016	12/19/2016	12/19/2016	12/20/2016	1/18/2017	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
<b>VOLATILE ORGANICS BY GC/MS</b>														
Methylene chloride	0.05	1000	100	0.05	-		-		-		0.012	U	0.011	U
1,1-Dichloroethane	0.27	480	26	0.27	-		-		-		0.0018	U	0.0017	U
Chloroform	0.37	700	49	0.37	-		-		-		0.0018	U	0.0017	U
Carbon tetrachloride	0.76	44	2.4	0.76	-		-		-		0.0012	U	0.0011	U
1,2-Dichloropropane					-		-		-		0.0042	U	0.0039	U
Dibromochloromethane					-		-		-		0.0012	U	0.0011	U
1,1,2-Trichloroethane					-		-		-		0.0018	U	0.0017	U
Tetrachloroethene	1.3	300	19	1.3	-		-		-		0.0012	U	0.0011	U
Chlorobenzene	1.1	1000	100	1.1	-		-		-		0.0012	U	0.0011	U
Trichlorofluoromethane					-		-		-		0.006	U	0.0056	U
1,2-Dichloroethane	0.02	60	3.1	0.02	-		-		-		0.0012	U	0.0011	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	-		-		-		0.0012	U	0.0011	U
Bromodichloromethane					-		-		-		0.0012	U	0.0011	U
trans-1,3-Dichloropropene					-		-		-		0.0012	U	0.0011	U
cis-1,3-Dichloropropene					-		-		-		0.0012	U	0.0011	U
1,3-Dichloropropene, Total					-		-		-					
Bromoform					-		-		-		0.0048	U	0.0045	U
1,1,2,2-Tetrachloroethane					-		-		-		0.0012	U	0.0011	U
Benzene	0.06	89	4.8	0.06	-		-		-		0.0012	U	0.0011	U
Toluene	0.7	1000	100	0.7	-		-		-		0.0018	U	0.0017	U
Ethylbenzene	1	780	41	1	-		-		-		0.0012	U	0.0011	U
Chloromethane					-		-		-		0.006	U	0.0056	U
Bromomethane					-		-		-		0.0024	U	0.0022	U
Vinyl chloride	0.02	27	0.9	0.02	-		-		-		0.0024	U	0.0022	U
Chloroethane					-		-		-		0.0024	U	0.0022	U
1,1-Dichloroethene	0.33	1000	100	0.33	-		-		-		0.0012	U	0.0011	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	-		-		-		0.0018	U	0.0017	U
Trichloroethene	0.47	400	21	0.47	-		-		-		0.0012	U	0.0011	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	-		-		-		0.006	U	0.0056	U
1,3-Dichlorobenzene	2.4	560	49	2.4	-		-		-		0.006	U	0.0056	U
1,4-Dichlorobenzene	1.8	250	13	1.8	-		-		-		0.006	U	0.0056	U
Methyl tert butyl ether	0.93	1000	100	0.93	-		-		-		0.0024	U	0.0022	U
p/m-Xylene					-		-		-		0.0024	U	0.0022	U
o-Xylene					-		-		-		0.0024	U	0.0022	U
Xylenes, Total	1.6	1000	100	0.26	-		-		-					
cis-1,2-Dichloroethene	0.25	1000	100	0.25	-		-		-		0.0012	U	0.0011	U
1,2-Dichloroethene, Total					-		-		-					
Styrene					-		-		-		0.0024	U	0.0022	U
Dichlorodifluoromethane					-		-		-		0.012	U	0.011	U
Acetone	0.05	1000	100	0.05	-		-		-		0.012	U	0.0095	J
Carbon disulfide					-		-		-		0.012	U	0.011	U
2-Butanone	0.12	1000	100	0.12	-		-		-		0.012	U	0.011	U
4-Methyl-2-pentanone					-		-		-		0.012	U	0.011	U
2-Hexanone					-		-		-		0.012	U	0.011	U
Bromochloromethane					-		-		-		0.006	U	0.0056	U
1,2-Dibromoethane					-		-		-		0.0048	U	0.0045	U
n-Butylbenzene	12	1000	100	12	-		-		-					
sec-Butylbenzene	11	1000	100	11	-		-		-					
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-					
1,2-Dibromo-3-chloropropane					-		-		-		0.006	U	0.0056	U
Isopropylbenzene					-		-		-		0.0012	U	0.0011	U
p-Isopropyltoluene					-		-		-					
Naphthalene	12	1000	100	12	-		-		-					
n-Propylbenzene	3.9	1000	100	3.9	-		-		-					
1,2,3-Trichlorobenzene					-		-		-		0.006	U	0.0056	U
1,2,4-Trichlorobenzene					-		-		-		0.006	U	0.0056	U

Notes:  
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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)				SB-2 (2-4)		SB-2 (2-4)		SB-2 (8-10)		SB-3 (0-2)		SB-3 (0-2)		SB-3 (4-6.5)		
		Monitoring Well ID				MW-6		MW-6		MW-6								
		LAB ID:				L1641701-03		L1641701-03 R1		L1641701-04		L1641701-05		L1701867-09		L1701867-10		
		COLLECTION DATE:				12/19/2016		12/19/2016		12/19/2016		12/20/2016		1/18/2017		1/18/2017		
Groundwater Protection Soil Cleanup Objective		IUSCO	RRSCO	UUSCO														
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-		-		-		-	
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-		-		-		-	
Methyl Acetate					-		-		-		-		0.024	U	0.022	U		
Cyclohexane					-		-		-		-		0.024	U	0.022	U		
1,4-Dioxane	0.1	250	13	0.1	-		-		-		-		0.12	U	0.11	U		
Freon-113					-		-		-		-		0.024	U	0.022	U		
Methyl cyclohexane					-		-		-		-		0.0048	U	0.0045	U		
Total VOCs					-		-		-		-		-		0.0095	-		

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				SAMPLE ID (Depth ft.)	SB-2 (2-4)	SB-2 (2-4)	SB-2 (8-10)	SB-3 (0-2)	SB-3 (0-2)	SB-3 (4-6.5)						
				Monitoring Well ID	MW-6	MW-6	MW-6									
				LAB ID:	L1641701-03	L1641701-03 R1	L1641701-04	L1641701-05	L1701867-09	L1701867-10						
				COLLECTION DATE:	12/19/2016	12/19/2016	12/19/2016	12/20/2016	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Pentane, 2-methyl-					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Pentane, 2,3,3-trimethyl-					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Undecane, 2,6-dimethyl-					-		-		-		-		-		-	
Unknown Cycloalkane					-		-		-		-		-		-	
Pentane					-		-		-		-		-		-	
Tridecane, 7-methyl-					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Dodecane, 2,6,10-trimethyl-					-		-		-		-		-		-	
Unknown Cyclohexane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Pentane, 2,3,4-trimethyl-					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Fluorodichloromethane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Ethane, 1-chloro-1-fluoro-					-		-		-		-		-		-	
Butane, 2-Methyl-					-		-		-		-		-		-	
n-Hexane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Decane, 3,7-dimethyl-					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Undecane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Cyclotrisiloxane, Hexamethyl-					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Dimethyl sulfide					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	

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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
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				SAMPLE ID (Depth ft.)	SB-2 (2-4)	SB-2 (2-4)	SB-2 (8-10)	SB-3 (0-2)	SB-3 (0-2)	SB-3 (4-6.5)				
				Monitoring Well ID	MW-6	MW-6	MW-6							
				LAB ID:	L1641701-03	L1641701-03 R1	L1641701-04	L1641701-05	L1701867-09	L1701867-10				
				COLLECTION DATE:	12/19/2016	12/19/2016	12/19/2016	12/20/2016	1/18/2017	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Tridecane					-		-		-		-		-	
Unknown					-		-		-		-		-	
1-Pentene					-		-		-		-		-	
Ethane, 1,1-Difluoro-					-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Cyclohexane					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
No Tentatively Identified Compounds									<0		U		<0	U
Tridecane, 7-methyl-					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-	
Pentane, 2,3,4-trimethyl-					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Dodecane, 2,6,10-trimethyl-					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Fluorodichloromethane					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Ethane, 1-chloro-1-fluoro-					-		-		-		-		-	
Unknown					-		-		-		-		-	
Pentane, 2-methyl-					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Cyclohexane					-		-		-		-		-	
Total TIC Compounds					-		-		-		-		-	

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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
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				SAMPLE ID (Depth ft.)	SB-2 (2-4)		SB-2 (2-4)		SB-2 (8-10)		SB-3 (0-2)		SB-3 (0-2)		SB-3 (4-6.5)	
				Monitoring Well ID	MW-6		MW-6		MW-6							
				LAB ID:	L1641701-03		L1641701-03 R1		L1641701-04		L1641701-05		L1701867-09		L1701867-10	
				COLLECTION DATE:	12/19/2016		12/19/2016		12/19/2016		12/20/2016		1/18/2017		1/18/2017	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	98	1000	100	20	0.027	J	-		0.16	U	-					
Hexachlorobenzene	3.2	12	1.2	0.33	0.15		-		0.12	U	-					
Bis(2-chloroethyl)ether					0.18	U	-		0.19	U	-					
2-Chloronaphthalene					0.2	U	-		0.21	U	-					
3,3'-Dichlorobenzidine					0.2	U	-		0.21	U	-					
2,4-Dinitrotoluene					0.2	U	-		0.21	U	-					
2,6-Dinitrotoluene					0.2	U	-		0.21	U	-					
Fluoranthene	1000	1000	100	100	0.42		-		0.12	U	-					
4-Chlorophenyl phenyl ether					0.2	U	-		0.21	U	-					
4-Bromophenyl phenyl ether					0.2	U	-		0.21	U	-					
Bis(2-chloroisopropyl)ether					0.24	U	-		0.25	U	-					
Bis(2-chloroethoxy)methane					0.22	U	-		0.22	U	-					
Hexachlorobutadiene					0.2	U	-		0.21	U	-					
Hexachlorocyclopentadiene					0.58	U	-		0.59	U	-					
Hexachloroethane					0.16	U	-		0.16	U	-					
Isophorone					0.18	U	-		0.19	U	-					
Naphthalene	12	1000	100	12	1.8		-		0.21	U	-					
Nitrobenzene					0.18	U	-		0.19	U	-					
NDPA/DPA					0.16	U	-		0.16	U	-					
n-Nitrosodi-n-propylamine					0.2	U	-		0.21	U	-					
Bis(2-ethylhexyl)phthalate					31	E	49		0.21	U	-					
Butyl benzyl phthalate					0.66		-		0.21	U	-					
Di-n-butylphthalate					0.3		-		0.21	U	-					
Di-n-octylphthalate					0.2	U	-		0.21	U	-					
Diethyl phthalate					0.2	U	-		0.21	U	-					
Dimethyl phthalate					19	E	18		0.21	U	-					
Benzo(a)anthracene	1	11	1	1	0.26		-		0.12	U	-					
Benzo(a)pyrene	22	1.1	1	1	0.32		-		0.16	U	-					
Benzo(b)fluoranthene	1.7	11	1	1	0.45		-		0.12	U	-					
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.12		-		0.12	U	-					
Chrysene	1	110	3.9	1	0.27		-		0.12	U	-					
Acenaphthylene	107	1000	100	100	0.053	J	-		0.16	U	-					
Anthracene	1000	1000	100	100	0.13		-		0.12	U	-					
Benzo(ghi)perylene	1000	1000	100	100	0.24		-		0.16	U	-					
Fluorene	386	1000	100	30	0.056	J	-		0.21	U	-					
Phenanthrene	1000	1000	100	100	0.28		-		0.12	U	-					
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.054	J	-		0.12	U	-					
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.25		-		0.16	U	-					
Pyrene	1000	1000	100	100	0.45		-		0.12	U	-					
Biphenyl					0.46	U	-		0.47	U	-					
4-Chloroaniline					0.2	U	-		0.21	U	-					
2-Nitroaniline					0.2	U	-		0.21	U	-					
3-Nitroaniline					0.2	U	-		0.21	U	-					
4-Nitroaniline					0.2	U	-		0.21	U	-					
Dibenzofuran	210	1000	59	7	0.028	J	-		0.21	U	-					
2-Methylnaphthalene					2.5		-		0.25	U	-					
1,2,4,5-Tetrachlorobenzene					0.088	J	-		0.21	U	-					
Acetophenone					0.2	U	-		0.21	U	-					

Notes:  
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				SAMPLE ID (Depth ft.)	SB-2 (2-4)		SB-2 (2-4)		SB-2 (8-10)		SB-3 (0-2)		SB-3 (0-2)		SB-3 (4-6.5)	
				Monitoring Well ID	MW-6		MW-6		MW-6							
				LAB ID:	L1641701-03		L1641701-03 R1		L1641701-04		L1641701-05		L1701867-09		L1701867-10	
				COLLECTION DATE:	12/19/2016		12/19/2016		12/19/2016		12/20/2016		1/18/2017		1/18/2017	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					0.12	U	-		0.12	U	-					
p-Chloro-m-cresol					0.2	U	-		0.21	U	-					
2-Chlorophenol					0.2	U	-		0.21	U	-					
2,4-Dichlorophenol					0.18	U	-		0.19	U	-					
2,4-Dimethylphenol					0.2	U	-		0.21	U	-					
2-Nitrophenol					0.44	U	-		0.45	U	-					
4-Nitrophenol					0.28	U	-		0.29	U	-					
2,4-Dinitrophenol					0.98	U	-		1	U	-					
4,6-Dinitro-o-cresol					0.53	U	-		0.54	U	-					
Pentachlorophenol	0.8	55	6.7	0.8	0.16	U	-		0.16	U	-					
Phenol	0.33	1000	100	0.33	0.2	U	-		0.21	U	-					
2-Methylphenol	0.33	1000	100	0.33	0.2	U	-		0.21	U	-					
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.89		-		0.3	U	-					
2,4,5-Trichlorophenol					0.2	U	-		0.21	U	-					
Carbazole					0.043	J	-		0.21	U	-					
Atrazine					0.16	U	-		0.16	U	-					
Benzaldehyde					0.27	U	-		0.27	U	-					
Caprolactam					0.2	U	-		0.21	U	-					
2,3,4,6-Tetrachlorophenol					0.2	U	-		0.21	U	-					
Total SVOCs					59.839	-	67	-	-	-	-	-				

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				SAMPLE ID (Depth ft.)	SB-2 (2-4)		SB-2 (2-4)		SB-2 (8-10)		SB-3 (0-2)		SB-3 (0-2)		SB-3 (4-6.5)	
				Monitoring Well ID	MW-6		MW-6		MW-6							
				LAB ID:	L1641701-03		L1641701-03 R1		L1641701-04		L1641701-05		L1701867-09		L1701867-10	
				COLLECTION DATE:	12/19/2016		12/19/2016		12/19/2016		12/20/2016		1/18/2017		1/18/2017	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Benzene					5.34	J	-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Vitamin E					-		-		-		-		-		-	
Unknown Benzene					3.63	J	-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Benzene					1.16	J	-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Cyclic Octaatomic Sulfur					-		-		1.24		NJ		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Biphenyl					0.709	J	-		-		-		-		-	
Unknown Benzene					2.96	J	-		-		-		-		-	
Unknown Alcohol					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Benzene					6.92	J	-		-		-		-		-	
Unknown Phenol					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Benzene					4.52	J	-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Sulfur					-		-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-		-	

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-2 (2-4)	SB-2 (2-4)	SB-2 (8-10)	SB-3 (0-2)	SB-3 (0-2)	SB-3 (4-6.5)						
				Monitoring Well ID	MW-6	MW-6	MW-6									
				LAB ID:	L1641701-03	L1641701-03 R1	L1641701-04	L1641701-05	L1701867-09	L1701867-10						
				COLLECTION DATE:	12/19/2016	12/19/2016	12/19/2016	12/20/2016	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene					3.62	J	-	-	-	-	-	-	-	-	-	-
Unknown Sulfur					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Phenol					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Phosphate					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Benzene					1.63	J	-	-	-	-	-	-	-	-	-	-
2,2',3,3',4,5',6-Heptachlor...					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					0.847	J	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					0.721	J	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown					2.12	J	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					1.15	J	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					1.2	J	-	-	-	-	-	-	-	-	-	-
Unknown					0.978	J	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					6.92	J	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Phenol					-		-		-		-		-		-	

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-2 (2-4)		SB-2 (2-4)		SB-2 (8-10)		SB-3 (0-2)		SB-3 (0-2)		SB-3 (4-6.5)	
				Monitoring Well ID	MW-6		MW-6		MW-6							
				LAB ID:	L1641701-03		L1641701-03 R1		L1641701-04		L1641701-05		L1701867-09		L1701867-10	
				COLLECTION DATE:	12/19/2016		12/19/2016		12/19/2016		12/20/2016		1/18/2017		1/18/2017	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Organic Acid					1.62	J	-		-		-		-		-	
Unknown					2.25	J	-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown					0.964	J	-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Alkane					1.4	J	-		-		-		-		-	
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown Alkane																
Sulfur																
Unknown PAH																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Alkane																
Cyclic Octaatomic Sulfur																
Unknown Benzene																
Unknown Alkane																
Unknown Naphthalene																
Unknown Benzene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Benzene																
Unknown Alkane																
No Tentatively Identified Compounds																
Unknown PAH																
Unknown Alkane																

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-2 (2-4)	SB-2 (2-4)	SB-2 (8-10)	SB-3 (0-2)	SB-3 (0-2)	SB-3 (4-6.5)				
				Monitoring Well ID	MW-6	MW-6	MW-6							
				LAB ID:	L1641701-03	L1641701-03 R1	L1641701-04	L1641701-05	L1701867-09	L1701867-10				
				COLLECTION DATE:	12/19/2016	12/19/2016	12/19/2016	12/20/2016	1/18/2017	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane														
Unknown Naphthalene														
Unknown														
Unknown Alkane														
Unknown														
Sulfur														
Unknown Alkane														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown Naphthalene														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown														
Unknown														
Unknown														
Unknown Alkane														
Unknown Naphthalene														
Unknown Naphthalene														
Cyclic Octatomic Sulfur														
Unknown Alkane														
Total SVOCs TICs					50.659		1.24							

Notes:  
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U = Compound not found above concentration shown  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-2 (2-4)	SB-2 (2-4)	SB-2 (8-10)	SB-3 (0-2)	SB-3 (0-2)	SB-3 (4-6.5)				
				Monitoring Well ID	MW-6	MW-6	MW-6							
				LAB ID:	L1641701-03	L1641701-03 R1	L1641701-04	L1641701-05	L1701867-09	L1701867-10				
				COLLECTION DATE:	12/19/2016	12/19/2016	12/19/2016	12/20/2016	1/18/2017	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>CHLORINATED HERBICIDES BY GC</b>														
MCPP					-		-		-					
MCPA					-		-		-					
Dalapon					-		-		-					
Dicamba					-		-		-					
Dichloroprop					-		-		-					
2,4-DB					-		-		-					
Dinoseb					-		-		-					
2,4-D					-		-	0.206	U	-				
2,4,5-T					-		-	0.206	U	-				
2,4,5-TP (Silvex)	3.8	1000	100	3.8	-		-	0.206	U	-				
<b>ORGANOCHLORINE PESTICIDES BY GC</b>														
Delta-BHC	0.25	1000	100	0.04	-		-	0.00198	U	-				
Lindane	0.1	23	1.3	0.1	-		-	0.000825	U	-				
Alpha-BHC	0.02	6.8	0.48	0.02	-		-	0.000825	U	-				
Beta-BHC	0.09	14	0.36	0.036	-		-	0.00198	U	-				
Heptachlor	0.38	29	2.1	0.042	-		-	0.00099	U	-				
Aldrin	0.19	1.4	0.097	0.005	-		-	0.00198	U	-				
Heptachlor epoxide					-		-	0.00371	U	-				
Endrin	0.06	410	11	0.014	-		-	0.000825	U	-				
Endrin aldehyde					-		-	0.00248	U	-				
Endrin ketone					-		-	0.00198	U	-				
Dieldrin	0.1	2.8	0.2	0.005	-		-	0.00124	U	-				
4,4'-DDE	17	120	8.9	0.0033	-		-	0.00198	U	-				
4,4'-DDD	14	180	13	0.0033	-		-	0.00198	U	-				
4,4'-DDT	136	94	7.9	0.0033	-		-	0.00371	U	-				
Endosulfan I	102	920	24	2.4	-		-	0.00198	U	-				
Endosulfan II	102	920	24	2.4	-		-	0.00198	U	-				
Endosulfan sulfate	1000	920	24	2.4	-		-	0.000825	U	-				
Methoxychlor					-		-	0.00371	U	-				
Toxaphene					-		-	0.0371	U	-				
cis-Chlordane	2.9	47	4.2	0.094	-		-	0.00248	U	-				
trans-Chlordane					-		-	0.00248	U	-				
Chlordane					-		-	0.0161	U	-				
<b>POLYCHLORINATED BIPHENYLS BY GC</b>														
Aroclor 1016	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
Aroclor 1221	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
Aroclor 1232	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
Aroclor 1242	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
Aroclor 1248	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
Aroclor 1254	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
Aroclor 1260	3.2	25	1	0.1	-		-	0.0402	U	0.231				
Aroclor 1262	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
Aroclor 1268	3.2	25	1	0.1	-		-	0.0402	U	0.0358	U			
PCBs, Total	3.2	25	1	0.1	-		-	0.0402	U	0.231				

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-2 (2-4)	SB-2 (2-4)	SB-2 (8-10)	SB-3 (0-2)	SB-3 (0-2)	SB-3 (4-6.5)					
				Monitoring Well ID	MW-6	MW-6	MW-6								
				LAB ID:	L1641701-03	L1641701-03 R1	L1641701-04	L1641701-05	L1701867-09	L1701867-10					
				COLLECTION DATE:	12/19/2016	12/19/2016	12/19/2016	12/20/2016	1/18/2017	1/18/2017					
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>TOTAL METALS</b>															
Aluminum, Total					-		-		8400		-				
Antimony, Total					-		-		4.9	U	-				
Arsenic, Total	16	16	16	13	-		-		5.1		-				
Barium, Total	820	10000	400	350	-		-		29		-				
Beryllium, Total	47	2700	72	7.2	-		-		0.3	J	-				
Cadmium, Total	7.5	60	4.3	2.5	-		-		0.98	U	-				
Calcium, Total					-		-		15000		-				
Chromium, Total					-		-		13		-				
Cobalt, Total					-		-		7.7		-				
Copper, Total	1720	10000	270	50	-		-		26		-				
Iron, Total					-		-		21000		-				
Lead, Total	450	3900	400	63	-		-		13		-				
Magnesium, Total					-		-		5700		-				
Manganese, Total	2000	10000	2000	1600	-		-		540		-				
Mercury, Total	0.73	5.7	0.81	0.18	-		-		0.08	U	-				
Nickel, Total	130	10000	310	30	-		-		19		-				
Potassium, Total					-		-		530		-				
Selenium, Total	4	6800	180	3.9	-		-		2	U	-				
Silver, Total	8.3	6800	180	2	-		-		0.98	U	-				
Sodium, Total					-		-		65	J	-				
Thallium, Total					-		-		2	U	-				
Vanadium, Total					-		-		15		-				
Zinc, Total	2480	10000	10000	109	-		-		57		-				
<b>GENERAL CHEMISTRY</b>															
Solids, Total					79.8		-		79.4		92.3		82.7		89.6
Cyanide, Total	40	10000	27	27	-		-		1.2	U	-		-	-	-

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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)				
				Monitoring Well ID											
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12					
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017					
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS</b>															
Methylene chloride	0.05	1000	100	0.05	-		-		0.012	U	0.012	U	-	0.012	U
1,1-Dichloroethane	0.27	480	26	0.27	-		-		0.0018	U	0.0018	U	-	0.0017	U
Chloroform	0.37	700	49	0.37	-		-		0.0018	U	0.0018	U	-	0.0017	U
Carbon tetrachloride	0.76	44	2.4	0.76	-		-		0.0012	U	0.0012	U	-	0.0012	U
1,2-Dichloropropane					-		-		0.0041	U	0.0041	U	-	0.0041	U
Dibromochloromethane					-		-		0.0012	U	0.0012	U	-	0.0012	U
1,1,2-Trichloroethane					-		-		0.0018	U	0.0018	U	-	0.0017	U
Tetrachloroethene	1.3	300	19	1.3	-		-		0.0012	U	0.0012	U	-	0.0012	U
Chlorobenzene	1.1	1000	100	1.1	-		-		0.0012	U	0.0012	U	-	0.0012	U
Trichlorofluoromethane					-		-		0.0059	U	0.0059	U	-	0.0058	U
1,2-Dichloroethane	0.02	60	3.1	0.02	-		-		0.0012	U	0.0012	U	-	0.0012	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	-		-		0.0012	U	0.0012	U	-	0.0012	U
Bromodichloromethane					-		-		0.0012	U	0.0012	U	-	0.0012	U
trans-1,3-Dichloropropene					-		-		0.0012	U	0.0012	U	-	0.0012	U
cis-1,3-Dichloropropene					-		-		0.0012	U	0.0012	U	-	0.0012	U
1,3-Dichloropropene, Total					-		-		-		-		-	-	
Bromoform					-		-		0.0047	U	0.0047	U	-	0.0046	U
1,1,2,2-Tetrachloroethane					-		-		0.0012	U	0.0012	U	-	0.0012	U
Benzene	0.06	89	4.8	0.06	-		-		0.0012	U	0.00014	J	-	0.0012	U
Toluene	0.7	1000	100	0.7	-		-		0.0018	U	0.00029	J	-	0.0017	U
Ethylbenzene	1	780	41	1	-		-		0.0012	U	0.0012	U	-	0.0012	U
Chloromethane					-		-		0.0059	U	0.0059	U	-	0.0058	U
Bromomethane					-		-		0.0023	U	0.0023	U	-	0.0023	U
Vinyl chloride	0.02	27	0.9	0.02	-		-		0.0023	U	0.0023	U	-	0.0023	U
Chloroethane					-		-		0.0023	U	0.0023	U	-	0.0023	U
1,1-Dichloroethene	0.33	1000	100	0.33	-		-		0.0012	U	0.0012	U	-	0.0012	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	-		-		0.0018	U	0.0018	U	-	0.0017	U
Trichloroethene	0.47	400	21	0.47	-		-		0.0012	U	0.0012	U	-	0.0012	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	-		-		0.0059	U	0.0059	U	-	0.0058	U
1,3-Dichlorobenzene	2.4	560	49	2.4	-		-		0.0059	U	0.0059	U	-	0.0058	U
1,4-Dichlorobenzene	1.8	250	13	1.8	-		-		0.0059	U	0.0059	U	-	0.0058	U
Methyl tert butyl ether	0.93	1000	100	0.93	-		-		0.0023	U	0.0023	U	-	0.0023	U
p/m-Xylene					-		-		0.0023	U	0.0023	U	-	0.0023	U
o-Xylene					-		-		0.0023	U	0.0023	U	-	0.0023	U
Xylenes, Total	1.6	1000	100	0.26	-		-		-		-		-	-	
cis-1,2-Dichloroethene	0.25	1000	100	0.25	-		-		0.0012	U	0.0012	U	-	0.0012	U
1,2-Dichloroethene, Total					-		-		-		-		-	-	
Styrene					-		-		0.0023	U	0.0023	U	-	0.0023	U
Dichlorodifluoromethane					-		-		0.012	U	0.012	U	-	0.012	U
Acetone	0.05	1000	100	0.05	-		-		0.012	U	0.012	U	-	0.012	U
Carbon disulfide					-		-		0.012	U	0.012	U	-	0.012	U
2-Butanone	0.12	1000	100	0.12	-		-		0.012	U	0.012	U	-	0.012	U
4-Methyl-2-pentanone					-		-		0.012	U	0.012	U	-	0.012	U
2-Hexanone					-		-		0.012	U	0.012	U	-	0.012	U
Bromochloromethane					-		-		0.0059	U	0.0059	U	-	0.0058	U
1,2-Dibromoethane					-		-		0.0047	U	0.0047	U	-	0.0046	U
n-Butylbenzene	12	1000	100	12	-		-		-		-		-	-	
sec-Butylbenzene	11	1000	100	11	-		-		-		-		-	-	
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-		-		-	-	
1,2-Dibromo-3-chloropropane					-		-		0.0059	U	0.0059	U	-	0.0058	U
Isopropylbenzene					-		-		0.0012	U	0.0012	U	-	0.0012	U
p-Isopropyltoluene					-		-		-		-		-	-	
Naphthalene	12	1000	100	12	-		-		-		-		-	-	
n-Propylbenzene	3.9	1000	100	3.9	-		-		-		-		-	-	
1,2,3-Trichlorobenzene					-		-		0.0059	U	0.0059	U	-	0.0058	U
1,2,4-Trichlorobenzene					-		-		0.0059	U	0.0059	U	-	0.0058	U

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)				
				Monitoring Well ID											
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12					
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017					
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-				-				
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-				-				
Methyl Acetate					-		-		0.023	U	0.023	U	-	0.023	U
Cyclohexane					-		-		0.023	U	0.023	U	-	0.023	U
1,4-Dioxane	0.1	250	13	0.1	-		-		0.12	U	0.12	U	-	0.12	U
Freon-113					-		-		0.023	U	0.023	U	-	0.023	U
Methyl cyclohexane					-		-		0.0047	U	0.0047	U	-	0.0046	U
Total VOCs					-	-	-	-	0.00043	-	-	-	-	-	-

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				Monitoring Well ID												
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12						
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Pentane, 2-methyl-					-		-				-					
Unknown Alkane					-		-				-					
Unknown Benzene					-		-				-					
Pentane, 2,3,3-trimethyl-					-		-				-					
Unknown Benzene					-		-				-					
Unknown					-		-				-					
Unknown Aromatic					-		-				-					
Unknown Benzene					-		-				-					
Undecane, 2,6-dimethyl-					-		-				-					
Unknown Cycloalkane					-		-				-					
Pentane					-		-				-					
Tridecane, 7-methyl-					-		-				-					
Unknown					-		-				-					
Unknown Benzene					-		-				-					
Unknown					-		-				-					
Dodecane, 2,6,10-trimethyl-					-		-				-					
Unknown Cyclohexane					-		-				-					
Unknown Benzene					-		-				-					
Pentane, 2,3,4-trimethyl-					-		-				-					
Unknown Naphthalene					-		-				-					
Fluorodichloromethane					-		-				-					
Unknown Alkane					-		-				-					
Ethane, 1-chloro-1-fluoro-					-		-				-					
Butane, 2-Methyl-					-		-				-					
n-Hexane					-		-				-					
Unknown Alkane					-		-				-					
Decane, 3,7-dimethyl-					-		-				-					
Unknown Benzene					-		-				-					
Undecane					-		-				-					
Unknown					-		-				-					
Unknown					-		-				-					
Cyclotrisiloxane, Hexamethyl-					-		-				-					
Unknown Alkane					-		-				-					
Unknown Naphthalene					-		-				-					
Dimethyl sulfide					-		-				-					
Unknown					-		-				-					

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				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane					-		-				-			
Unknown Benzene					-		-				-			
Unknown Aromatic					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Tridecane					-		-				-			
Unknown					-		-				-			
1-Pentene					-		-				-			
Ethane, 1,1-Difluoro-					-		-				-			
Unknown Aromatic					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown Aromatic					-		-				-			
Unknown					-		-				-			
Unknown Cyclohexane					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown Benzene					-		-				-			
No Tentatively Identified Compounds								<0	U	<0	U		<0	U
Tridecane, 7-methyl-					-		-				-			
Unknown Alkane					-		-				-			
Unknown Aromatic					-		-				-			
Pentane, 2,3,4-trimethyl-					-		-				-			
Unknown Naphthalene					-		-				-			
Dodecane, 2,6,10-trimethyl-					-		-				-			
Unknown Alkane					-		-				-			
Unknown					-		-				-			
Unknown Alkane					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown Naphthalene					-		-				-			
Fluorodichloromethane					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Ethane, 1-chloro-1-fluoro-					-		-				-			
Unknown					-		-				-			
Pentane, 2-methyl-					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown Cyclohexane					-		-				-			
Total TIC Compounds					-		-				-			

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				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>														
Acenaphthene	98	1000	100	20	0.15	U	0.44	U			0.15	U		
Hexachlorobenzene	3.2	12	1.2	0.33	0.11	U	0.33	U			0.11	U		
Bis(2-chloroethyl)ether					0.17	U	0.5	U			0.17	U		
2-Chloronaphthalene					0.19	U	0.55	U			0.19	U		
3,3'-Dichlorobenzidine					0.19	U	0.55	U			0.19	U		
2,4-Dinitrotoluene					0.19	U	0.55	U			0.19	U		
2,6-Dinitrotoluene					0.19	U	0.55	U			0.19	U		
Fluoranthene	1000	1000	100	100	0.11	U	0.25	J			0.11	U		
4-Chlorophenyl phenyl ether					0.19	U	0.55	U			0.19	U		
4-Bromophenyl phenyl ether					0.19	U	0.12	J			0.19	U		
Bis(2-chloroisopropyl)ether					0.23	U	0.66	U			0.23	U		
Bis(2-chloroethoxy)methane					0.2	U	0.6	U			0.2	U		
Hexachlorobutadiene					0.19	U	0.55	U			0.19	U		
Hexachlorocyclopentadiene					0.54	U	1.6	U			0.54	U		
Hexachloroethane					0.15	U	0.44	U			0.15	U		
Isophorone					0.17	U	0.5	U			0.17	U		
Naphthalene	12	1000	100	12	0.19	U	0.55	U			0.19	U		
Nitrobenzene					0.17	U	0.5	U			0.17	U		
NDPA/DPA					0.15	U	0.44	U			0.15	U		
n-Nitrosodi-n-propylamine					0.19	U	0.55	U			0.19	U		
Bis(2-ethylhexyl)phthalate					0.19	U	0.55	U			0.19	U		
Butyl benzyl phthalate					0.19	U	0.55	U			0.19	U		
Di-n-butylphthalate					0.19	U	0.55	U			0.19	U		
Di-n-octylphthalate					0.19	U	0.55	U			0.19	U		
Diethyl phthalate					0.19	U	0.55	U			0.19	U		
Dimethyl phthalate					0.19	U	0.55	U			0.19	U		
Benzo(a)anthracene	1	11	1	1	0.11	U	0.14	J			0.11	U		
Benzo(a)pyrene	22	1.1	1	1	0.15	U	0.15	J			0.15	U		
Benzo(b)fluoranthene	1.7	11	1	1	0.11	U	0.17	J			0.11	U		
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.11	U	0.33	U			0.11	U		
Chrysene	1	110	3.9	1	0.11	U	0.16	J			0.11	U		
Acenaphthylene	107	1000	100	100	0.15	U	0.44	U			0.15	U		
Anthracene	1000	1000	100	100	0.11	U	0.33	U			0.11	U		
Benzo(ghi)perylene	1000	1000	100	100	0.15	U	0.089	J			0.15	U		
Fluorene	386	1000	100	30	0.19	U	0.55	U			0.19	U		
Phenanthrene	1000	1000	100	100	0.11	U	0.12	J			0.11	U		
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.11	U	0.33	U			0.11	U		
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.15	U	0.093	J			0.15	U		
Pyrene	1000	1000	100	100	0.11	U	0.23	J			0.11	U		
Biphenyl					0.43	U	1.3	U			0.43	U		
4-Chloroaniline					0.19	U	0.55	U			0.19	U		
2-Nitroaniline					0.19	U	0.55	U			0.19	U		
3-Nitroaniline					0.19	U	0.55	U			0.19	U		
4-Nitroaniline					0.19	U	0.55	U			0.19	U		
Dibenzofuran	210	1000	59	7	0.19	U	0.55	U			0.19	U		
2-Methylnaphthalene					0.23	U	0.66	U			0.23	U		
1,2,4,5-Tetrachlorobenzene					0.19	U	0.55	U			0.19	U		
Acetophenone					0.19	U	0.55	U			0.19	U		

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				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					0.11	U	0.33	U			0.11	U		
p-Chloro-m-cresol					0.19	U	0.55	U			0.19	U		
2-Chlorophenol					0.19	U	0.55	U			0.19	U		
2,4-Dichlorophenol					0.17	U	0.5	U			0.17	U		
2,4-Dimethylphenol					0.19	U	0.55	U			0.19	U		
2-Nitrophenol					0.41	U	1.2	U			0.41	U		
4-Nitrophenol					0.27	U	0.78	U			0.26	U		
2,4-Dinitrophenol					0.91	U	2.6	U			0.91	U		
4,6-Dinitro-o-cresol					0.5	U	1.4	U			0.49	U		
Pentachlorophenol	0.8	55	6.7	0.8	0.15	U	0.44	U			0.15	U		
Phenol	0.33	1000	100	0.33	0.19	U	0.55	U			0.19	U		
2-Methylphenol	0.33	1000	100	0.33	0.19	U	0.55	U			0.19	U		
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.27	U	0.8	U			0.27	U		
2,4,5-Trichlorophenol					0.19	U	0.55	U			0.19	U		
Carbazole					0.19	U	0.55	U			0.19	U		
Atrazine					0.15	U	0.44	U			0.15	U		
Benzaldehyde					0.25	U	0.73	U			0.25	U		
Caprolactam					0.19	U	0.55	U			0.19	U		
2,3,4,6-Tetrachlorophenol					0.19	U	0.55	U			0.19	U		
Total SVOCs					-	-	1.522	-			-	-		

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				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>														
Unknown Biphenyl					-		-				-			
Unknown Benzene					-	-	-	-			-	-		
Unknown					-		-				-			
Unknown PAH					-		-				-			
Vitamin E					-		-				-			
Unknown Benzene					-		-				-			
Unknown PAH					-		-				-			
Unknown PAH					-		-				-			
Unknown PAH					-		-				-			
Unknown PAH					-		-				-			
Unknown Biphenyl					-		-				-			
Unknown Organic Acid					-		-				-			
Unknown Alkane					-		-				-			
Unknown Alkane					-		-				-			
Unknown Benzene					-	-	-	-			-	-		
Unknown Naphthalene					-		-				-			
Unknown Benzene					-	-	-	-			-	-		
Unknown Biphenyl					-		-				-			
Cyclic Octatomic Sulfur					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown Biphenyl					-		-				-			
Unknown Benzene					-		-				-			
Unknown Alcohol					-		-				-			
Unknown PAH					-		-				-			
Unknown Biphenyl					-		-				-			
Unknown Alkane					-		-				-			
Unknown Alkane					-		-				-			
Unknown					-		-				-			
Unknown Alkane					-		-				-			
Unknown PAH					-		-				-			
Unknown Biphenyl					-		-				-			
Unknown Organic Acid					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown PAH					-		-				-			
Unknown Benzene					-	-	-	-			-	-		
Unknown Phenol					-		-				-			
Unknown Alkane					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown PAH					-		-				-			
Unknown					-		-				-			
Unknown Benzene					-	-	-	-			-	-		
Unknown					-		-				-			
Sulfur					-		-				-			
Unknown Thiophene					-		-				-			
Unknown Biphenyl					-		-				-			
Unknown Thiophene					-		-				-			

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene					-	-	-	-			-	-		
Unknown Sulfur					-	-	-	-			-	-		
Unknown PAH					-	-	-	-			-	-		
Unknown Phenol					-	-	-	-			-	-		
Unknown Biphenyl					-	-	-	-			-	-		
Unknown Alkane					-	-	-	-			-	-		
Unknown Phosphate					-	-	-	-			-	-		
Unknown Biphenyl					-	-	-	-			-	-		
Unknown Biphenyl					-	-	-	-			-	-		
Unknown Organic Acid					-	-	-	-			-	-		
Unknown Benzene					-	-	-	-			-	-		
2,2',3,3',4,5',6-Heptachlor...					-	-	-	-			-	-		
Unknown PAH					-	-	-	-			-	-		
Unknown Alkane					-	-	-	-			-	-		
Unknown					-	-	-	-			-	-		
Unknown Benzene					-	-	-	-			-	-		
Unknown PAH					-	-	-	-			-	-		
Unknown Alkane					-	-	-	-			-	-		
Unknown Alkane					-	-	-	-			-	-		
Unknown					-	-	-	-			-	-		
Unknown					-	-	-	-			-	-		
Unknown Alkane					-	-	-	-			-	-		
Unknown Benzene					-	-	-	-			-	-		
Unknown					-	-	-	-			-	-		
Unknown Benzene					-	-	-	-			-	-		
Unknown Biphenyl					-	-	-	-			-	-		
Unknown Biphenyl					-	-	-	-			-	-		
Unknown Phenol					-	-	-	-			-	-		

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
PI = Quality assurance exceedance

**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown					-		-				-			
Unknown PAH					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown					-		-				-			
Unknown PAH					-		-				-			
Unknown Organic Acid					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown					-		-				-			
Unknown Alkane					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown Naphthalene					-		-				-			
Unknown Alkane					-		-				-			
Unknown Alkane					-		-				-			
Unknown														
Unknown Alkane														
Unknown Alkane														
Sulfur														
Unknown PAH														
Unknown Naphthalene														
Unknown Naphthalene														
Unknown Naphthalene														
Unknown Alkane														
Cyclic Octaatomic Sulfur														
Unknown Benzene														
Unknown Alkane														
Unknown Naphthalene														
Unknown Benzene														
Unknown Naphthalene														
Unknown Naphthalene														
Unknown Benzene														
Unknown Alkane														
Unknown														
Unknown PAH														
Unknown Alkane														
Unknown Benzene														
Unknown Naphthalene														
Unknown														
Unknown														
Unknown														
Unknown Alkane														
Unknown Alkane														
Unknown														
Unknown Benzene														
Unknown Alkane														
No Tentatively Identified Compounds														
Unknown PAH														
Unknown Alkane														

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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E= Estimated  
R1 = Repeated analysis  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane														
Unknown Naphthalene														
Unknown														
Unknown														
Unknown Alkane														
Unknown														
Sulfur														
Unknown Alkane														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown Naphthalene														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown														
Unknown														
Unknown														
Unknown Alkane														
Unknown Naphthalene														
Unknown Naphthalene														
Cyclic Octatomic Sulfur														
Unknown Alkane														
Total SVOCs TICs														

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>CHLORINATED HERBICIDES BY GC</b>														
MCPP					-		-				-			
MCPA					-		-				-			
Dalapon					-		-				-			
Dicamba					-		-				-			
Dichloroprop					-		-				-			
2,4-DB					-		-				-			
Dinoseb					-		-				-			
2,4-D					0.19	U	0.184	U			0.188	U		
2,4,5-T					0.19	U	0.184	U			0.188	U		
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.19	U	0.184	U			0.188	U		
<b>ORGANOCHLORINE PESTICIDES BY GC</b>														
Delta-BHC	0.25	1000	100	0.04	0.00182	U	0.00178	U			0.00182	U		
Lindane	0.1	23	1.3	0.1	0.000758	U	0.000741	U			0.000757	U		
Alpha-BHC	0.02	6.8	0.48	0.02	0.000758	U	0.000741	U			0.000757	U		
Beta-BHC	0.09	14	0.36	0.036	0.00182	U	0.00178	U			0.00182	U		
Heptachlor	0.38	29	2.1	0.042	0.00091	U	0.000889	U			0.000908	U		
Aldrin	0.19	1.4	0.097	0.005	0.00182	U	0.00178	U			0.00182	U		
Heptachlor epoxide					0.00341	U	0.00333	U			0.0034	U		
Endrin	0.06	410	11	0.014	0.000758	U	0.000741	U			0.000757	U		
Endrin aldehyde					0.00227	U	0.00222	U			0.00227	U		
Endrin ketone					0.00182	U	0.00178	U			0.00182	U		
Dieldrin	0.1	2.8	0.2	0.005	0.00114	U	0.00111	U			0.00114	U		
4,4'-DDE	17	120	8.9	0.0033	0.00182	U	0.00178	U			0.00182	U		
4,4'-DDD	14	180	13	0.0033	0.00182	U	0.00178	U			0.00182	U		
4,4'-DDT	136	94	7.9	0.0033	0.00341	U	0.00333	U			0.0034	U		
Endosulfan I	102	920	24	2.4	0.00182	U	0.00178	U			0.00182	U		
Endosulfan II	102	920	24	2.4	0.00182	U	0.00178	U			0.00182	U		
Endosulfan sulfate	1000	920	24	2.4	0.000758	U	0.000741	U			0.000757	U		
Methoxychlor					0.00341	U	0.00333	U			0.0034	U		
Toxaphene					0.0341	U	0.0333	U			0.034	U		
cis-Chlordane	2.9	47	4.2	0.094	0.00227	U	0.00222	U			0.00227	U		
trans-Chlordane					0.00227	U	0.00222	U			0.00227	U		
Chlordane					0.0148	U	0.0144	U			0.0148	U		
<b>POLYCHLORINATED BIPHENYLS BY GC</b>														
Aroclor 1016	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1221	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1232	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1242	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1248	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1254	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1260	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1262	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
Aroclor 1268	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		
PCBs, Total	3.2	25	1	0.1	0.0365	U	0.0372	U			0.0379	U		

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-3 (8-9)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (0-2)	SB-4 (2-4)	SB-4 (2-4)			
				Monitoring Well ID										
				LAB ID:	L1641701-06	L1641701-07	L1701867-11	L1701867-11 R1	L1641701-08	L1701867-12				
				COLLECTION DATE:	12/20/2016	12/20/2016	1/18/2017	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>														
Aluminum, Total					10000		4300				12000			
Antimony, Total					4.4	U	8				4.5	U		
Arsenic, Total	16	16	16	13	5.7		15				4.2			
Barium, Total	820	10000	400	350	88		66				59			
Beryllium, Total	47	2700	72	7.2	0.36	J	0.27	J			0.66			
Cadmium, Total	7.5	60	4.3	2.5	0.88	U	0.11	J			0.91	U		
Calcium, Total					5100		36000				900			
Chromium, Total					16		7.2				15			
Cobalt, Total					10		5.2				7.9			
Copper, Total	1720	10000	270	50	41		82				36			
Iron, Total					23000		16000				24000			
Lead, Total	450	3900	400	63	14		340				13			
Magnesium, Total					6500		1700				3900			
Manganese, Total	2000	10000	2000	1600	620		330				620			
Mercury, Total	0.73	5.7	0.81	0.18	0.02	J	0.19				0.05	J		
Nickel, Total	130	10000	310	30	23		11				17			
Potassium, Total					540		400				400			
Selenium, Total	4	6800	180	3.9	1.8	U	2				1.8	U		
Silver, Total	8.3	6800	180	2	0.88	U	0.9	U			0.91	U		
Sodium, Total					62	J	97	J			19	J		
Thallium, Total					1.8	U	1.8	U			1.8	U		
Vanadium, Total					18		12				23			
Zinc, Total	2480	10000	10000	109	75		58				52			
<b>GENERAL CHEMISTRY</b>														
Solids, Total					86.2		88.5	85.2			87		86.1	
Cyanide, Total	40	10000	27	27	1.1	U	0.36	J	-	-	1	U	-	-

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)		SB-4 (12-16)		SB-4 (14-16)		SB-5 (0-2)		SB-5 (0-2)		SB-6 (4-6)		SB-6 (4-6)	
				Monitoring Well ID										MW-1		MW-1	
				LAB ID:		L1641701-09		L1701867-13		L1641701-10		L1701867-14		L1641701-11		L1701867-15	
				COLLECTION DATE:		12/20/2016		1/18/2017		12/20/2016		1/18/2017		12/20/2016		1/18/2017	
		Groundwater Protection Soil Cleanup Objective		IUSCO		RRSCO		UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS</b>																	
Methylene chloride	0.05	1000	100	0.05	-		0.012	U	-		0.012	U	-		0.011	U	
1,1-Dichloroethane	0.27	480	26	0.27	-		0.0017	U	-		0.0018	U	-		0.0016	U	
Chloroform	0.37	700	49	0.37	-		0.0017	U	-		0.0018	U	-		0.0016	U	
Carbon tetrachloride	0.76	44	2.4	0.76	-		0.0012	U	-		0.0012	U	-		0.0011	U	
1,2-Dichloropropane					-		0.0041	U	-		0.0041	U	-		0.0038	U	
Dibromochloromethane					-		0.0012	U	-		0.0012	U	-		0.0011	U	
1,1,2-Trichloroethane					-		0.0017	U	-		0.0018	U	-		0.0016	U	
Tetrachloroethene	1.3	300	19	1.3	-		0.0012	U	-		0.0012	U	-		0.0011	U	
Chlorobenzene	1.1	1000	100	1.1	-		0.0012	U	-		0.0012	U	-		0.0011	U	
Trichlorofluoromethane					-		0.0058	U	-		0.0058	U	-		0.0054	U	
1,2-Dichloroethane	0.02	60	3.1	0.02	-		0.0012	U	-		0.0012	U	-		0.0011	U	
1,1,1-Trichloroethane	0.68	1000	100	0.68	-		0.0012	U	-		0.0012	U	-		0.0011	U	
Bromodichloromethane					-		0.0012	U	-		0.0012	U	-		0.0011	U	
trans-1,3-Dichloropropene					-		0.0012	U	-		0.0012	U	-		0.0011	U	
cis-1,3-Dichloropropene					-		0.0012	U	-		0.0012	U	-		0.0011	U	
1,3-Dichloropropene, Total					-				-				-				
Bromoform					-		0.0047	U	-		0.0047	U	-		0.0044	U	
1,1,2,2-Tetrachloroethane					-		0.0012	U	-		0.0012	U	-		0.0011	U	
Benzene	0.06	89	4.8	0.06	-		0.0012	U	-		0.0012	U	-		0.0011	U	
Toluene	0.7	1000	100	0.7	-		0.0017	U	-		0.0018	U	-		0.0016	U	
Ethylbenzene	1	780	41	1	-		0.0012	U	-		0.0012	U	-		0.0011	U	
Chloromethane					-		0.0058	U	-		0.0058	U	-		0.0054	U	
Bromomethane					-		0.0023	U	-		0.0023	U	-		0.0022	U	
Vinyl chloride	0.02	27	0.9	0.02	-		0.0023	U	-		0.0023	U	-		0.0022	U	
Chloroethane					-		0.0023	U	-		0.0023	U	-		0.0022	U	
1,1-Dichloroethene	0.33	1000	100	0.33	-		0.0012	U	-		0.0012	U	-		0.0011	U	
trans-1,2-Dichloroethene	0.19	1000	100	0.19	-		0.0017	U	-		0.0018	U	-		0.0016	U	
Trichloroethene	0.47	400	21	0.47	-		0.0012	U	-		0.0012	U	-		0.0011	U	
1,2-Dichlorobenzene	1.1	1000	100	1.1	-		0.0058	U	-		0.0058	U	-		0.0054	U	
1,3-Dichlorobenzene	2.4	560	49	2.4	-		0.0058	U	-		0.0058	U	-		0.0054	U	
1,4-Dichlorobenzene	1.8	250	13	1.8	-		0.0058	U	-		0.0058	U	-		0.0054	U	
Methyl tert butyl ether	0.93	1000	100	0.93	-		0.0023	U	-		0.0022	J	-		0.0022	U	
p/m-Xylene					-		0.0023	U	-		0.0023	U	-		0.0022	U	
o-Xylene					-		0.0023	U	-		0.0023	U	-		0.0022	U	
Xylenes, Total	1.6	1000	100	0.26	-				-				-				
cis-1,2-Dichloroethene	0.25	1000	100	0.25	-		0.0012	U	-		0.0012	U	-		0.0011	U	
1,2-Dichloroethene, Total					-				-				-				
Styrene					-		0.0023	U	-		0.0023	U	-		0.0022	U	
Dichlorodifluoromethane					-		0.012	U	-		0.012	U	-		0.011	U	
Acetone	0.05	1000	100	0.05	-		0.012	U	-		0.046		-		0.04		
Carbon disulfide					-		0.012	U	-		0.012	U	-		0.011	U	
2-Butanone	0.12	1000	100	0.12	-		0.012	U	-		0.012	U	-		0.011	U	
4-Methyl-2-pentanone					-		0.012	U	-		0.012	U	-		0.011	U	
2-Hexanone					-		0.012	U	-		0.012	U	-		0.011	U	
Bromochloromethane					-		0.0058	U	-		0.0058	U	-		0.0054	U	
1,2-Dibromoethane					-		0.0047	U	-		0.0047	U	-		0.0044	U	
n-Butylbenzene	12	1000	100	12	-				-				-				
sec-Butylbenzene	11	1000	100	11	-				-				-				
tert-Butylbenzene	5.9	1000	100	5.9	-				-				-				
1,2-Dibromo-3-chloropropane					-		0.0058	U	-		0.0058	U	-		0.0054	U	
Isopropylbenzene					-		0.0012	U	-		0.0012	U	-		0.0011	U	
p-Isopropyltoluene					-				-				-				
Naphthalene	12	1000	100	12	-				-				-				
n-Propylbenzene	3.9	1000	100	3.9	-				-				-				
1,2,3-Trichlorobenzene					-		0.0058	U	-		0.0058	U	-		0.0054	U	
1,2,4-Trichlorobenzene					-		0.0058	U	-		0.0058	U	-		0.0054	U	

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)		SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)						
		Monitoring Well ID						MW-1	MW-1						
		LAB ID:		L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15						
		COLLECTION DATE:		12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017						
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-		-		
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-		-		
Methyl Acetate					-		0.023	U	-		0.023	U	-	0.022	U
Cyclohexane					-		0.023	U	-		0.023	U	-	0.022	U
1,4-Dioxane	0.1	250	13	0.1	-		0.12	U	-		0.12	U	-	0.11	U
Freon-113					-		0.023	U	-		0.023	U	-	0.022	U
Methyl cyclohexane					-		0.0047	U	-		0.0047	U	-	0.0044	U
Total VOCs					-	-	-	-	-	-	0.0482	-	-	0.04	-

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				SAMPLE ID (Depth ft.)	SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)					
				Monitoring Well ID					MW-1	MW-1					
				LAB ID:	L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15					
				COLLECTION DATE:	12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017					
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>															
Pentane, 2-methyl-					-				-				-		
Unknown Alkane					-				-				-		
Unknown Benzene					-				-				-		
Pentane, 2,3,3-trimethyl-					-				-				-		
Unknown Benzene					-				-				-		
Unknown					-				-				-		
Unknown Aromatic					-				-				-		
Unknown Benzene					-				-				-		
Undecane, 2,6-dimethyl-					-				-				-		
Unknown Cycloalkane					-				-				-		
Pentane					-				-				-		
Tridecane, 7-methyl-					-				-				-		
Unknown					-				-				-		
Unknown Benzene					-				-				-		
Unknown					-				-				-		
Dodecane, 2,6,10-trimethyl-					-				-				-		
Unknown Cyclohexane					-				-				-		
Unknown Benzene					-				-				-		
Pentane, 2,3,4-trimethyl-					-				-				-		
Unknown Naphthalene					-				-				-		
Fluorodichloromethane					-				-				-		
Unknown Alkane					-				-				-		
Ethane, 1-chloro-1-fluoro-					-				-				-		
Butane, 2-Methyl-					-				-				-		
n-Hexane					-				-				-		
Unknown Alkane					-				-				-		
Decane, 3,7-dimethyl-					-				-				-		
Unknown Benzene					-				-				-		
Undecane					-				-				-		
Unknown					-				-				-		
Unknown					-				-				-		
Cyclotrisiloxane, Hexamethyl-					-				-				-		
Unknown Alkane					-				-				-		
Unknown Naphthalene					-				-				-		
Dimethyl sulfide					-				-				-		
Unknown					-				-				-		

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

ANALYTE	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	SB-4 (12-16)		SB-4 (14-16)		SB-5 (0-2)		SB-5 (0-2)		SB-6 (4-6)		SB-6 (4-6)	
					Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)												
Cyclopentane					-				-				-			
Unknown Benzene					-				-				-			
Unknown Aromatic					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Tridecane					-				-				-			
Unknown					-				-				-			
1-Pentene					-				-				-			
Ethane, 1,1-Difluoro-					-				-				-			
Unknown Aromatic					-				-				-			
Unknown Naphthalene					-				-				-			
Unknown Aromatic					-				-				-			
Unknown					-				-				-			
Unknown Cyclohexane					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Unknown Benzene					-				-				-			
No Tentatively Identified Compounds							<0		U						<0	U
Tridecane, 7-methyl-					-				-				-			
Unknown Alkane					-				-				-			
Unknown Aromatic					-				-				-			
Pentane, 2,3,4-trimethyl-					-				-				-			
Unknown Naphthalene					-				-				-			
Dodecane, 2,6,10-trimethyl-					-				-				-			
Unknown Alkane					-				-				-			
Unknown					-				-				-			
Unknown Alkane					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Unknown Naphthalene					-				-				-			
Fluorodichloromethane					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Ethane, 1-chloro-1-fluoro-					-				-				-			
Unknown					-				-				-			
Pentane, 2-methyl-					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Unknown Cyclohexane					-				-				-			
Total TIC Compounds												11.6				

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

					SAMPLE ID (Depth ft.)		SB-4 (12-16)		SB-4 (14-16)		SB-5 (0-2)		SB-5 (0-2)		SB-6 (4-6)		SB-6 (4-6)	
					Monitoring Well ID										MW-1		MW-1	
					LAB ID:		L1641701-09		L1701867-13		L1641701-10		L1701867-14		L1641701-11		L1701867-15	
					COLLECTION DATE:		12/20/2016		1/18/2017		12/20/2016		1/18/2017		12/20/2016		1/18/2017	
					Groundwater Protection Soil Cleanup Objective		IUSCO		RRSCO		UUSCO							
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																		
Acenaphthene	98	1000	100	20	0.16	U			0.14	U			0.019	J				
Hexachlorobenzene	3.2	12	1.2	0.33	0.12	U			0.11	U			0.11	U				
Bis(2-chloroethyl)ether					0.18	U			0.16	U			0.16	U				
2-Chloronaphthalene					0.2	U			0.18	U			0.18	U				
3,3'-Dichlorobenzidine					0.2	U			0.18	U			0.18	U				
2,4-Dinitrotoluene					0.2	U			0.18	U			0.18	U				
2,6-Dinitrotoluene					0.2	U			0.18	U			0.18	U				
Fluoranthene	1000	1000	100	100	0.12	U			0.093	J			0.39					
4-Chlorophenyl phenyl ether					0.2	U			0.18	U			0.18	U				
4-Bromophenyl phenyl ether					0.2	U			0.18	U			0.18	U				
Bis(2-chloroisopropyl)ether					0.24	U			0.22	U			0.21	U				
Bis(2-chloroethoxy)methane					0.22	U			0.2	U			0.19	U				
Hexachlorobutadiene					0.2	U			0.18	U			0.18	U				
Hexachlorocyclopentadiene					0.58	U			0.52	U			0.51	U				
Hexachloroethane					0.16	U			0.14	U			0.14	U				
Isophorone					0.18	U			0.16	U			0.16	U				
Naphthalene	12	1000	100	12	0.2	U			0.048	J			0.15	J				
Nitrobenzene					0.18	U			0.16	U			0.16	U				
NDPA/DPA					0.16	U			0.14	U			0.14	U				
n-Nitrosodi-n-propylamine					0.2	U			0.18	U			0.18	U				
Bis(2-ethylhexyl)phthalate					0.2	U			0.12	J			0.47					
Butyl benzyl phthalate					0.2	U			0.18	U			0.18	U				
Di-n-butylphthalate					0.2	U			0.18	U			0.082	J				
Di-n-octylphthalate					0.2	U			0.18	U			0.18	U				
Diethyl phthalate					0.2	U			0.18	U			0.18	U				
Dimethyl phthalate					0.2	U			0.18	U			4					
Benzo(a)anthracene	1	11	1	1	0.12	U			0.064	J			0.23					
Benzo(a)pyrene	22	1.1	1	1	0.16	U			0.072	J			0.24					
Benzo(b)fluoranthene	1.7	11	1	1	0.12	U			0.093	J			0.4					
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.12	U			0.037	J			0.13					
Chrysene	1	110	3.9	1	0.12	U			0.074	J			0.28					
Acenaphthylene	107	1000	100	100	0.16	U			0.14	U			0.046	J				
Anthracene	1000	1000	100	100	0.12	U			0.11	U			0.083	J				
Benzo(ghi)perylene	1000	1000	100	100	0.16	U			0.082	J			0.15					
Fluorene	386	1000	100	30	0.2	U			0.18	U			0.026	J				
Phenanthrene	1000	1000	100	100	0.12	U			0.065	J			0.25					
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.12	U			0.11	U			0.044	J				
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.16	U			0.07	J			0.2					
Pyrene	1000	1000	100	100	0.12	U			0.09	J			0.4					
Biphenyl					0.46	U			0.41	U			0.41	U				
4-Chloroaniline					0.2	U			0.18	U			0.18	U				
2-Nitroaniline					0.2	U			0.18	U			0.18	U				
3-Nitroaniline					0.2	U			0.18	U			0.18	U				
4-Nitroaniline					0.2	U			0.18	U			0.18	U				
Dibenzofuran	210	1000	59	7	0.2	U			0.18	U			0.046	J				
2-Methylnaphthalene					0.24	U			0.064	J			0.14	J				
1,2,4,5-Tetrachlorobenzene					0.2	U			0.18	U			0.18	U				
Acetophenone					0.2	U			0.18	U			0.18	U				

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**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)		SB-4 (12-16)		SB-4 (14-16)		SB-5 (0-2)		SB-5 (0-2)		SB-6 (4-6)		SB-6 (4-6)	
				Monitoring Well ID										MW-1		MW-1	
				LAB ID:		L1641701-09		L1701867-13		L1641701-10		L1701867-14		L1641701-11		L1701867-15	
				COLLECTION DATE:		12/20/2016		1/18/2017		12/20/2016		1/18/2017		12/20/2016		1/18/2017	
		Groundwater Protection Soil Cleanup Objective		IUSCO		RRSCO		UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
2,4,6-Trichlorophenol					0.12	U			0.11	U			0.11	U			
p-Chloro-m-cresol					0.2	U			0.18	U			0.18	U			
2-Chlorophenol					0.2	U			0.18	U			0.18	U			
2,4-Dichlorophenol					0.18	U			0.16	U			0.16	U			
2,4-Dimethylphenol					0.2	U			0.18	U			0.18	U			
2-Nitrophenol					0.44	U			0.39	U			0.39	U			
4-Nitrophenol					0.28	U			0.25	U			0.25	U			
2,4-Dinitrophenol					0.97	U			0.87	U			0.86	U			
4,6-Dinitro-o-cresol					0.52	U			0.47	U			0.46	U			
Pentachlorophenol	0.8	55	6.7	0.8	0.16	U			0.14	U			0.14	U			
Phenol	0.33	1000	100	0.33	0.2	U			0.18	U			0.18	U			
2-Methylphenol	0.33	1000	100	0.33	0.2	U			0.18	U			0.18	U			
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.29	U			0.26	U			0.26	U			
2,4,5-Trichlorophenol					0.2	U			0.18	U			0.18	U			
Carbazole					0.2	U			0.18	U			0.035	J			
Atrazine					0.16	U			0.14	U			0.14	U			
Benzaldehyde					0.27	U			0.24	U			0.24	U			
Caprolactam					0.2	U			0.18	U			0.18	U			
2,3,4,6-Tetrachlorophenol					0.2	U			0.18	U			0.18	U			
Total SVOCs					-	-			0.972	-			7.811	-			

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				SAMPLE ID (Depth ft.)	SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)						
				Monitoring Well ID					MW-1	MW-1						
				LAB ID:	L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15						
				COLLECTION DATE:	12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl					-				-				-			
Unknown Benzene					-	-			-	-			-	-		
Unknown					-				-				-			
Unknown PAH					-				-				-			
Vitamin E					-				-				-			
Unknown Benzene					-				-				-			
Unknown PAH					-				-				-			
Unknown PAH					-				-				-			
Unknown PAH					-				-				-			
Unknown PAH					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Organic Acid					-				-				-			
Unknown Alkane					-				-				-			
Unknown Alkane					-				-				0.241	J		
Unknown Benzene					-	-			-	-			-	-		
Unknown Naphthalene					-				-				-			
Unknown Benzene					-	-			-	-			-	-		
Unknown Biphenyl					-				-				-			
Cyclic Octatomic Sulfur					-				-				-			
Unknown Naphthalene					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Benzene					-				-				-			
Unknown Alcohol					-				-				-			
Unknown PAH					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Alkane					-				-				-			
Unknown Alkane					-				-				-			
Unknown					-				-				-			
Unknown Alkane					-				-				-			
Unknown PAH					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Organic Acid					-				-				-			
Unknown Naphthalene					-				-				-			
Unknown Naphthalene					-				-				-			
Unknown PAH					-				-				-			
Unknown Benzene					-	-			-	-			-	-		
Unknown Phenol					-				-				-			
Unknown Alkane					-				-				-			
Unknown Naphthalene					-				-				-			
Unknown PAH					-				-				-			
Unknown					-				-				-			
Unknown Benzene					-	-			-	-			-	-		
Unknown					-				-				-			
Sulfur					-				-				-			
Unknown Thiophene					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Thiophene					-				-				-			

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				SAMPLE ID (Depth ft.)	SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)						
				Monitoring Well ID					MW-1	MW-1						
				LAB ID:	L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15						
				COLLECTION DATE:	12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene					-	-			-	-			-	-		
Unknown Sulfur					-				-				-			
Unknown PAH					-				-				-			
Unknown Phenol					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Alkane					-				-				-			
Unknown Phosphate					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Organic Acid					-				-				-			
Unknown Benzene					-	-			-	-			-	-		
2,2',3,3',4,5',6-Heptachlor...					-				-				-			
Unknown PAH					-				-				-			
Unknown Alkane					-				-				-			
Unknown					-				-				-			
Unknown Benzene					-				-				0.223	J		
Unknown PAH					-				-				-			
Unknown Alkane					-				0.212	J			-			
Unknown Alkane					-				-				-			
Unknown					-				-				-			
Unknown					-				0.147	J			0.332	J		
Unknown Alkane					-				0.226	J			-			
Unknown Benzene					-				-				-			
Unknown					-				0.609	J			-			
Unknown Benzene					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Biphenyl					-				-				-			
Unknown Phenol					-				-				1.43	J		

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				SAMPLE ID (Depth ft.)	SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)						
				Monitoring Well ID					MW-1	MW-1						
				LAB ID:	L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15						
				COLLECTION DATE:	12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
<b>ANALYTE</b>	<b>(mg/kg)</b>	<b>(mg/kg)</b>	<b>(mg/kg)</b>	<b>(mg/kg)</b>	<b>Conc</b>	<b>Q</b>	<b>Conc</b>	<b>Q</b>	<b>Conc</b>	<b>Q</b>	<b>Conc</b>	<b>Q</b>	<b>Conc</b>	<b>Q</b>	<b>Conc</b>	<b>Q</b>
Unknown					-				-				-			
Unknown PAH					-				-				-			
Unknown Naphthalene					-				-				-			
Unknown					-				-				-			
Unknown PAH					-				-				-			
Unknown Organic Acid					-				-				-			
Unknown					-				-				-			
Unknown					-				-				-			
Unknown					-			0.356	J				0.297	J		
Unknown Alkane					-			-					-			
Unknown Naphthalene					-			-					-			
Unknown Naphthalene					-			-					-			
Unknown Alkane					-			-					-			
Unknown Alkane					-			-					-			
Unknown																
Unknown Alkane																
Unknown Alkane																
Sulfur																
Unknown PAH																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Alkane																
Cyclic Octaatomic Sulfur																
Unknown Benzene																
Unknown Alkane																
Unknown Naphthalene																
Unknown Benzene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Benzene																
Unknown Alkane																
No Tentatively Identified Compounds																
Unknown PAH																
Unknown Alkane																

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
PI = Quality assurance exceedance



**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)						
				Monitoring Well ID					MW-1	MW-1						
				LAB ID:	L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15						
				COLLECTION DATE:	12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	
Unknown Alkane																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown Alkane																
Unknown																
Sulfur																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown Naphthalene																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Naphthalene																
Unknown Naphthalene																
Cyclic Octaatomic Sulfur																
Unknown Alkane																
Total SVOCs TICs								1.55					2.523			

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)				
				Monitoring Well ID					MW-1	MW-1				
				LAB ID:	L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15				
				COLLECTION DATE:	12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>CHLORINATED HERBICIDES BY GC</b>														
MCPP					-				-				-	
MCPA					-				-				-	
Dalapon					-				-				-	
Dicamba					-				-				-	
Dichloroprop					-				-				-	
2,4-DB					-				-				-	
Dinoseb					-				-				-	
2,4-D					0.202	U			0.181	U			0.179	U
2,4,5-T					0.202	U			0.181	U			0.179	U
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.202	U			0.181	U			0.179	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>														
Delta-BHC	0.25	1000	100	0.04	0.0019	U			0.00174	U			0.0017	U
Lindane	0.1	23	1.3	0.1	0.000794	U			0.000727	U			0.00071	U
Alpha-BHC	0.02	6.8	0.48	0.02	0.000794	U			0.000727	U			0.00071	U
Beta-BHC	0.09	14	0.36	0.036	0.0019	U			0.00174	U			0.0017	U
Heptachlor	0.38	29	2.1	0.042	0.000953	U			0.000873	U			0.00109	PI
Aldrin	0.19	1.4	0.097	0.005	0.0019	U			0.00174	U			0.0017	U
Heptachlor epoxide					0.00357	U			0.00327	U			0.0032	U
Endrin	0.06	410	11	0.014	0.000794	U			0.000727	U			0.00071	U
Endrin aldehyde					0.00238	U			0.00218	U			0.00213	U
Endrin ketone					0.0019	U			0.00174	U			0.0017	U
Dieldrin	0.1	2.8	0.2	0.005	0.00119	U			0.00109	U			0.00352	P
4,4'-DDE	17	120	8.9	0.0033	0.0019	U			0.00174	U			0.0017	U
4,4'-DDD	14	180	13	0.0033	0.0019	U			0.00174	U			0.000695	JPI
4,4'-DDT	136	94	7.9	0.0033	0.00357	U			0.00327	U			0.0032	U
Endosulfan I	102	920	24	2.4	0.0019	U			0.00174	U			0.0017	U
Endosulfan II	102	920	24	2.4	0.0019	U			0.00769	PI			0.0017	U
Endosulfan sulfate	1000	920	24	2.4	0.000794	U			0.000727	U			0.00071	U
Methoxychlor					0.00357	U			0.00327	U			0.0032	U
Toxaphene					0.0357	U			0.0327	U			0.032	U
cis-Chlordane	2.9	47	4.2	0.094	0.00238	U			0.00218	U			0.00213	U
trans-Chlordane					0.00238	U			0.00218	U			0.00213	U
Chlordane					0.0155	U			0.0142	U			0.0138	U
<b>POLYCHLORINATED BIPHENYLS BY GC</b>														
Aroclor 1016	3.2	25	1	0.1	0.0394	U			0.716	U			0.0359	U
Aroclor 1221	3.2	25	1	0.1	0.0394	U			0.716	U			0.0359	U
Aroclor 1232	3.2	25	1	0.1	0.0394	U			0.716	U			0.0359	U
Aroclor 1242	3.2	25	1	0.1	0.0394	U			1.14				0.226	
Aroclor 1248	3.2	25	1	0.1	0.0394	U			0.716	U			0.0359	U
Aroclor 1254	3.2	25	1	0.1	0.0394	U			1.36				0.197	
Aroclor 1260	3.2	25	1	0.1	0.0394	U			0.252	J			0.0834	
Aroclor 1262	3.2	25	1	0.1	0.0394	U			0.716	U			0.0359	U
Aroclor 1268	3.2	25	1	0.1	0.0394	U			0.716	U			0.0359	U
PCBs, Total	3.2	25	1	0.1	0.0394	U			2.75	J			0.506	

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-4 (12-16)	SB-4 (14-16)	SB-5 (0-2)	SB-5 (0-2)	SB-6 (4-6)	SB-6 (4-6)				
				Monitoring Well ID					MW-1	MW-1				
				LAB ID:	L1641701-09	L1701867-13	L1641701-10	L1701867-14	L1641701-11	L1701867-15				
				COLLECTION DATE:	12/20/2016	1/18/2017	12/20/2016	1/18/2017	12/20/2016	1/18/2017				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>														
Aluminum, Total					6600			11000			9600			
Antimony, Total					4.8	U		4.3	U		4.2	U		
Arsenic, Total	16	16	16	13	3.5			3.3			6.6			
Barium, Total	820	10000	400	350	26			140			71			
Beryllium, Total	47	2700	72	7.2	0.24	J		0.45			0.35	J		
Cadmium, Total	7.5	60	4.3	2.5	0.95	U		0.19	J		1.1			
Calcium, Total					20000			1500			4700			
Chromium, Total					9.7			12			110			
Cobalt, Total					6			6			9.3			
Copper, Total	1720	10000	270	50	21			91			160			
Iron, Total					16000			16000			34000			
Lead, Total	450	3900	400	63	8.4			39			250			
Magnesium, Total					4800			2400			3700			
Manganese, Total	2000	10000	2000	1600	370			500			440			
Mercury, Total	0.73	5.7	0.81	0.18	0.09	U		0.065	J		0.23			
Nickel, Total	130	10000	310	30	14			16			60			
Potassium, Total					360			450			450			
Selenium, Total	4	6800	180	3.9	1.9	U		1.7	U		1.7	U		
Silver, Total	8.3	6800	180	2	0.95	U		0.86	U		0.83	U		
Sodium, Total					70	J		95	J		110	J		
Thallium, Total					1.9	U		1.7	U		1.7	U		
Vanadium, Total					12			18			26			
Zinc, Total	2480	10000	10000	109	44			63			280			
<b>GENERAL CHEMISTRY</b>														
Solids, Total					81.2		85.8	90.5	85.7		91.2	91.9		
Cyanide, Total	40	10000	27	27	1.1	U	-	0.98	J	-	0.23	J	-	-

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)		SB-6 (6-8)		SB-6 (18-20)		SB-6 (18-20)		SB-7 (0-2)		SB-7 (0-2)		SB-8 (0-2)	
				Monitoring Well ID		MW-1		MW-1		MW-1						MW-3	
				LAB ID:		L1701867-08		L1701867-16		L1641701-12		L1641701-13		L1701867-17		L1641701-14	
				COLLECTION DATE:		1/18/2017		1/18/2017		12/20/2016		12/20/2016		1/18/2017		12/20/2016	
		Groundwater Protection Soil Cleanup Objective		IUSCO		RRSCO		UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS</b>																	
Methylene chloride	0.05	1000	100	0.05	0.012	U	0.011	U	-	-	-	-	0.011	U	-	-	
1,1-Dichloroethane	0.27	480	26	0.27	0.0018	U	0.0017	U	-	-	-	-	0.0017	U	-	-	
Chloroform	0.37	700	49	0.37	0.0018	U	0.0017	U	-	-	-	-	0.0017	U	-	-	
Carbon tetrachloride	0.76	44	2.4	0.76	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
1,2-Dichloropropane					0.0043	U	0.0039	U	-	-	-	-	0.0039	U	-	-	
Dibromochloromethane					0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
1,1,2-Trichloroethane					0.0018	U	0.0017	U	-	-	-	-	0.0017	U	-	-	
Tetrachloroethene	1.3	300	19	1.3	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
Chlorobenzene	1.1	1000	100	1.1	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
Trichlorofluoromethane					0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
Bromodichloromethane					0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
trans-1,3-Dichloropropene					0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
cis-1,3-Dichloropropene					0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
1,3-Dichloropropene, Total																	
Bromoform					0.0049	U	0.0045	U	-	-	-	-	0.0045	U	-	-	
1,1,2,2-Tetrachloroethane					0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
Benzene	0.06	89	4.8	0.06	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
Toluene	0.7	1000	100	0.7	0.0018	U	0.0017	U	-	-	-	-	0.0017	U	-	-	
Ethylbenzene	1	780	41	1	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
Chloromethane					0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
Bromomethane					0.0025	U	0.0022	U	-	-	-	-	0.0022	U	-	-	
Vinyl chloride	0.02	27	0.9	0.02	0.0025	U	0.0022	U	-	-	-	-	0.0022	U	-	-	
Chloroethane					0.0025	U	0.0022	U	-	-	-	-	0.0022	U	-	-	
1,1-Dichloroethene	0.33	1000	100	0.33	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0018	U	0.0017	U	-	-	-	-	0.0017	U	-	-	
Trichloroethene	0.47	400	21	0.47	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
1,3-Dichlorobenzene	2.4	560	49	2.4	0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
1,4-Dichlorobenzene	1.8	250	13	1.8	0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
Methyl tert butyl ether	0.93	1000	100	0.93	0.0025	U	0.0022	U	-	-	-	-	0.0022	U	-	-	
p/m-Xylene					0.0025	U	0.0022	U	-	-	-	-	0.0022	U	-	-	
o-Xylene					0.0025	U	0.0022	U	-	-	-	-	0.0022	U	-	-	
Xylenes, Total	1.6	1000	100	0.26					-	-	-	-					
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
1,2-Dichloroethene, Total									-	-	-	-					
Styrene					0.0025	U	0.0022	U	-	-	-	-	0.0022	U	-	-	
Dichlorodifluoromethane					0.012	U	0.011	U	-	-	-	-	0.011	U	-	-	
Acetone	0.05	1000	100	0.05	0.2		0.013		-	-	-	-	0.011	U	-	-	
Carbon disulfide					0.012	U	0.011	U	-	-	-	-	0.011	U	-	-	
2-Butanone	0.12	1000	100	0.12	0.012		0.011		-	-	-	-	0.011	U	-	-	
4-Methyl-2-pentanone					0.012	U	0.011	U	-	-	-	-	0.011	U	-	-	
2-Hexanone					0.012	U	0.011	U	-	-	-	-	0.011	U	-	-	
Bromochloromethane					0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
1,2-Dibromoethane					0.0049	U	0.0045	U	-	-	-	-	0.0045	U	-	-	
n-Butylbenzene	12	1000	100	12					-	-	-	-					
sec-Butylbenzene	11	1000	100	11					-	-	-	-					
tert-Butylbenzene	5.9	1000	100	5.9					-	-	-	-					
1,2-Dibromo-3-chloropropane					0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
Isopropylbenzene					0.0012	U	0.0011	U	-	-	-	-	0.0011	U	-	-	
p-Isopropyltoluene									-	-	-	-					
Naphthalene	12	1000	100	12					-	-	-	-					
n-Propylbenzene	3.9	1000	100	3.9					-	-	-	-					
1,2,3-Trichlorobenzene					0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	
1,2,4-Trichlorobenzene					0.0062	U	0.0056	U	-	-	-	-	0.0056	U	-	-	

Notes:  
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J = Compound found below lab report limit  
E = Estimated  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)		
				Monitoring Well ID	MW-1	MW-1	MW-1			MW-3		
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,3,5-Trimethylbenzene	8.4	380	52	8.4			-		-		-	
1,2,4-Trimethylbenzene	3.6	380	52	3.6			-		-		-	
Methyl Acetate					0.025	U	0.022	U	-		0.022	U
Cyclohexane					0.025	U	0.022	U	-		0.022	U
1,4-Dioxane	0.1	250	13	0.1	0.12	U	0.11	U	-		0.11	U
Freon-113					0.025	U	0.022	U	-		0.022	U
Methyl cyclohexane					0.0049	U	0.0045	U	-		0.0045	U
Total VOCs					0.212	-	0.013	-	-		-	-

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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)		
				Monitoring Well ID	MW-1	MW-1	MW-1			MW-3		
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>												
Pentane, 2-methyl-												
Unknown Alkane												
Unknown Benzene												
Pentane, 2,3,3-trimethyl-												
Unknown Benzene												
Unknown												
Unknown Aromatic												
Unknown Benzene												
Undecane, 2,6-dimethyl-												
Unknown Cycloalkane												
Pentane												
Tridecane, 7-methyl-												
Unknown												
Unknown Benzene												
Unknown												
Dodecane, 2,6,10-trimethyl-												
Unknown Cyclohexane												
Unknown Benzene												
Pentane, 2,3,4-trimethyl-												
Unknown Naphthalene												
Fluorodichloromethane												
Unknown Alkane												
Ethane, 1-chloro-1-fluoro-												
Butane, 2-Methyl-												
n-Hexane												
Unknown Alkane												
Decane, 3,7-dimethyl-												
Unknown Benzene												
Undecane												
Unknown												
Unknown												
Cyclotrisiloxane, Hexamethyl-												
Unknown Alkane												
Unknown Naphthalene												
Dimethyl sulfide												
Unknown												

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
PI = Quality assurance exceedance

**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)		
				Monitoring Well ID	MW-1	MW-1	MW-1			MW-3		
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane									-		-	
Unknown Benzene									-		-	
Unknown Aromatic									-		-	
Unknown									-		-	
Unknown									-		-	
Tridecane									-		-	
Unknown									-		-	
1-Pentene									-		-	
Ethane, 1,1-Difluoro-									-		-	
Unknown Aromatic									-		-	
Unknown Naphthalene									-		-	
Unknown Aromatic									-		-	
Unknown									-		-	
Unknown Cyclohexane					-		-			13	J	
Unknown					-		-			11.6	J	
Unknown					-		-			16.3	J	
Unknown Benzene					-	-	-			-	-	
No Tentatively Identified Compounds					-	<0	U			-	-	
Tridecane, 7-methyl-					-		-			21	NJ	
Unknown Alkane					-		-			10.5	J	
Unknown Aromatic					-		-			-	-	
Pentane, 2,3,4-trimethyl-					-		-			-	-	
Unknown Naphthalene					-		-			-	-	
Dodecane, 2,6,10-trimethyl-					-		-			23.7	NJ	
Unknown Alkane					-		-			-	-	
Unknown					-		-			13.2	J	
Unknown Alkane					-		-			19.8	J	
Unknown					-		-			11.3	J	
Unknown					2.49	J	-			-	-	
Unknown					-		-			17.2	J	
Unknown												
Unknown												
Unknown												
Unknown Naphthalene												
Fluorodichloromethane												
Unknown												
Unknown												
Ethane, 1-chloro-1-fluoro-												
Unknown												
Pentane, 2-methyl-												
Unknown												
Unknown												
Unknown												
Unknown Cyclohexane												
Total TIC Compounds					2.49					157.6		

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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)	
				Monitoring Well ID	MW-1	MW-1	MW-1				MW-3	
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>												
Acenaphthene	98	1000	100	20	0.071	J			0.15	U	0.15	U
Hexachlorobenzene	3.2	12	1.2	0.33	0.12	U			0.11	U	0.11	U
Bis(2-chloroethyl)ether					0.18	U			0.16	U	0.17	U
2-Chloronaphthalene					0.2	U			0.18	U	0.18	U
3,3'-Dichlorobenzidine					0.2	U			0.18	U	0.18	U
2,4-Dinitrotoluene					0.2	U			0.18	U	0.18	U
2,6-Dinitrotoluene					0.2	U			0.18	U	0.18	U
Fluoranthene	1000	1000	100	100	0.95				0.27		0.12	
4-Chlorophenyl phenyl ether					0.2	U			0.18	U	0.18	U
4-Bromophenyl phenyl ether					0.2	U			0.18	U	0.18	U
Bis(2-chloroisopropyl)ether					0.24	U			0.22	U	0.22	U
Bis(2-chloroethoxy)methane					0.22	U			0.2	U	0.2	U
Hexachlorobutadiene					0.2	U			0.18	U	0.18	U
Hexachlorocyclopentadiene					0.58	U			0.52	U	0.53	U
Hexachloroethane					0.16	U			0.15	U	0.15	U
Isophorone					0.18	U			0.16	U	0.17	U
Naphthalene	12	1000	100	12	0.91				0.11	J	0.097	J
Nitrobenzene					0.18	U			0.16	U	0.17	U
NDPA/DPA					0.16	U			0.15	U	0.15	U
n-Nitrosodi-n-propylamine					0.2	U			0.18	U	0.18	U
Bis(2-ethylhexyl)phthalate					0.087	J			0.087	J	0.46	
Butyl benzyl phthalate					0.23				0.18	U	0.18	U
Di-n-butylphthalate					0.2	U			0.18	U	0.22	
Di-n-octylphthalate					0.2	U			0.18	U	0.18	U
Diethyl phthalate					0.2	U			0.18	U	0.18	U
Dimethyl phthalate					0.2	U			0.18	U	0.18	U
Benzo(a)anthracene	1	11	1	1	0.54				0.15		0.099	J
Benzo(a)pyrene	22	1.1	1	1	0.46				0.12	J	0.14	J
Benzo(b)fluoranthene	1.7	11	1	1	0.73				0.21		0.25	
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.22				0.074	J	0.064	J
Chrysene	1	110	3.9	1	0.61				0.17		0.13	
Acenaphthylene	107	1000	100	100	0.13	J			0.15	U	0.1	J
Anthracene	1000	1000	100	100	0.2				0.046	J	0.12	
Benzo(ghi)perylene	1000	1000	100	100	0.26				0.078	J	0.13	J
Fluorene	386	1000	100	30	0.084	J			0.018	J	0.18	U
Phenanthrene	1000	1000	100	100	0.67				0.19		0.11	
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.078	J			0.022	J	0.029	J
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.3				0.082	J	0.16	
Pyrene	1000	1000	100	100	0.88				0.24		0.21	
Biphenyl					0.081	J			0.42	U	0.42	U
4-Chloroaniline					0.2	U			0.18	U	0.18	U
2-Nitroaniline					0.2	U			0.18	U	0.18	U
3-Nitroaniline					0.2	U			0.18	U	0.18	U
4-Nitroaniline					0.2	U			0.18	U	0.18	U
Dibenzofuran	210	1000	59	7	0.25				0.046	J	0.18	U
2-Methylnaphthalene					0.97				0.093	J	0.15	J
1,2,4,5-Tetrachlorobenzene					0.2	U			0.18	U	0.18	U
Acetophenone					0.14	J			0.18	U	0.18	U

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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-6 (6-8)		SB-6 (18-20)		SB-6 (18-20)		SB-7 (0-2)		SB-7 (0-2)		SB-8 (0-2)	
				Monitoring Well ID	MW-1		MW-1		MW-1						MW-3	
				LAB ID:	L1701867-08		L1701867-16		L1641701-12		L1641701-13		L1701867-17		L1641701-14	
				COLLECTION DATE:	1/18/2017		1/18/2017		12/20/2016		12/20/2016		1/18/2017		12/20/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					0.12	U			0.11	U	0.11	U			0.11	U
p-Chloro-m-cresol					0.2	U			0.18	U	0.18	U			0.18	U
2-Chlorophenol					0.2	U			0.18	U	0.18	U			0.18	U
2,4-Dichlorophenol					0.18	U			0.16	U	0.17	U			0.16	U
2,4-Dimethylphenol					0.2	U			0.18	U	0.18	U			0.18	U
2-Nitrophenol					0.44	U			0.4	U	0.4	U			0.4	U
4-Nitrophenol					0.28	U			0.26	U	0.26	U			0.26	U
2,4-Dinitrophenol					0.97	U			0.88	U	0.89	U			0.88	U
4,6-Dinitro-o-cresol					0.53	U			0.48	U	0.48	U			0.48	U
Pentachlorophenol	0.8	55	6.7	0.8	0.16	U			0.15	U	0.15	U			0.15	U
Phenol	0.33	1000	100	0.33	0.069	J			0.18	U	0.18	U			0.18	U
2-Methylphenol	0.33	1000	100	0.33	0.032	J			0.18	U	0.18	U			0.18	U
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.045	J			0.26	U	0.27	U			0.16	J
2,4,5-Trichlorophenol					0.2	U			0.18	U	0.18	U			0.18	U
Carbazole					0.1	J			0.021	J	0.18	U			0.26	
Atrazine					0.16	U			0.15	U	0.15	U			0.15	U
Benzaldehyde					0.27	U			0.24	U	0.24	U			0.24	U
Caprolactam					0.2	U			0.18	U	0.18	U			0.18	U
2,3,4,6-Tetrachlorophenol					0.2	U			0.18	U	0.18	U			0.18	U
Total SVOCs					9.097	-			2.027	-	2.589	-			29.227	-

Notes:  
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				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)		
				Monitoring Well ID	MW-1	MW-1	MW-1			MW-3		
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>												
Unknown Biphenyl												
Unknown Benzene												
Unknown												
Unknown PAH											1.54	J
Vitamin E												
Unknown Benzene												
Unknown PAH												
Unknown PAH												
Unknown PAH												
Unknown PAH												
Unknown Biphenyl												
Unknown Organic Acid												
Unknown Alkane								4.64	J			
Unknown Alkane												
Unknown Benzene												
Unknown Naphthalene												
Unknown Benzene												
Unknown Biphenyl												
Cyclic Octaatomic Sulfur												
Unknown Naphthalene												
Unknown Biphenyl												
Unknown Benzene												
Unknown Alcohol												
Unknown PAH												
Unknown Biphenyl												
Unknown Alkane								1.18	J			
Unknown Alkane								1.54	J			
Unknown												
Unknown Alkane								0.933	J			
Unknown PAH												
Unknown Biphenyl												
Unknown Organic Acid												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown PAH												
Unknown Benzene												
Unknown Phenol												
Unknown Alkane								0.902	J			
Unknown Naphthalene												
Unknown PAH												
Unknown												
Unknown Benzene												
Unknown												
Sulfur												
Unknown Thiophene												
Unknown Biphenyl												
Unknown Thiophene												

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				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)		
				Monitoring Well ID	MW-1	MW-1	MW-1			MW-3		
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene									-	-	-	-
Unknown Sulfur									-	-	-	-
Unknown PAH									-	-	-	-
Unknown Phenol									-	-	-	-
Unknown Biphenyl									-	-	-	-
Unknown Alkane									-	1.63	J	-
Unknown Phosphate									-	-	-	-
Unknown Biphenyl									-	-	-	-
Unknown Biphenyl									-	-	-	-
Unknown Organic Acid									-	-	-	-
Unknown Benzene									-	-	-	-
2,2',3,3',4,5',6-Heptachlor...									-	-	-	-
Unknown PAH									-	-	-	-
Unknown Alkane									-	0.555	J	-
Unknown									-	0.564	J	-
Unknown Benzene									-	-	0.15	J
Unknown PAH									-	-	0.222	J
Unknown Alkane									-	0.655	J	0.247
Unknown Alkane									-	1.99	J	-
Unknown									-	1.05	J	-
Unknown									-	0.577	J	0.355
Unknown Alkane									-	0.569	J	0.261
Unknown Benzene									-	-	-	-
Unknown									-	0.521	J	-
Unknown Benzene									-	-	-	-
Unknown Biphenyl									-	-	-	-
Unknown Biphenyl									-	-	-	-
Unknown Phenol									-	-	2.16	J

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				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)	
				Monitoring Well ID	MW-1	MW-1	MW-1	MW-1			MW-3	
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown									-	J	1.1	
Unknown PAH									-		-	
Unknown Naphthalene									-		-	
Unknown									-	J	0.595	
Unknown PAH									-		-	0.371 J
Unknown Organic Acid									-		-	
Unknown									-	J	0.505	
Unknown									0.392	J	-	
Unknown									-	J	0.81	0.28 J
Unknown Alkane									-	J	1.32	
Unknown Naphthalene									-		-	
Unknown Naphthalene									-		-	
Unknown Alkane									-	J	0.588	0.63 J
Unknown Alkane					591	J						
Unknown					175	J						
Unknown Alkane					-	-						
Unknown Alkane					-	-						
Sulfur					-	-						
Unknown PAH					255	J						
Unknown Naphthalene					478	J						
Unknown Naphthalene					345	J						
Unknown Naphthalene					174	J						
Unknown Alkane					200	J						
Cyclic Octaatomic Sulfur					-	-						
Unknown Benzene					-	-						
Unknown Alkane					-	-						
Unknown Naphthalene					307	J						
Unknown Benzene					-	-						
Unknown Naphthalene					319	J						
Unknown Naphthalene					762	J						
Unknown Benzene					371	J						
Unknown Alkane					199	J						
Unknown					250	J						
Unknown PAH					241	J						
Unknown Alkane					171	J						
Unknown Benzene					602	J						
Unknown Naphthalene					334	J						
Unknown					421	J						
Unknown					-	-						
Unknown					206	J						
Unknown Alkane												
Unknown Alkane												
Unknown												
Unknown Benzene												
Unknown Alkane												
No Tentatively Identified Compounds												
Unknown PAH												
Unknown Alkane												

Notes:  
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				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)				
				Monitoring Well ID	MW-1	MW-1	MW-1			MW-3				
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14				
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane														
Unknown Naphthalene														
Unknown														
Unknown														
Unknown Alkane														
Unknown														
Sulfur														
Unknown Alkane														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown Naphthalene														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown														
Unknown														
Unknown														
Unknown Alkane														
Unknown Naphthalene														
Unknown Naphthalene														
Cyclic Octaatomic Sulfur														
Unknown Alkane														
Total SVOCs TICs					6401	-		0.392		22.224			6.216	

Notes:  
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				SAMPLE ID (Depth ft.)	SB-6 (6-8)	SB-6 (18-20)	SB-6 (18-20)	SB-6 (18-20)	SB-7 (0-2)	SB-7 (0-2)	SB-8 (0-2)	
				Monitoring Well ID	MW-1	MW-1	MW-1	MW-1			MW-3	
				LAB ID:	L1701867-08	L1701867-16	L1641701-12	L1641701-13	L1701867-17	L1641701-14		
				COLLECTION DATE:	1/18/2017	1/18/2017	12/20/2016	12/20/2016	1/18/2017	12/20/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>CHLORINATED HERBICIDES BY GC</b>												
MCPP					4.06	U			-		-	
MCPA					4.06	U			-		-	
Dalapon					0.0406	U			-		-	
Dicamba					0.0406	U			-		-	
Dichloroprop					0.0406	U			-		-	
2,4-DB					0.203	U			-		-	
Dinoseb					0.203	U			-		-	
2,4-D					0.203	U		0.185	U	0.188	U	0.187
2,4,5-T					0.203	U		0.185	U	0.188	U	0.187
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.0406	U		0.185	U	0.188	U	0.187
<b>ORGANOCHLORINE PESTICIDES BY GC</b>												
Delta-BHC	0.25	1000	100	0.04	0.00196	U		0.00173	U	0.00172	U	0.00173
Lindane	0.1	23	1.3	0.1	0.000819	U		0.000721	U	0.000716	U	0.00072
Alpha-BHC	0.02	6.8	0.48	0.02	0.000819	U		0.000721	U	0.000716	U	0.00072
Beta-BHC	0.09	14	0.36	0.036	0.00196	U		0.00173	U	0.00172	U	0.00173
Heptachlor	0.38	29	2.1	0.042	0.000983	U		0.000865	U	0.000859	U	0.000863
Aldrin	0.19	1.4	0.097	0.005	0.00196	U		0.00173	U	0.00172	U	0.00569
Heptachlor epoxide					0.00368	U		0.00324	U	0.00322	U	0.00324
Endrin	0.06	410	11	0.014	0.000819	U		0.000721	U	0.000716	U	0.00072
Endrin aldehyde					0.00246	U		0.00216	U	0.00215	U	0.00216
Endrin ketone					0.00196	U		0.00173	U	0.00172	U	0.00173
Dieldrin	0.1	2.8	0.2	0.005	0.012	P		0.00108	U	0.00107	U	0.00741
4,4'-DDE	17	120	8.9	0.0033	0.00196	U		0.00173	U	0.00172	U	0.00173
4,4'-DDD	14	180	13	0.0033	0.00196	U		0.00173	U	0.00172	U	0.00525
4,4'-DDT	136	94	7.9	0.0033	0.00974	PI		0.00324	U	0.00322	U	0.00913
Endosulfan I	102	920	24	2.4	0.00196	U		0.00173	U	0.00172	U	0.00173
Endosulfan II	102	920	24	2.4	0.00196	JPI		0.00173	U	0.00172	U	0.00303
Endosulfan sulfate	1000	920	24	2.4	0.000819	U		0.000721	U	0.000716	U	0.00072
Methoxychlor					0.00368	U		0.00324	U	0.00322	U	0.00324
Toxaphene					0.0368	U		0.0324	U	0.0322	U	0.0324
cis-Chlordane	2.9	47	4.2	0.094	0.00246	U		0.00216	U	0.00215	U	0.00216
trans-Chlordane					0.00091	JPI		0.00216	U	0.00215	U	0.00216
Chlordane					0.016	U		0.014	U	0.014	U	0.014
<b>POLYCHLORINATED BIPHENYLS BY GC</b>												
Aroclor 1016	3.2	25	1	0.1	0.0404	U		0.0359	U	0.0371	U	0.037
Aroclor 1221	3.2	25	1	0.1	0.0404	U		0.0359	U	0.0371	U	0.037
Aroclor 1232	3.2	25	1	0.1	0.0404	U		0.0359	U	0.0371	U	0.037
Aroclor 1242	3.2	25	1	0.1	0.0557	U		0.119	U	0.0894	U	0.222
Aroclor 1248	3.2	25	1	0.1	0.0404	U		0.0359	U	0.0371	U	0.037
Aroclor 1254	3.2	25	1	0.1	0.196	U		0.0955	U	0.097	U	0.432
Aroclor 1260	3.2	25	1	0.1	0.161	U		0.038	U	0.0641	U	0.25
Aroclor 1262	3.2	25	1	0.1	0.0404	U		0.0359	U	0.0371	U	0.037
Aroclor 1268	3.2	25	1	0.1	0.0404	U		0.0359	U	0.0371	U	0.037
PCBs, Total	3.2	25	1	0.1	0.413	U		0.253	U	0.251	U	0.904

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-6 (6-8)		SB-6 (18-20)		SB-6 (18-20)		SB-7 (0-2)		SB-7 (0-2)		SB-8 (0-2)	
				Monitoring Well ID	MW-1		MW-1		MW-1						MW-3	
				LAB ID:	L1701867-08		L1701867-16		L1641701-12		L1641701-13		L1701867-17		L1641701-14	
				COLLECTION DATE:	1/18/2017		1/18/2017		12/20/2016		12/20/2016		1/18/2017		12/20/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>																
Aluminum, Total					12000				9000		6200				7800	
Antimony, Total					4.8	U			4.4	U	4.5	U			4.4	U
Arsenic, Total	16	16	16	13	4				5.4		5.4				9.2	
Barium, Total	820	10000	400	350	66				49		79				93	
Beryllium, Total	47	2700	72	7.2	0.43	J			0.45		0.26	J			0.36	J
Cadmium, Total	7.5	60	4.3	2.5	0.96	U			0.89	U	0.85	J			1.8	
Calcium, Total					1100				1500		6900				19000	
Chromium, Total					16				11		25				70	
Cobalt, Total					11				7.6		7.5				9.7	
Copper, Total	1720	10000	270	50	27				48		110				890	
Iron, Total					22000				19000		28000				42000	
Lead, Total	450	3900	400	63	39				62		130				2000	
Magnesium, Total					3300				2500		2400				4300	
Manganese, Total	2000	10000	2000	1600	270				210		320				550	
Mercury, Total	0.73	5.7	0.81	0.18	0.17				0.14		0.31				0.54	
Nickel, Total	130	10000	310	30	23				14		27				66	
Potassium, Total					470				330		400				480	
Selenium, Total	4	6800	180	3.9	1.9	U			1.8	U	1.8	U			1.8	U
Silver, Total	8.3	6800	180	2	0.96	U			0.89	U	0.91	U			0.34	J
Sodium, Total					130	J			58	J	100	J			200	
Thallium, Total					1.9	U			1.8	U	1.8	U			0.29	J
Vanadium, Total					20				18		20				20	
Zinc, Total	2480	10000	10000	109	77				60		220				480	
<b>GENERAL CHEMISTRY</b>																
Solids, Total					81.2		89.6		88.8		88		88.8		88.3	
Cyanide, Total	40	10000	27	27	0.24	J	-	-	1.1	U	1.1	U	-	-	1.1	U

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

ANALYTE	SAMPLE ID (Depth ft.)				SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)												
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	0.05	1000	100	0.05	0.011	U	-	0.011	U	0.012	U	-	0.023	U		
1,1-Dichloroethane	0.27	480	26	0.27	0.0017	U	-	0.0016	U	0.0017	U	-	0.0034	U		
Chloroform	0.37	700	49	0.37	0.0017	U	-	0.0016	U	0.0017	U	-	0.0034	U		
Carbon tetrachloride	0.76	44	2.4	0.76	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
1,2-Dichloropropane					0.0039	U	-	0.0038	U	0.0041	U	-	0.008	U		
Dibromochloromethane					0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
1,1,2-Trichloroethane					0.0017	U	-	0.0016	U	0.0017	U	-	0.0034	U		
Tetrachloroethene	1.3	300	19	1.3	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
Chlorobenzene	1.1	1000	100	1.1	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
Trichlorofluoromethane					0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
Bromodichloromethane					0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
trans-1,3-Dichloropropene					0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
cis-1,3-Dichloropropene					0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
1,3-Dichloropropene, Total																
Bromoform					0.0045	U	-	0.0044	U	0.0046	U	-	0.0091	U		
1,1,2,2-Tetrachloroethane					0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
Benzene	0.06	89	4.8	0.06	0.00015	J	-	0.0011	U	0.0012	U	-	0.00054	J		
Toluene	0.7	1000	100	0.7	0.0017	U	-	0.0016	U	0.0017	U	-	0.00048	J		
Ethylbenzene	1	780	41	1	0.0011	U	-	0.0011	U	0.0012	U	-	0.00047	J		
Chloromethane					0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
Bromomethane					0.0022	U	-	0.0022	U	0.0023	U	-	0.0046	U		
Vinyl chloride	0.02	27	0.9	0.02	0.0022	U	-	0.0022	U	0.0023	U	-	0.0046	U		
Chloroethane					0.0022	U	-	0.0022	U	0.0023	U	-	0.0046	U		
1,1-Dichloroethene	0.33	1000	100	0.33	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0017	U	-	0.0016	U	0.0017	U	-	0.0034	U		
Trichloroethene	0.47	400	21	0.47	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
1,3-Dichlorobenzene	2.4	560	49	2.4	0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
1,4-Dichlorobenzene	1.8	250	13	1.8	0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
Methyl tert butyl ether	0.93	1000	100	0.93	0.0022	U	-	0.0022	U	0.0023	U	-	0.0046	U		
p/m-Xylene					0.0022	U	-	0.0022	U	0.0023	U	-	0.00095	J		
o-Xylene					0.0022	U	-	0.0022	U	0.0023	U	-	0.0046	U		
Xylenes, Total	1.6	1000	100	0.26												
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
1,2-Dichloroethene, Total																
Styrene					0.0022	U	-	0.0022	U	0.0023	U	-	0.0046	U		
Dichlorodifluoromethane					0.011	U	-	0.011	U	0.012	U	-	0.023	U		
Acetone	0.05	1000	100	0.05	0.076			0.0055	J	0.02			0.25			
Carbon disulfide					0.011	U	-	0.011	U	0.012	U	-	0.0035	J		
2-Butanone	0.12	1000	100	0.12	0.011	U	-	0.011	U	0.012	U	-	0.029			
4-Methyl-2-pentanone					0.011	U	-	0.011	U	0.012	U	-	0.023	U		
2-Hexanone					0.011	U	-	0.011	U	0.012	U	-	0.023	U		
Bromochloromethane					0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
1,2-Dibromoethane					0.0045	U	-	0.0044	U	0.0046	U	-	0.0091	U		
n-Butylbenzene	12	1000	100	12												
sec-Butylbenzene	11	1000	100	11												
tert-Butylbenzene	5.9	1000	100	5.9												
1,2-Dibromo-3-chloropropane					0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
Isopropylbenzene					0.0011	U	-	0.0011	U	0.0012	U	-	0.0023	U		
p-Isopropyltoluene																
Naphthalene	12	1000	100	12												
n-Propylbenzene	3.9	1000	100	3.9												
1,2,3-Trichlorobenzene					0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		
1,2,4-Trichlorobenzene					0.0056	U	-	0.0054	U	0.0058	U	-	0.011	U		

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)		SB-8 (0-2)	SB-8 (6-8)	SB-8 (6-8)	SB-8 (14-16)	SB-8 (16-20)	SB-9 (0-2)						
		Monitoring Well ID		MW-3	MW-3	MW-3	MW-3	MW-3							
		LAB ID:		L1701867-18	L1641701-15	L1701867-19	L1701867-20	L1641701-16	L1642026-03						
		COLLECTION DATE:		1/18/2017	12/20/2016	1/18/2017	1/18/2017	12/20/2016	12/21/2016						
Groundwater Protection Soil Cleanup Objective		IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
1,3,5-Trimethylbenzene	8.4	380	52	8.4			-				-		-		
1,2,4-Trimethylbenzene	3.6	380	52	3.6											
Methyl Acetate					0.022	U	-		0.022	U	0.023	U	-	0.046	U
Cyclohexane					0.022	U	-		0.022	U	0.023	U	-	0.046	U
1,4-Dioxane	0.1	250	13	0.1			-		0.11	U	0.12	U	-	0.23	U
Freon-113					0.022	U	-		0.022	U	0.023	U	-	0.046	U
Methyl cyclohexane					0.0045	U	-		0.0044	U	0.0046	U	-	0.0053	J
Total VOCs					0.07615	-	-	-	0.0055	-	0.02	-	-	0.28547	-

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**Subsurface Soil Sample Results from Soil Borings**  
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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Pentane, 2-methyl-							-						-			-
Unknown Alkane							-						-			-
Unknown Benzene							-						-			-
Pentane, 2,3,3-trimethyl-							-						-			-
Unknown Benzene							-						-			-
Unknown							-						-			-
Unknown Aromatic							-						-			-
Unknown Benzene							-						-			-
Undecane, 2,6-dimethyl-							-						-			-
Unknown Cycloalkane							-						-			-
Pentane							-						-			-
Tridecane, 7-methyl-							-						-			-
Unknown							-						-			-
Unknown Benzene							-						-			-
Unknown							-						-			-
Dodecane, 2,6,10-trimethyl-							-						-			-
Unknown Cyclohexane							-						-			-
Unknown Benzene							-						-			-
Pentane, 2,3,4-trimethyl-							-						-			-
Unknown Naphthalene							-						-			-
Fluorodichloromethane							-						-			-
Unknown Alkane							-						-			-
Ethane, 1-chloro-1-fluoro-							-						-			-
Butane, 2-Methyl-							-						-			-
n-Hexane							-						-			-
Unknown Alkane							-						-			-
Decane, 3,7-dimethyl-							-						-			-
Unknown Benzene							-						-			-
Undecane							-						-			-
Unknown							-						-			-
Unknown							-						-		0.102	J
Cyclotrisiloxane, Hexamethyl-							-						-			-
Unknown Alkane							-						-			-
Unknown Naphthalene							-						-			-
Dimethyl sulfide							-						-			-
Unknown							-						-		0.00518	J

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**Subsurface Soil Sample Results from Soil Borings**  
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				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane							-						-		-	
Unknown Benzene							-						-		-	
Unknown Aromatic							-						-		-	
Unknown							-						-		0.00499	J
Unknown							-						-		0.0217	J
Tridecane							-						-		-	
Unknown							-						-		0.0062	J
1-Pentene							-						-		-	
Ethane, 1,1-Difluoro-							-						-		-	
Unknown Aromatic							-						-		-	
Unknown Naphthalene							-						-		-	
Unknown Aromatic							-						-		-	
Unknown							-						-		0.00908	J
Unknown Cyclohexane							-						-		-	
Unknown							-						-		-	
Unknown							-						2.42	J	-	
Unknown Benzene							-						-		-	
No Tentatively Identified Compounds							<0	U					<0	U	-	
Tridecane, 7-methyl-							-						-		-	
Unknown Alkane							-						-		-	
Unknown Aromatic							-						-		-	
Pentane, 2,3,4-trimethyl-							-						-		-	
Unknown Naphthalene							-						-		-	
Dodecane, 2,6,10-trimethyl-							-						-		-	
Unknown Alkane							-						-		-	
Unknown							-						2.43	J	-	
Unknown Alkane							-						-		-	
Unknown							-						-		-	
Unknown							-						-		-	
Unknown							-						2.67	J	-	
Unknown							-						-		-	
Unknown							-						-		-	
Unknown Naphthalene							-						-		-	
Fluorodichloromethane							-						-		-	
Unknown							-						-		-	
Unknown							-						-		-	
Ethane, 1-chloro-1-fluoro-							-						-		-	
Unknown							-						-		-	
Pentane, 2-methyl-							-						-		-	
Unknown							-						-		-	
Unknown							-						-		-	
Unknown							-						-		-	
Unknown Cyclohexane							-						-		-	
Total TIC Compounds													7.52		0.14915	

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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E= Estimated  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-8 (0-2)	SB-8 (6-8)	SB-8 (6-8)	SB-8 (14-16)	SB-8 (16-20)	SB-9 (0-2)					
				Monitoring Well ID	MW-3	MW-3	MW-3	MW-3	MW-3						
				LAB ID:	L1701867-18	L1641701-15	L1701867-19	L1701867-20	L1641701-16	L1642026-03					
				COLLECTION DATE:	1/18/2017	12/20/2016	1/18/2017	1/18/2017	12/20/2016	12/21/2016					
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>															
Acenaphthene	98	1000	100	20			0.14	U			0.16	U	0.15	U	
Hexachlorobenzene	3.2	12	1.2	0.33			0.11	U			0.12	U	0.11	U	
Bis(2-chloroethyl)ether							0.16	U			0.18	U	0.17	U	
2-Chloronaphthalene							0.18	U			0.2	U	0.18	U	
3,3'-Dichlorobenzidine							0.18	U			0.2	U	0.18	U	
2,4-Dinitrotoluene							0.18	U			0.2	U	0.18	U	
2,6-Dinitrotoluene							0.18	U			0.2	U	0.18	U	
Fluoranthene	1000	1000	100	100			0.11	U			0.12	U	0.12	U	
4-Chlorophenyl phenyl ether							0.18	U			0.2	U	0.18	U	
4-Bromophenyl phenyl ether							0.18	U			0.2	U	0.18	U	
Bis(2-chloroisopropyl)ether							0.21	U			0.24	U	0.22	U	
Bis(2-chloroethoxy)methane							0.19	U			0.21	U	0.2	U	
Hexachlorobutadiene							0.18	U			0.2	U	0.18	U	
Hexachlorocyclopentadiene							0.51	U			0.56	U	0.53	U	
Hexachloroethane							0.14	U			0.16	U	0.15	U	
Isophorone							0.16	U			0.18	U	0.17	U	
Naphthalene	12	1000	100	12			0.18	U			0.2	U	0.087	J	
Nitrobenzene							0.16	U			0.18	U	0.17	U	
NDPA/DPA							0.14	U			0.16	U	0.15	U	
n-Nitrosodi-n-propylamine							0.18	U			0.2	U	0.18	U	
Bis(2-ethylhexyl)phthalate							0.18	U			0.2	U	0.58		
Butyl benzyl phthalate							0.18	U			0.2	U	0.18	U	
Di-n-butylphthalate							0.18	U			0.2	U	0.18	U	
Di-n-octylphthalate							0.18	U			0.2	U	0.18	U	
Diethyl phthalate							0.18	U			0.2	U	0.18	U	
Dimethyl phthalate							0.18	U			0.2	U	0.18	U	
Benzo(a)anthracene	1	11	1	1			0.11	U			0.12	U	0.086	J	
Benzo(a)pyrene	22	1.1	1	1			0.14	U			0.16	U	0.11	J	
Benzo(b)fluoranthene	1.7	11	1	1			0.11	U			0.12	U	0.15		
Benzo(k)fluoranthene	1.7	110	3.9	0.8			0.11	U			0.12	U	0.051	J	
Chrysene	1	110	3.9	1			0.11	U			0.12	U	0.1	J	
Acenaphthylene	107	1000	100	100			0.14	U			0.16	U	0.058	J	
Anthracene	1000	1000	100	100			0.11	U			0.12	U	0.11	U	
Benzo(ghi)perylene	1000	1000	100	100			0.14	U			0.16	U	0.078	J	
Fluorene	386	1000	100	30			0.18	U			0.2	U	0.18	U	
Phenanthrene	1000	1000	100	100			0.11	U			0.12	U	0.089	J	
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33			0.11	U			0.12	U	0.024	J	
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5			0.14	U			0.16	U	0.08	J	
Pyrene	1000	1000	100	100			0.11	U			0.12	U	0.18		
Biphenyl							0.4	U			0.45	U	0.42	U	
4-Chloroaniline							0.18	U			0.2	U	0.18	U	
2-Nitroaniline							0.18	U			0.2	U	0.18	U	
3-Nitroaniline							0.18	U			0.2	U	0.18	U	
4-Nitroaniline							0.18	U			0.2	U	0.18	U	
Dibenzofuran	210	1000	59	7			0.18	U			0.2	U	0.019	J	
2-Methylnaphthalene							0.21	U			0.24	U	0.082	J	
1,2,4,5-Tetrachlorobenzene							0.18	U			0.2	U	0.18	U	
Acetophenone							0.18	U			0.2	U	0.18	U	

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol							0.11	U					0.12	U	0.11	U
p-Chloro-m-cresol							0.18	U					0.2	U	0.18	U
2-Chlorophenol							0.18	U					0.2	U	0.18	U
2,4-Dichlorophenol							0.16	U					0.18	U	0.17	U
2,4-Dimethylphenol							0.18	U					0.2	U	0.18	U
2-Nitrophenol							0.38	U					0.42	U	0.4	U
4-Nitrophenol							0.25	U					0.28	U	0.26	U
2,4-Dinitrophenol							0.85	U					0.94	U	0.89	U
4,6-Dinitro-o-cresol							0.46	U					0.51	U	0.48	U
Pentachlorophenol	0.8	55	6.7	0.8			0.14	U					0.16	U	0.15	U
Phenol	0.33	1000	100	0.33			0.18	U					0.2	U	0.18	U
2-Methylphenol	0.33	1000	100	0.33			0.18	U					0.2	U	0.18	U
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33			0.25	U					0.28	U	0.27	U
2,4,5-Trichlorophenol							0.18	U					0.2	U	0.18	U
Carbazole							0.18	U					0.2	U	0.18	U
Atrazine							0.14	U					0.16	U	0.15	U
Benzaldehyde							0.23	U					0.26	U	0.24	U
Caprolactam							0.18	U					0.2	U	0.18	U
2,3,4,6-Tetrachlorophenol							0.18	U					0.2	U	0.18	U
Total SVOCs							-	-					-	-	1.894	-

Notes:  
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				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl							-						-		-	
Unknown Benzene							-	-					-	-	-	-
Unknown							-						-		-	
Unknown PAH							-						-		-	
Vitamin E							-						-		-	
Unknown Benzene							-						-		-	
Unknown PAH							-						-		-	
Unknown PAH							-						-		-	
Unknown PAH							-						-		-	
Unknown PAH							-						-		-	
Unknown Biphenyl							-						-		-	
Unknown Organic Acid							-						-		-	
Unknown Alkane							-	-					-	-	-	-
Unknown Alkane							-						-		0.667	J
Unknown Benzene							-	-					-	-	-	-
Unknown Naphthalene							-						-		-	
Unknown Benzene							-	-					-	-	-	-
Unknown Biphenyl							-						-		-	
Cyclic Octaatomic Sulfur							-						-		-	
Unknown Naphthalene							-						-		-	
Unknown Biphenyl							-						-		-	
Unknown Benzene							-						-		-	
Unknown Alcohol							-						-		-	
Unknown PAH							-						-		-	
Unknown Biphenyl							-						-		-	
Unknown Alkane							-	-					-	-	-	-
Unknown Alkane							-						-		-	-
Unknown							-						-		-	
Unknown Alkane							-						-		-	
Unknown PAH							-						-		-	
Unknown Biphenyl							-						-		-	
Unknown Organic Acid							-						-		-	
Unknown Naphthalene							-						-		-	
Unknown Naphthalene							-						-		-	
Unknown PAH							-						-		-	
Unknown Benzene							-	-					-	-	-	-
Unknown Phenol							-						-		-	
Unknown Alkane							-	-					-	-	-	-
Unknown Naphthalene							-						-		-	
Unknown PAH							-						-		-	
Unknown							-						-		-	
Unknown Benzene							-	-					-	-	-	-
Unknown							-						-		-	
Sulfur							-						-		-	
Unknown Thiophene							-						-		-	
Unknown Biphenyl							-						-		-	
Unknown Thiophene							-						-		-	

Notes:  
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				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene							-	-					-	-	-	-
Unknown Sulfur							-	-					-	-	-	-
Unknown PAH							-	-					-	-	-	-
Unknown Phenol							-	-					-	-	-	-
Unknown Biphenyl							-	-					-	-	-	-
Unknown Alkane							-	-					-	-	-	-
Unknown Phosphate							-	-					-	-	-	-
Unknown Biphenyl							-	-					-	-	-	-
Unknown Biphenyl							-	-					-	-	-	-
Unknown Organic Acid							-	-					-	-	-	-
Unknown Benzene							-	-					-	-	-	-
2,2',3,3',4,5',6-Heptachlor...							-	-					-	-	-	-
Unknown PAH							-	-					-	-	-	-
Unknown Alkane							-	-					-	-	-	-
Unknown							-	-					-	-	-	-
Unknown Benzene							-	-					-	-	0.153	J
Unknown PAH							-	-					-	-	-	-
Unknown Alkane							-	-					-	-	-	-
Unknown Alkane							-	-					-	-	-	-
Unknown							-	-					-	-	-	-
Unknown							-	-					-	-	0.317	J
Unknown Alkane							-	-					-	-	-	-
Unknown Benzene							-	-					-	-	-	-
Unknown							-	-					-	-	0.171	J
Unknown Benzene							-	-					-	-	-	-
Unknown Biphenyl							-	-					-	-	-	-
Unknown Biphenyl							-	-					-	-	-	-
Unknown Phenol							-	-					-	-	-	-

Notes:  
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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown							-						-		-	
Unknown PAH							-						-		-	
Unknown Naphthalene							-						-		-	
Unknown							-						-		-	
Unknown PAH							-						-		-	
Unknown Organic Acid							-						-		-	
Unknown							-						-		-	
Unknown							-						-		-	
Unknown							-						-		0.178	J
Unknown Alkane							-						-		-	
Unknown Naphthalene							-						-		-	
Unknown Naphthalene							-						-		-	
Unknown Alkane							-						-		-	
Unknown Alkane							-						-		-	
Unknown																
Unknown Alkane																
Unknown Alkane																
Sulfur																
Unknown PAH																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Alkane																
Cyclic Octaatomic Sulfur																
Unknown Benzene																
Unknown Alkane																
Unknown Naphthalene																
Unknown Benzene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Benzene																
Unknown Alkane																
No Tentatively Identified Compounds																
Unknown PAH																
Unknown Alkane																

Notes:  
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				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	
Unknown Alkane																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown Alkane																
Unknown																
Sulfur																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown Naphthalene																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Naphthalene																
Unknown Naphthalene																
Cyclic Octaatomic Sulfur																
Unknown Alkane																
Total SVOCs TICs															1.486	

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				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>CHLORINATED HERBICIDES BY GC</b>																
MCPP							-						-		3.7	U
MCPA							-						-		3.7	U
Dalapon							-						-		0.037	U
Dicamba							-						-		0.037	U
Dichloroprop							-						-		0.037	U
2,4-DB							-						-		0.185	U
Dinoseb							-						-		0.037	U
2,4-D							0.179	U					0.202	U	0.185	U
2,4,5-T							0.179	U					0.202	U	0.185	U
2,4,5-TP (Silvex)	3.8	1000	100	3.8			0.179	U					0.202	U	0.185	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																
Delta-BHC	0.25	1000	100	0.04			0.00173	U					0.00186	U	0.00177	U
Lindane	0.1	23	1.3	0.1			0.000721	U					0.000776	U	0.000736	U
Alpha-BHC	0.02	6.8	0.48	0.02			0.000721	U					0.000776	U	0.000736	U
Beta-BHC	0.09	14	0.36	0.036			0.00173	U					0.00186	U	0.00177	U
Heptachlor	0.38	29	2.1	0.042			0.000521	J					0.000931	U	0.000884	U
Aldrin	0.19	1.4	0.097	0.005			0.00173	U					0.00186	U	0.00177	U
Heptachlor epoxide							0.00324	U					0.00349	U	0.00331	U
Endrin	0.06	410	11	0.014			0.000721	U					0.000776	U	0.000736	U
Endrin aldehyde							0.00216	U					0.00233	U	0.00221	U
Endrin ketone							0.00173	U					0.00186	U	0.00177	U
Dieldrin	0.1	2.8	0.2	0.005			0.00108	U					0.00116	U	0.0172	
4,4'-DDE	17	120	8.9	0.0033			0.00173	U					0.00186	U	0.00177	U
4,4'-DDD	14	180	13	0.0033			0.00173	U					0.00186	U	0.00177	U
4,4'-DDT	136	94	7.9	0.0033			0.00324	U					0.00349	U	0.00331	U
Endosulfan I	102	920	24	2.4			0.00173	U					0.00186	U	0.00177	U
Endosulfan II	102	920	24	2.4			0.00173	U					0.00186	U	0.00177	U
Endosulfan sulfate	1000	920	24	2.4			0.000721	U					0.000776	U	0.000736	U
Methoxychlor							0.00324	U					0.00349	U	0.00331	U
Toxaphene							0.0324	U					0.0349	U	0.0331	U
cis-Chlordane	2.9	47	4.2	0.094			0.00216	U					0.00233	U	0.00221	U
trans-Chlordane							0.00216	U					0.00233	U	0.00221	U
Chlordane							0.014	U					0.0151	U	0.0144	U
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																
Aroclor 1016	3.2	25	1	0.1			0.0354	U					0.0385	U	0.0373	U
Aroclor 1221	3.2	25	1	0.1			0.0354	U					0.0385	U	0.0373	U
Aroclor 1232	3.2	25	1	0.1			0.0354	U					0.0385	U	0.0373	U
Aroclor 1242	3.2	25	1	0.1			0.0354	U					0.0385	U	0.0497	PI
Aroclor 1248	3.2	25	1	0.1			0.0354	U					0.0385	U	0.0373	U
Aroclor 1254	3.2	25	1	0.1			0.0354	U					0.0385	U	0.197	P
Aroclor 1260	3.2	25	1	0.1			0.0354	U					0.0385	U	0.422	
Aroclor 1262	3.2	25	1	0.1			0.0354	U					0.0385	U	0.0373	U
Aroclor 1268	3.2	25	1	0.1			0.0354	U					0.0385	U	0.0373	U
PCBs, Total	3.2	25	1	0.1			0.0354	U					0.0385	U	0.669	

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-8 (0-2)		SB-8 (6-8)		SB-8 (6-8)		SB-8 (14-16)		SB-8 (16-20)		SB-9 (0-2)	
				Monitoring Well ID	MW-3		MW-3		MW-3		MW-3		MW-3			
				LAB ID:	L1701867-18		L1641701-15		L1701867-19		L1701867-20		L1641701-16		L1642026-03	
				COLLECTION DATE:	1/18/2017		12/20/2016		1/18/2017		1/18/2017		12/20/2016		12/21/2016	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	
<b>TOTAL METALS</b>																
Aluminum, Total							8400						9000		8600	
Antimony, Total							4.4	U					4.7	U	11	
Arsenic, Total	16	16	16	13			4.6						3.5		9.4	
Barium, Total	820	10000	400	350			37						87		92	
Beryllium, Total	47	2700	72	7.2			0.33	J					0.31	J	0.35	
Cadmium, Total	7.5	60	4.3	2.5			0.87	U					0.95	U	1.6	
Calcium, Total							490						1600		12000	
Chromium, Total							11						14		70	
Cobalt, Total							7.4						7.3		9	
Copper, Total	1720	10000	270	50			23						20		1900	
Iron, Total							19000						20000		44000	
Lead, Total	450	3900	400	63			9.5						10		780	
Magnesium, Total							3300						4500		3200	
Manganese, Total	2000	10000	2000	1600			690						250		440	
Mercury, Total	0.73	5.7	0.81	0.18			0.04	J					0.02	J	0.71	
Nickel, Total	130	10000	310	30			14						18		53	
Potassium, Total							390						460		470	
Selenium, Total	4	6800	180	3.9			1.7	U					1.9	U	1.8	
Silver, Total	8.3	6800	180	2			0.87	U					0.95	U	0.63	
Sodium, Total							32	J					110	J	140	
Thallium, Total							0.3	J					1.9	U	1.8	
Vanadium, Total							15						14		20	
Zinc, Total	2480	10000	10000	109			62						56		490	
<b>GENERAL CHEMISTRY</b>																
Solids, Total					89.4		91.5		91.7		86		82		87.7	
Cyanide, Total	40	10000	27	27	-	-	1	U	-	-	-	-	1.2	U	1.1	

Notes:  
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U = Compound not found above concentration shown  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

					SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)					
					Monitoring Well ID											
					LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06					
					COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016					
					Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	0.05	1000	100	0.05	0.012	U	0.011	U	0.011	U	0.011	U	0.011	U	0.012	U
1,1-Dichloroethane	0.27	480	26	0.27	0.0018	U	0.0016	U	0.0016	U	0.0017	U	0.0016	U	0.0018	U
Chloroform	0.37	700	49	0.37	0.0018	U	0.0016	U	0.0016	U	0.0017	U	0.0016	U	0.0018	U
Carbon tetrachloride	0.76	44	2.4	0.76	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
1,2-Dichloropropane					0.0042	U	0.0039	U	0.0038	U	0.004	U	0.0039	U	0.0041	U
Dibromochloromethane					0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
1,1,2-Trichloroethane					0.0018	U	0.0016	U	0.0016	U	0.0017	U	0.0016	U	0.0018	U
Tetrachloroethene	1.3	300	19	1.3	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
Chlorobenzene	1.1	1000	100	1.1	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
Trichlorofluoromethane					0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
Bromodichloromethane					0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
trans-1,3-Dichloropropene					0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
cis-1,3-Dichloropropene					0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
1,3-Dichloropropene, Total					-		-		-		-		-		-	
Bromoform					0.0048	U	0.0044	U	0.0044	U	0.0046	U	0.0044	U	0.0047	U
1,1,2,2-Tetrachloroethane					0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
Benzene	0.06	89	4.8	0.06	0.0012	U	0.00013	J	0.0011	U	0.0011	U	0.0011	U	0.0012	U
Toluene	0.7	1000	100	0.7	0.0018	U	0.0016	U	0.0016	U	0.0017	U	0.0016	U	0.0018	U
Ethylbenzene	1	780	41	1	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
Chloromethane					0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
Bromomethane					0.0024	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U
Vinyl chloride	0.02	27	0.9	0.02	0.0024	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U
Chloroethane					0.0024	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U
1,1-Dichloroethene	0.33	1000	100	0.33	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0018	U	0.0016	U	0.0016	U	0.0017	U	0.0016	U	0.0018	U
Trichloroethene	0.47	400	21	0.47	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
1,3-Dichlorobenzene	2.4	560	49	2.4	0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
1,4-Dichlorobenzene	1.8	250	13	1.8	0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
Methyl tert butyl ether	0.93	1000	100	0.93	0.0024	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U
p/m-Xylene					0.0024	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U
o-Xylene					0.0024	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U
Xylenes, Total	1.6	1000	100	0.26	-		-		-		-		-		-	
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
1,2-Dichloroethene, Total					-		-		-		-		-		-	
Styrene					0.0024	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U
Dichlorodifluoromethane					0.012	U	0.011	U	0.011	U	0.011	U	0.011	U	0.012	U
Acetone	0.05	1000	100	0.05	0.014		0.014		0.011	U	0.011	U	0.011	U	0.012	U
Carbon disulfide					0.012	U	0.011	U	0.011	U	0.011	U	0.011	U	0.012	U
2-Butanone	0.12	1000	100	0.12	0.012	U	0.011	U	0.011	U	0.011	U	0.011	U	0.012	U
4-Methyl-2-pentanone					0.012	U	0.011	U	0.011	U	0.011	U	0.011	U	0.012	U
2-Hexanone					0.012	U	0.011	U	0.011	U	0.011	U	0.011	U	0.012	U
Bromochloromethane					0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
1,2-Dibromoethane					0.0048	U	0.0044	U	0.0044	U	0.0046	U	0.0044	U	0.0047	U
n-Butylbenzene	12	1000	100	12	-		-		-		-		-		-	
sec-Butylbenzene	11	1000	100	11	-		-		-		-		-		-	
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-		-		-		-	
1,2-Dibromo-3-chloropropane					0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
Isopropylbenzene					0.0012	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0012	U
p-Isopropyltoluene					-		-		-		-		-		-	
Naphthalene	12	1000	100	12	-		-		-		-		-		-	
n-Propylbenzene	3.9	1000	100	3.9	-		-		-		-		-		-	
1,2,3-Trichlorobenzene					0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U
1,2,4-Trichlorobenzene					0.006	U	0.0055	U	0.0055	U	0.0057	U	0.0055	U	0.0059	U

Notes:  
mg/Kg = Milligram per kilogram  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)		SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)							
		Monitoring Well ID														
		LAB ID:		L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06							
		COLLECTION DATE:		12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016							
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-		-			
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-		-			
Methyl Acetate					0.024	U	0.022	U	0.022	U	0.023	U	0.022	U	0.023	U
Cyclohexane					0.024	U	0.022	U	0.022	U	0.023	U	0.022	U	0.023	U
1,4-Dioxane	0.1	250	13	0.1	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U
Freon-113					0.024	U	0.022	U	0.022	U	0.023	U	0.022	U	0.023	U
Methyl cyclohexane					0.0048	U	0.0044	U	0.0044	U	0.0046	U	0.0044	U	0.0047	U
Total VOCs					0.014	-	0.01413	-	-	-	-	-	-	-	-	-

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				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)		
				Monitoring Well ID								
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06		
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>												
Pentane, 2-methyl-					-		-		-		-	
Unknown Alkane					-		-		-		-	
Unknown Benzene					-		-		-		-	
Pentane, 2,3,3-trimethyl-					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown					-		-		-		-	
Unknown Aromatic					-		-		-		-	
Unknown Benzene					-		-		-		-	
Undecane, 2,6-dimethyl-					-		-		-		-	
Unknown Cycloalkane					-		-		-		-	
Pentane					-		-		-		-	
Tridecane, 7-methyl-					-		-		-		-	
Unknown					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown					-		-		-		-	
Dodecane, 2,6,10-trimethyl-					-		-		-		-	
Unknown Cyclohexane					-		-		-		-	
Unknown Benzene					-		-		-		-	
Pentane, 2,3,4-trimethyl-					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Fluorodichloromethane					-		-		-		-	
Unknown Alkane					-		-		-		-	
Ethane, 1-chloro-1-fluoro-					-		-		-		-	
Butane, 2-Methyl-					-		-		-		-	
n-Hexane					0.0044	NJ	0.00349	NJ	-		-	
Unknown Alkane					-		-		-		-	
Decane, 3,7-dimethyl-					-		-		-		-	
Unknown Benzene					-		-		-		-	
Undecane					-		-		-		-	
Unknown					-		0.00282	J	-		0.00553	J
Unknown					-		-		0.00252	J	-	
Cyclotrisiloxane, Hexamethyl-					-		-		-		-	
Unknown Alkane					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Dimethyl sulfide					-		-		-		-	
Unknown					-		-		-		-	

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		SAMPLE ID (Depth ft.)		SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)						
		Monitoring Well ID													
		LAB ID:		L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06						
		COLLECTION DATE:		12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)											
Cyclopentane					-		-		-		-		-		
Unknown Benzene					-		-		-		-		-		
Unknown Aromatic					-		-		-		-		-		
Unknown					-		-		-		-		-		
Unknown					-		-	0.0042	J		-		-	0.00329	J
Tridecane					-		-		-		-		-		
Unknown					-		-		-		-		-		
1-Pentene					-		-		-		-		-		
Ethane, 1,1-Difluoro-					-		-		-		-		-		
Unknown Aromatic					-		-		-		-		-		
Unknown Naphthalene					-		-		-		-		-		
Unknown Aromatic					-		-		-		-		-		
Unknown					-		-		-		-		-		
Unknown Cyclohexane					-		-		-		-		-		
Unknown															
Unknown															
Unknown Benzene															
No Tentatively Identified Compounds															
Tridecane, 7-methyl-															
Unknown Alkane															
Unknown Aromatic															
Pentane, 2,3,4-trimethyl-															
Unknown Naphthalene															
Dodecane, 2,6,10-trimethyl-															
Unknown Alkane															
Unknown															
Unknown Alkane															
Unknown															
Unknown															
Unknown															
Unknown															
Unknown															
Unknown Naphthalene															
Fluorodichloromethane															
Unknown															
Unknown															
Ethane, 1-chloro-1-fluoro-															
Unknown															
Pentane, 2-methyl-															
Unknown															
Unknown															
Unknown															
Unknown Cyclohexane															
Total TIC Compounds					0.0044		0.00631		0.00672				0.00553	0.00588	

Notes:  
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				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)						
				Monitoring Well ID												
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06						
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	98	1000	100	20	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Hexachlorobenzene	3.2	12	1.2	0.33	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Bis(2-chloroethyl)ether					0.18	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U
2-Chloronaphthalene					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
3,3'-Dichlorobenzidine					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2,4-Dinitrotoluene					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2,6-Dinitrotoluene					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Fluoranthene	1000	1000	100	100	0.12	U	0.11	U	0.11	U	0.11	U	0.022	J	0.11	U
4-Chlorophenyl phenyl ether					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
4-Bromophenyl phenyl ether					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Bis(2-chloroisopropyl)ether					0.23	U	0.22	U	0.21	U	0.22	U	0.22	U	0.23	U
Bis(2-chloroethoxy)methane					0.21	U	0.19	U	0.19	U	0.2	U	0.19	U	0.21	U
Hexachlorobutadiene					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Hexachlorocyclopentadiene					0.56	U	0.51	U	0.51	U	0.53	U	0.52	U	0.55	U
Hexachloroethane					0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Isophorone					0.18	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U
Naphthalene	12	1000	100	12	0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Nitrobenzene					0.18	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U
NDPA/DPA					0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
n-Nitrosodi-n-propylamine					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Bis(2-ethylhexyl)phthalate					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Butyl benzyl phthalate					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Di-n-butylphthalate					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Di-n-octylphthalate					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Diethyl phthalate					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Dimethyl phthalate					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Benzo(a)anthracene	1	11	1	1	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Benzo(a)pyrene	22	1.1	1	1	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Benzo(b)fluoranthene	1.7	11	1	1	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Chrysene	1	110	3.9	1	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Acenaphthylene	107	1000	100	100	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Anthracene	1000	1000	100	100	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Benzo(ghi)perylene	1000	1000	100	100	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Fluorene	386	1000	100	30	0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Phenanthrene	1000	1000	100	100	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Pyrene	1000	1000	100	100	0.12	U	0.11	U	0.11	U	0.11	U	0.021	J	0.11	U
Biphenyl					0.44	U	0.41	U	0.41	U	0.42	U	0.41	U	0.44	U
4-Chloroaniline					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2-Nitroaniline					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
3-Nitroaniline					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
4-Nitroaniline					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Dibenzofuran	210	1000	59	7	0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2-Methylnaphthalene					0.23	U	0.22	U	0.21	U	0.22	U	0.22	U	0.23	U
1,2,4,5-Tetrachlorobenzene					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Acetophenone					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-9 (6-8)		SB-10 (6-8)		SB-11 (0-4)		SB-11 (4-7.5)		SB-12 (4-6)		SB-12 (14-16)	
				Monitoring Well ID												
				LAB ID:	L1642026-01		L1642026-02		L1642026-04		L1642026-05		L1642026-07		L1642026-06	
				COLLECTION DATE:	12/21/2016		12/21/2016		12/21/2016		12/21/2016		12/21/2016		12/21/2016	
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
p-Chloro-m-cresol					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2-Chlorophenol					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2,4-Dichlorophenol					0.18	U	0.16	U	0.16	U	0.17	U	0.16	U	0.17	U
2,4-Dimethylphenol					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2-Nitrophenol					0.42	U	0.39	U	0.38	U	0.4	U	0.39	U	0.41	U
4-Nitrophenol					0.27	U	0.25	U	0.25	U	0.26	U	0.25	U	0.27	U
2,4-Dinitrophenol					0.94	U	0.86	U	0.86	U	0.89	U	0.87	U	0.92	U
4,6-Dinitro-o-cresol					0.51	U	0.47	U	0.46	U	0.48	U	0.47	U	0.5	U
Pentachlorophenol	0.8	55	6.7	0.8	0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Phenol	0.33	1000	100	0.33	0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2-Methylphenol	0.33	1000	100	0.33	0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.28	U	0.26	U	0.26	U	0.27	U	0.26	U	0.27	U
2,4,5-Trichlorophenol					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Carbazole					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Atrazine					0.16	U	0.14	U	0.14	U	0.15	U	0.14	U	0.15	U
Benzaldehyde					0.26	U	0.24	U	0.24	U	0.24	U	0.24	U	0.25	U
Caprolactam					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
2,3,4,6-Tetrachlorophenol					0.2	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U
Total SVOCs					-	-	-	-	-	-	-	-	0.043	-	-	-

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)				
				Monitoring Well ID										
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06				
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>														
Unknown Biphenyl					-		-		-		-		-	
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Vitamin E					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-	
Unknown Alkane					-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-		-		-		-		-	
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown Naphthalene					-		-		-		-		-	
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-		-		-		-		-	
Cyclic Octatomic Sulfur					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown Alcohol					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Alkane					-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown Phenol					-		-		-		-		-	
Unknown Alkane					-	-	-	-	-	-	-	-	-	-
Unknown Naphthalene					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown					-		-		-		-		-	
Sulfur					-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-	

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)						
				Monitoring Well ID												
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06						
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Sulfur					-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phenol					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phosphate					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Organic Acid					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
2,2',3,3',4,5',6-Heptachlor...					-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phenol					-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
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				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)				
				Monitoring Well ID										
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06				
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown					-		-	0.215	J		-		-	
Unknown					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown														
Unknown Alkane														
Unknown Alkane														
Sulfur														
Unknown PAH														
Unknown Naphthalene														
Unknown Naphthalene														
Unknown Naphthalene														
Unknown Alkane														
Cyclic Octaatomic Sulfur														
Unknown Benzene														
Unknown Alkane														
Unknown Naphthalene														
Unknown Benzene														
Unknown Naphthalene														
Unknown Naphthalene														
Unknown Benzene														
Unknown Alkane														
Unknown														
Unknown PAH														
Unknown Alkane														
Unknown Benzene														
Unknown Naphthalene														
Unknown														
Unknown														
Unknown														
Unknown Alkane														
Unknown Alkane														
Unknown														
Unknown Benzene														
Unknown Alkane														
No Tentatively Identified Compounds														
Unknown PAH														
Unknown Alkane														

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				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)				
				Monitoring Well ID										
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06				
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016				
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane														
Unknown Naphthalene														
Unknown														
Unknown Alkane														
Unknown														
Sulfur														
Unknown Alkane														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown Naphthalene														
Unknown														
Unknown PAH														
Unknown PAH														
Unknown														
Unknown														
Unknown														
Unknown Alkane														
Unknown Naphthalene														
Unknown Naphthalene														
Cyclic Octaatomic Sulfur														
Unknown Alkane														
Total SVOCs TICs								0.215						

Notes:  
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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)						
				Monitoring Well ID												
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06						
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	
<b>CHLORINATED HERBICIDES BY GC</b>																
MCP					3.93	U	3.62	U	3.63	U	3.82	U	3.65	U	3.88	U
MCPA					3.93	U	3.62	U	3.63	U	3.82	U	3.65	U	3.88	U
Dalapon					0.0393	U	0.0362	U	0.0363	U	0.0382	U	0.0365	U	0.0388	U
Dicamba					0.0393	U	0.0362	U	0.0363	U	0.0382	U	0.0365	U	0.0388	U
Dichloroprop					0.0393	U	0.0362	U	0.0363	U	0.0382	U	0.0365	U	0.0388	U
2,4-DB					0.197	U	0.181	U	0.182	U	0.191	U	0.182	U	0.194	U
Dinoseb					0.0393	U	0.0362	U	0.0363	U	0.0382	U	0.0365	U	0.0388	U
2,4-D					0.197	U	0.181	U	0.182	U	0.191	U	0.182	U	0.194	U
2,4,5-T					0.197	U	0.181	U	0.182	U	0.191	U	0.182	U	0.194	U
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.197	U	0.181	U	0.182	U	0.191	U	0.182	U	0.194	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																
Delta-BHC	0.25	1000	100	0.04	0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
Lindane	0.1	23	1.3	0.1	0.000773	U	0.000719	U	0.000728	U	0.000751	U	0.000709	U	0.000767	U
Alpha-BHC	0.02	6.8	0.48	0.02	0.000773	U	0.000719	U	0.000728	U	0.000751	U	0.000709	U	0.000767	U
Beta-BHC	0.09	14	0.36	0.036	0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
Heptachlor	0.38	29	2.1	0.042	0.000928	U	0.000863	U	0.000874	U	0.000901	U	0.000851	U	0.00092	U
Aldrin	0.19	1.4	0.097	0.005	0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
Heptachlor epoxide					0.00348	U	0.00324	U	0.00328	U	0.00338	U	0.00319	U	0.00345	U
Endrin	0.06	410	11	0.014	0.000773	U	0.000719	U	0.000728	U	0.000751	U	0.000709	U	0.000767	U
Endrin aldehyde					0.00232	U	0.00216	U	0.00218	U	0.00225	U	0.00213	U	0.0023	U
Endrin ketone					0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
Dieldrin	0.1	2.8	0.2	0.005	0.00116	U	0.00108	U	0.00109	U	0.00243	P	0.00106	U	0.00115	U
4,4'-DDE	17	120	8.9	0.0033	0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
4,4'-DDD	14	180	13	0.0033	0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
4,4'-DDT	136	94	7.9	0.0033	0.00348	U	0.00324	U	0.00328	U	0.00338	U	0.00319	U	0.00345	U
Endosulfan I	102	920	24	2.4	0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
Endosulfan II	102	920	24	2.4	0.00186	U	0.00172	U	0.00175	U	0.0018	U	0.0017	U	0.00184	U
Endosulfan sulfate	1000	920	24	2.4	0.000773	U	0.000719	U	0.000728	U	0.000751	U	0.000709	U	0.000767	U
Methoxychlor					0.00348	U	0.00324	U	0.00328	U	0.00338	U	0.00319	U	0.00345	U
Toxaphene					0.0348	U	0.0324	U	0.0328	U	0.0338	U	0.0319	U	0.0345	U
cis-Chlordane	2.9	47	4.2	0.094	0.00232	U	0.00216	U	0.00218	U	0.00225	U	0.00213	U	0.0023	U
trans-Chlordane					0.00232	U	0.00216	U	0.00218	U	0.00225	U	0.00213	U	0.0023	U
Chlordane					0.0151	U	0.014	U	0.0142	U	0.0146	U	0.0138	U	0.015	U
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																
Aroclor 1016	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0357	U	0.0376	U
Aroclor 1221	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0357	U	0.0376	U
Aroclor 1232	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0357	U	0.0376	U
Aroclor 1242	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0357	U	0.0376	U
Aroclor 1248	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0357	U	0.0376	U
Aroclor 1254	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0407	P	0.0376	U
Aroclor 1260	3.2	25	1	0.1	0.0382	U	0.016	J	0.0351	U	0.00624	J	0.011	J	0.0376	U
Aroclor 1262	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0357	U	0.0376	U
Aroclor 1268	3.2	25	1	0.1	0.0382	U	0.0352	U	0.0351	U	0.0368	U	0.0357	U	0.0376	U
PCBs, Total	3.2	25	1	0.1	0.0382	U	0.016	J	0.0351	U	0.00624	J	0.0517	J	0.0376	U

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E = Estimated  
R1 = Repeated analysis  
PI = Quality assurance exceedance

**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-9 (6-8)	SB-10 (6-8)	SB-11 (0-4)	SB-11 (4-7.5)	SB-12 (4-6)	SB-12 (14-16)						
				Monitoring Well ID												
				LAB ID:	L1642026-01	L1642026-02	L1642026-04	L1642026-05	L1642026-07	L1642026-06						
				COLLECTION DATE:	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q				
<b>TOTAL METALS</b>																
Aluminum, Total					7400		7000		8500		9000		5700		6400	
Antimony, Total					0.46	J	1.2	J	1.4	J	4.5	U	4.2	U	4.7	U
Arsenic, Total	16	16	16	13	5.1		8		6.3		6.7		4		3.8	
Barium, Total	820	10000	400	350	39		60		53		130		31		26	
Beryllium, Total	47	2700	72	7.2	0.25	J	0.25	J	0.3	J	0.33	J	0.2	J	0.21	J
Cadmium, Total	7.5	60	4.3	2.5	0.94	U	0.86	U	0.84	U	0.91	U	0.84	U	0.93	U
Calcium, Total					1300		16000		2400		2000		880		1600	
Chromium, Total					12		14		13		15		9.4		10	
Cobalt, Total					8.3		6.4		8.8		8.4		6.1		7.8	
Copper, Total	1720	10000	270	50	23		2600		95		25		18		19	
Iron, Total					18000		17000		29000		22000		14000		16000	
Lead, Total	450	3900	400	63	11		39		290		11		14		9.5	
Magnesium, Total					4400		4800		3400		3900		3000		4000	
Manganese, Total	2000	10000	2000	1600	260		480		760		1400		640		410	
Mercury, Total	0.73	5.7	0.81	0.18	0.08	U	0.05	J	0.51		0.03	J	0.03	J	0.02	J
Nickel, Total	130	10000	310	30	17		15		18		18		13		17	
Potassium, Total					500		510		420		520		320		360	
Selenium, Total	4	6800	180	3.9	1.9	U	1.7	U	1.7	U	1.8	U	1.7	U	1.9	U
Silver, Total	8.3	6800	180	2	0.94	U	0.86	U	0.84	U	0.91	U	0.84	U	0.93	U
Sodium, Total					40	J	99	J	84	J	74	J	39	J	45	J
Thallium, Total					1.9	U	1.7	U	1.7	U	1.8	U	1.7	U	1.9	U
Vanadium, Total					14		12		16		17		9.2		11	
Zinc, Total	2480	10000	10000	109	54		75		76		52		46		50	
<b>GENERAL CHEMISTRY</b>																
Solids, Total					82.8		90.5		91		87.1		90.6		85.2	
Cyanide, Total	40	10000	27	27	1.1	U	1	U	1	U	1.1	U	1	U	1.1	U

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)				
				Monitoring Well ID			MW-2	MW-2	MW-2					
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07			L1701349-07 R1		
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017			1/10/2017		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)										
<b>VOLATILE ORGANICS BY GC/MS</b>														
Methylene chloride	0.05	1000	100	0.05	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
1,1-Dichloroethane	0.27	480	26	0.27	0.0016	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
Chloroform	0.37	700	49	0.37	0.0016	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
Carbon tetrachloride	0.76	44	2.4	0.76	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
1,2-Dichloropropane					0.0038	U	0.004	U	0.004	U	0.004	U	0.004	U
Dibromochloromethane					0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
1,1,2-Trichloroethane					0.0016	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
Tetrachloroethene	1.3	300	19	1.3	0.0011	U	0.0011	U	0.00038	J	0.0011	U	0.0011	U
Chlorobenzene	1.1	1000	100	1.1	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
Trichlorofluoromethane					0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
Bromodichloromethane					0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
trans-1,3-Dichloropropene					0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
cis-1,3-Dichloropropene					0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
1,3-Dichloropropene, Total					-		-		-		-		-	
Bromoform					0.0043	U	0.0045	U	0.0045	U	0.0046	U	0.0045	U
1,1,2,2-Tetrachloroethane					0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
Benzene	0.06	89	4.8	0.06	0.0011	U	0.00024	J	0.00016	J	0.0011	U	0.0011	U
Toluene	0.7	1000	100	0.7	0.0016	U	0.00043	J	0.00048	J	0.0017	U	0.0017	U
Ethylbenzene	1	780	41	1	0.0011	U	0.0011	U	0.00078	J	0.0011	U	0.0011	U
Chloromethane					0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
Bromomethane					0.0022	U	0.0022	U	0.0023	U	0.0023	U	0.0023	U
Vinyl chloride	0.02	27	0.9	0.02	0.0022	U	0.0022	U	0.0023	U	0.0023	U	0.0023	U
Chloroethane					0.0022	U	0.0022	U	0.0023	U	0.0023	U	0.0023	U
1,1-Dichloroethene	0.33	1000	100	0.33	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0016	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
Trichloroethene	0.47	400	21	0.47	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
1,3-Dichlorobenzene	2.4	560	49	2.4	0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
1,4-Dichlorobenzene	1.8	250	13	1.8	0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
Methyl tert butyl ether	0.93	1000	100	0.93	0.0022	U	0.0022	U	0.0023	U	0.0023	U	0.0023	U
p/m-Xylene					0.0022	U	0.0022	U	0.00062	J	0.0023	U	0.0023	U
o-Xylene					0.0022	U	0.0022	U	0.002	J	0.0023	U	0.0023	U
Xylenes, Total	1.6	1000	100	0.26	-		-		-		-		-	
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
1,2-Dichloroethene, Total					-		-		-		-		-	
Styrene					0.0022	U	0.0022	U	0.0022	J	0.0023	U	0.0023	U
Dichlorodifluoromethane					0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
Acetone	0.05	1000	100	0.05	0.011	U	0.012		0.19		0.032		0.011	U
Carbon disulfide					0.011	U	0.011	U	0.0021	J	0.011	U	0.011	U
2-Butanone	0.12	1000	100	0.12	0.011	U	0.011	U	0.025		0.011	U	0.011	U
4-Methyl-2-pentanone					0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
2-Hexanone					0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
Bromochloromethane					0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
1,2-Dibromoethane					0.0043	U	0.0045	U	0.0045	U	0.0046	U	0.0045	U
n-Butylbenzene	12	1000	100	12	-		-		-		-		-	
sec-Butylbenzene	11	1000	100	11	-		-		-		-		-	
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-		-		-	
1,2-Dibromo-3-chloropropane					0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
Isopropylbenzene					0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
p-Isopropyltoluene					-		-		-		-		-	
Naphthalene	12	1000	100	12	-		-		-		-		-	
n-Propylbenzene	3.9	1000	100	3.9	-		-		-		-		-	
1,2,3-Trichlorobenzene					0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U
1,2,4-Trichlorobenzene					0.0054	U	0.0056	U	0.0056	U	0.0057	U	0.0057	U

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
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**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)				SB-13 (2-4)		SB-13 (8-12)		SB-14 (0-2)		SB-14 (4-6)		SB-14 (12-14)		SB-14 (12-14)	
		Monitoring Well ID								MW-2		MW-2		MW-2		MW-2	
		LAB ID:				L1642026-08		L1642026-09		L1701349-05		L1701349-06		L1701349-07		L1701349-07 R1	
		COLLECTION DATE:				12/21/2016		12/21/2016		1/10/2017		1/10/2017		1/10/2017		1/10/2017	
		Groundwater Protection Soil Cleanup Objective				IUSCO		RRSCO		UUSCO							
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-		-		-		
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-		-		-		
Methyl Acetate					0.022	U	0.022	U	0.023	U	0.023	U	0.023	U	0.023	U	
Cyclohexane					0.022	U	0.022	U	0.023	U	0.023	U	0.023	U	0.023	U	
1,4-Dioxane	0.1	250	13	0.1	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	
Freon-113					0.022	U	0.022	U	0.023	U	0.023	U	0.023	U	0.023	U	
Methyl cyclohexane					0.0043	U	0.0045	U	0.0045	U	0.0046	U	0.0045	U	0.0045	U	
Total VOCs					-	-	0.01267	-	0.22372	-	0.032	-	0.193	-	-	-	

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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)						
				Monitoring Well ID			MW-2	MW-2	MW-2	MW-2						
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1						
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Pentane, 2-methyl-					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Pentane, 2,3,3-trimethyl-					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		0.00526	J	-	
Unknown Benzene					-		-		-		-		-		-	
Undecane, 2,6-dimethyl-					-		-		-		-		-		-	
Unknown Cycloalkane					-		-		-		-		-		-	
Pentane					-		-		-		-		-		-	
Tridecane, 7-methyl-					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Dodecane, 2,6,10-trimethyl-					-		-		-		-		-		-	
Unknown Cyclohexane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Pentane, 2,3,4-trimethyl-					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Fluorodichloromethane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Ethane, 1-chloro-1-fluoro-					-		-		-		-		-		-	
Butane, 2-Methyl-					-		-		-		-		-		-	
n-Hexane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Decane, 3,7-dimethyl-					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Undecane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown					0.00762	J	-		0.00243	J	-		-		0.00229	J
Cyclotrisiloxane, Hexamethyl-					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Dimethyl sulfide					-		-		-		-		-		-	
Unknown					-		-		-		-		0.00831	J	-	

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)						
				Monitoring Well ID			MW-2	MW-2	MW-2	MW-2						
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1						
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown					0.00321	J	-		-		0.0384	J	0.0339	J	-	
Tridecane					-		-		-		-		-		-	
Unknown					-		-		-		0.047	J	0.0227	J	-	
1-Pentene					-		-		-		-		-		-	
Ethane, 1,1-Difluoro-					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-	
Unknown					-		-		-		0.0227	J	-		-	
Unknown Cyclohexane																
Unknown																
Unknown																
Unknown Benzene																
No Tentatively Identified Compounds																
Tridecane, 7-methyl-																
Unknown Alkane																
Unknown Aromatic																
Pentane, 2,3,4-trimethyl-																
Unknown Naphthalene																
Dodecane, 2,6,10-trimethyl-																
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown																
Unknown																
Unknown																
Unknown																
Unknown																
Unknown Naphthalene																
Fluorodichloromethane																
Unknown																
Unknown																
Ethane, 1-chloro-1-fluoro-																
Unknown																
Pentane, 2-methyl-																
Unknown																
Unknown																
Unknown																
Unknown Cyclohexane																
Total TIC Compounds					0.01083		0.00243				0.12396		0.0632			

Notes:  
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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)						
				Monitoring Well ID			MW-2	MW-2	MW-2	MW-2						
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1						
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	98	1000	100	20	0.14	U	0.15	U	0.034	J	0.15	U	0.15	U	-	
Hexachlorobenzene	3.2	12	1.2	0.33	0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	-	
Bis(2-chloroethyl)ether					0.16	U	0.16	U	0.17	U	0.17	U	0.17	U	-	
2-Chloronaphthalene					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
3,3'-Dichlorobenzidine					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2,4-Dinitrotoluene					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2,6-Dinitrotoluene					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Fluoranthene	1000	1000	100	100	0.08	J	0.11	U	0.44		0.11	U	0.11	U	-	
4-Chlorophenyl phenyl ether					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
4-Bromophenyl phenyl ether					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Bis(2-chloroisopropyl)ether					0.21	U	0.22	U	0.22	U	0.22	U	0.22	U	-	
Bis(2-chloroethoxy)methane					0.19	U	0.2	U	0.2	U	0.2	U	0.2	U	-	
Hexachlorobutadiene					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Hexachlorocyclopentadiene					0.5	U	0.52	U	0.54	U	0.53	U	0.53	U	-	
Hexachloroethane					0.14	U	0.15	U	0.15	U	0.15	U	0.15	U	-	
Isophorone					0.16	U	0.16	U	0.17	U	0.17	U	0.17	U	-	
Naphthalene	12	1000	100	12	0.18	U	0.18	U	0.048	J	0.18	U	0.18	U	-	
Nitrobenzene					0.16	U	0.16	U	0.17	U	0.17	U	0.17	U	-	
NDPA/DPA					0.14	U	0.15	U	0.15	U	0.15	U	0.15	U	-	
n-Nitrosodi-n-propylamine					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Bis(2-ethylhexyl)phthalate					0.18	U	0.18	U	0.56		0.18	U	0.18	U	-	
Butyl benzyl phthalate					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Di-n-butylphthalate					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Di-n-octylphthalate					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Diethyl phthalate					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Dimethyl phthalate					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Benzo(a)anthracene	1	11	1	1	0.059	J	0.11	U	0.2		0.11	U	0.11	U	-	
Benzo(a)pyrene	22	1.1	1	1	0.052	J	0.15	U	0.18		0.15	U	0.15	U	-	
Benzo(b)fluoranthene	1.7	11	1	1	0.059	J	0.11	U	0.25		0.11	U	0.11	U	-	
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.1	U	0.11	U	0.083	J	0.11	U	0.11	U	-	
Chrysene	1	110	3.9	1	0.053	J	0.11	U	0.21		0.11	U	0.11	U	-	
Acenaphthylene	107	1000	100	100	0.14	U	0.15	U	0.15	U	0.15	U	0.15	U	-	
Anthracene	1000	1000	100	100	0.1	U	0.11	U	0.067	J	0.11	U	0.11	U	-	
Benzo(ghi)perylene	1000	1000	100	100	0.029	J	0.15	U	0.12	J	0.15	U	0.15	U	-	
Fluorene	386	1000	100	30	0.18	U	0.18	U	0.043	J	0.18	U	0.18	U	-	
Phenanthrene	1000	1000	100	100	0.042	J	0.11	U	0.24		0.11	U	0.11	U	-	
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.1	U	0.11	U	0.038	J	0.11	U	0.11	U	-	
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.034	J	0.15	U	0.12	J	0.15	U	0.15	U	-	
Pyrene	1000	1000	100	100	0.073	J	0.11	U	0.39		0.11	U	0.11	U	-	
Biphenyl					0.4	U	0.42	U	0.43	U	0.42	U	0.42	U	-	
4-Chloroaniline					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2-Nitroaniline					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
3-Nitroaniline					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
4-Nitroaniline					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Dibenzofuran	210	1000	59	7	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2-Methylnaphthalene					0.21	U	0.22	U	0.048	J	0.22	U	0.22	U	-	
1,2,4,5-Tetrachlorobenzene					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Acetophenone					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	

Notes:  
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J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
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**Former Freedman and Son**  
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**Green Island, New York**

		SAMPLE ID (Depth ft.)		SB-13 (2-4)		SB-13 (8-12)		SB-14 (0-2)		SB-14 (4-6)		SB-14 (12-14)		SB-14 (12-14)		
		Monitoring Well ID						MW-2		MW-2		MW-2		MW-2		
		LAB ID:		L1642026-08		L1642026-09		L1701349-05		L1701349-06		L1701349-07		L1701349-07 R1		
		COLLECTION DATE:		12/21/2016		12/21/2016		1/10/2017		1/10/2017		1/10/2017		1/10/2017		
Groundwater Protection Soil Cleanup Objective		IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					0.1	U	0.11	U	0.11	U	0.11	U	0.11	U	-	
p-Chloro-m-cresol					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2-Chlorophenol					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2,4-Dichlorophenol					0.16	U	0.16	U	0.17	U	0.17	U	0.17	U	-	
2,4-Dimethylphenol					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2-Nitrophenol					0.38	U	0.4	U	0.4	U	0.4	U	0.4	U	-	
4-Nitrophenol					0.25	U	0.26	U	0.26	U	0.26	U	0.26	U	-	
2,4-Dinitrophenol					0.84	U	0.88	U	0.9	U	0.89	U	0.89	U	-	
4,6-Dinitro-o-cresol					0.46	U	0.48	U	0.49	U	0.48	U	0.48	U	-	
Pentachlorophenol	0.8	55	6.7	0.8	0.14	U	0.15	U	0.15	U	0.15	U	0.15	U	-	
Phenol	0.33	1000	100	0.33	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2-Methylphenol	0.33	1000	100	0.33	0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.25	U	0.26	U	0.27	U	0.27	U	0.27	U	-	
2,4,5-Trichlorophenol					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Carbazole					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Atrazine					0.14	U	0.15	U	0.15	U	0.15	U	0.15	U	-	
Benzaldehyde					0.23	U	0.24	U	0.25	U	0.24	U	0.24	U	-	
Caprolactam					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
2,3,4,6-Tetrachlorophenol					0.18	U	0.18	U	0.19	U	0.18	U	0.18	U	-	
Total SVOCs					0.481	-	-	-	3.071	-	-	-	-	-	-	-

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				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)						
				Monitoring Well ID			MW-2	MW-2	MW-2	MW-2						
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1						
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Vitamin E					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Cyclic Octatomic Sulfur					-		0.34		NJ		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Alcohol					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Phenol					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Sulfur					-		-		0.811		NJ		0.289		NJ	
Unknown Thiophene					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-		-	

Notes:  
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				Monitoring Well ID			MW-2	MW-2	MW-2							
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1						
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
<b>ANALYTE</b>	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene					-	-	-	-	-	-						
Unknown Sulfur					-	-	-	-	4.11	J	0.385	J	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phenol					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phosphate					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Organic Acid					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
2,2',3,3',4,5',6-Heptachlor...					-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	0.226	J	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	0.287	J	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	0.294	J	-	-	-	-	-	-	-
Unknown					-	-	-	0.219	J	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	0.308	J	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
Unknown					-	-	-	0.206	J	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phenol					-	-	-	-	-	-	-	-	-	-	-	-

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)						
				Monitoring Well ID			MW-2	MW-2	MW-2	MW-2						
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1						
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown					0.322	J	-		0.387	J	-		0.272	J	-	
Unknown					-		-		0.229	J	-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Alkane					-		-		0.379	J	-		-		-	
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown Alkane																
Sulfur																
Unknown PAH																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Alkane																
Cyclic Octaatomic Sulfur																
Unknown Benzene																
Unknown Alkane																
Unknown Naphthalene																
Unknown Benzene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Benzene																
Unknown Alkane																
No Tentatively Identified Compounds																
Unknown PAH																
Unknown Alkane																

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)						
				Monitoring Well ID			MW-2	MW-2	MW-2	MW-2						
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1						
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown Alkane																
Unknown																
Sulfur																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown Naphthalene																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Naphthalene																
Unknown Naphthalene																
Cyclic Octatomic Sulfur																
Unknown Alkane																
Total SVOCs TICs					0.322		0.34		3.346		4.671		0.385			

Notes:  
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U = Compound not found above concentration shown  
J = Compound found below lab report limit  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)				SB-13 (2-4)		SB-13 (8-12)		SB-14 (0-2)		SB-14 (4-6)		SB-14 (12-14)		SB-14 (12-14)	
		Monitoring Well ID				MW-2		MW-2		MW-2		MW-2		MW-2		MW-2	
		LAB ID:				L1642026-08		L1642026-09		L1701349-05		L1701349-06		L1701349-07		L1701349-07 R1	
		COLLECTION DATE:				12/21/2016		12/21/2016		1/10/2017		1/10/2017		1/10/2017		1/10/2017	
Groundwater Protection Soil Cleanup Objective		IUSCO	RRSCO	UUSCO													
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>CHLORINATED HERBICIDES BY GC</b>																	
MCP					3.54	U	3.76	U	3.72	U	3.76	U	3.76	U	-		
MCPA					3.54	U	3.76	U	3.72	U	3.76	U	3.76	U	-		
Dalapon					0.0354	U	0.0376	U	0.0372	U	0.0376	U	0.0376	U	-		
Dicamba					0.0354	U	0.0376	U	0.0372	U	0.0376	U	0.0376	U	-		
Dichloroprop					0.0354	U	0.0376	U	0.0372	U	0.0376	U	0.0376	U	-		
2,4-DB					0.177	U	0.188	U	0.186	U	0.188	U	0.188	U	-		
Dinoseb					0.0354	U	0.0376	U	0.0372	U	0.0376	U	0.0376	U	-		
2,4-D					0.177	U	0.188	U	0.186	U	0.188	U	0.188	U	-		
2,4,5-T					0.177	U	0.188	U	0.186	U	0.188	U	0.188	U	-		
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.177	U	0.188	U	0.186	U	0.188	U	0.188	U	-		
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																	
Delta-BHC	0.25	1000	100	0.04	0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
Lindane	0.1	23	1.3	0.1	0.000697	U	0.000731	U	0.000727	U	0.000725	U	0.000711	U	-		
Alpha-BHC	0.02	6.8	0.48	0.02	0.000697	U	0.000731	U	0.000727	U	0.000725	U	0.000711	U	-		
Beta-BHC	0.09	14	0.36	0.036	0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
Heptachlor	0.38	29	2.1	0.042	0.000837	U	0.000878	U	0.000873	U	0.00087	U	0.000853	U	-		
Aldrin	0.19	1.4	0.097	0.005	0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
Heptachlor epoxide					0.00314	U	0.00329	U	0.00327	U	0.00326	U	0.0032	U	-		
Endrin	0.06	410	11	0.014	0.000697	U	0.000731	U	0.000727	U	0.000725	U	0.000711	U	-		
Endrin aldehyde					0.00209	U	0.00219	U	0.00218	U	0.00218	U	0.00213	U	-		
Endrin ketone					0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
Dieldrin	0.1	2.8	0.2	0.005	0.00105	U	0.0011	U	0.00109	U	0.00109	U	0.00107	U	-		
4,4'-DDE	17	120	8.9	0.0033	0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
4,4'-DDD	14	180	13	0.0033	0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
4,4'-DDT	136	94	7.9	0.0033	0.00314	U	0.00329	U	0.00327	U	0.00326	U	0.0032	U	-		
Endosulfan I	102	920	24	2.4	0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
Endosulfan II	102	920	24	2.4	0.00167	U	0.00176	U	0.00174	U	0.00174	U	0.00171	U	-		
Endosulfan sulfate	1000	920	24	2.4	0.000697	U	0.000731	U	0.000727	U	0.000725	U	0.000711	U	-		
Methoxychlor					0.00314	U	0.00329	U	0.00327	U	0.00326	U	0.0032	U	-		
Toxaphene					0.0314	U	0.0329	U	0.0327	U	0.0326	U	0.032	U	-		
cis-Chlordane	2.9	47	4.2	0.094	0.00209	U	0.00219	U	0.00218	U	0.00218	U	0.00213	U	-		
trans-Chlordane					0.00209	U	0.00219	U	0.00218	U	0.00218	U	0.00213	U	-		
Chlordane					0.0136	U	0.0143	U	0.0142	U	0.0141	U	0.0139	U	-		
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																	
Aroclor 1016	3.2	25	1	0.1	0.035	U	0.0373	U	0.0356	U	0.0373	U	0.0369	U	-		
Aroclor 1221	3.2	25	1	0.1	0.035	U	0.0373	U	0.0356	U	0.0373	U	0.0369	U	-		
Aroclor 1232	3.2	25	1	0.1	0.035	U	0.0373	U	0.0356	U	0.0373	U	0.0369	U	-		
Aroclor 1242	3.2	25	1	0.1	0.035	U	0.0373	U	0.255		0.0303	J	0.0236	J	-		
Aroclor 1248	3.2	25	1	0.1	0.035	U	0.0373	U	0.0356	U	0.0373	U	0.0369	U	-		
Aroclor 1254	3.2	25	1	0.1	0.035	U	0.0373	U	0.374		0.0214	J	0.0193	J	-		
Aroclor 1260	3.2	25	1	0.1	0.035	U	0.0373	U	0.13		0.00912	J	0.00724	J	-		
Aroclor 1262	3.2	25	1	0.1	0.035	U	0.0373	U	0.0356	U	0.0373	U	0.0369	U	-		
Aroclor 1268	3.2	25	1	0.1	0.035	U	0.0373	U	0.0356	U	0.0373	U	0.0369	U	-		
PCBs, Total	3.2	25	1	0.1	0.035	U	0.0373	U	0.759		0.0608	J	0.0501	J	-		

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-13 (2-4)	SB-13 (8-12)	SB-14 (0-2)	SB-14 (4-6)	SB-14 (12-14)	SB-14 (12-14)					
				Monitoring Well ID			MW-2	MW-2	MW-2	MW-2					
				LAB ID:	L1642026-08	L1642026-09	L1701349-05	L1701349-06	L1701349-07	L1701349-07 R1					
				COLLECTION DATE:	12/21/2016	12/21/2016	1/10/2017	1/10/2017	1/10/2017	1/10/2017					
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>TOTAL METALS</b>															
Aluminum, Total					7100		9600		5800		6100		10000		-
Antimony, Total					0.46	J	0.44	J	1.7	J	4.4	U	4.4	U	-
Arsenic, Total	16	16	16	13	4.7		7.3		7.6		4.4		8.1		-
Barium, Total	820	10000	400	350	39		63		58		36		63		-
Beryllium, Total	47	2700	72	7.2	0.24	J	0.35	J	0.27	J	0.19	J	0.38	J	-
Cadmium, Total	7.5	60	4.3	2.5	0.82	U	0.9	U	1.1		2.2		0.14	J	-
Calcium, Total					2400		2100		40000		6500		6900		-
Chromium, Total					10		17		25		13		18		-
Cobalt, Total					6.6		13		6.4		5.9		12		-
Copper, Total	1720	10000	270	50	32		30		170		39		33		-
Iron, Total					17000		25000		23000		17000		22000		-
Lead, Total	450	3900	400	63	23		17		270		42		15		-
Magnesium, Total					3800		5200		3400		3700		7900		-
Manganese, Total	2000	10000	2000	1600	430		2500		340		350		650		-
Mercury, Total	0.73	5.7	0.81	0.18	0.09		0.06	J	2.1		0.16		0.05	J	-
Nickel, Total	130	10000	310	30	15		24		50		17		24		-
Potassium, Total					330		490		460		500		1000		-
Selenium, Total	4	6800	180	3.9	1.6	U	1.8	U	1.8	U	1.8	U	1.7	U	-
Silver, Total	8.3	6800	180	2	0.82	U	0.9	U	1.3		0.38	J	0.87	U	-
Sodium, Total					49	J	58	J	160	J	91	J	97	J	-
Thallium, Total					1.6	U	1.8	U	1.8	U	1.8	U	1.7	U	-
Vanadium, Total					13		14		18		11		18		-
Zinc, Total	2480	10000	10000	109	91		72		260		100		57		-
<b>GENERAL CHEMISTRY</b>															
Solids, Total					92.8		88.6		88.4		87.5		88.2		-
Cyanide, Total	40	10000	27	27	1	U	1	U	1.1	U	1.1	U	1	U	-

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
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**Green Island, New York**

ANALYTE	SAMPLE ID (Depth ft.)				SB-14 (12-14)		SB-15 (2-4)		SB-15 (8-10)		SB-16 (2-4)		SB-17 (2-4)		SB-17 (2-4)	
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)												
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	0.05	1000	100	0.05	0.57	U	0.011	U	0.012	U	0.011	U	0.0025	J		
1,1-Dichloroethane	0.27	480	26	0.27	0.085	U	0.0016	U	0.0018	U	0.0016	U	0.0017	U		
Chloroform	0.37	700	49	0.37	0.085	U	0.0016	U	0.0018	U	0.0016	U	0.0017	U		
Carbon tetrachloride	0.76	44	2.4	0.76	0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
1,2-Dichloropropane					0.2	U	0.0038	U	0.0042	U	0.0039	U	0.0039	U		
Dibromochloromethane					0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
1,1,2-Trichloroethane					0.085	U	0.0016	U	0.0018	U	0.0016	U	0.0017	U		
Tetrachloroethene	1.3	300	19	1.3	0.057	U	0.0012	U	0.0012	U	0.0011	U	0.0011	U		
Chlorobenzene	1.1	1000	100	1.1	0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
Trichlorofluoromethane					0.28	U	0.0054	U	0.006	U	0.0055	U	0.0056	U		
1,2-Dichloroethane	0.02	60	3.1	0.02	0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
Bromodichloromethane					0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
trans-1,3-Dichloropropene					0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
cis-1,3-Dichloropropene					0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
1,3-Dichloropropene, Total					-		-		-		-		-			
Bromoform					0.23	U	0.0043	U	0.0048	U	0.0044	U	0.0045	U		
1,1,2,2-Tetrachloroethane					0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
Benzene	0.06	89	4.8	0.06	0.057	U	0.001	J	0.00025	J	0.00029	J	0.00062	J		
Toluene	0.7	1000	100	0.7	0.085	U	0.0029		0.0018	U	0.0016	U	0.00035	J		
Ethylbenzene	1	780	41	1	0.057	U	0.0083		0.0012	U	0.0011	U	0.00025	J		
Chloromethane					0.28	U	0.0054	U	0.006	U	0.0055	U	0.0056	U		
Bromomethane					0.11	U	0.0022	U	0.0024	U	0.0022	U	0.0022	U		
Vinyl chloride	0.02	27	0.9	0.02	0.11	U	0.0022	U	0.0024	U	0.0022	U	0.0022	U		
Chloroethane					0.11	U	0.0022	U	0.0024	U	0.0022	U	0.0022	U		
1,1-Dichloroethene	0.33	1000	100	0.33	0.057	U	0.0011	U	0.0012	U	0.0011	U	0.0011	U		
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.085	U	0.0016	U	0.0018	U	0.0016	U	0.0017	U		
Trichloroethene	0.47	400	21	0.47	0.057	U	0.0016	U	0.0012	U	0.0011	U	0.0011	U		
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.28	U	0.0054	U	0.006	U	0.0055	U	0.0056	U		
1,3-Dichlorobenzene	2.4	560	49	2.4	0.28	U	0.0054	U	0.006	U	0.0055	U	0.0056	U		
1,4-Dichlorobenzene	1.8	250	13	1.8	0.28	U	0.0054	U	0.006	U	0.0055	U	0.0056	U		
Methyl tert butyl ether	0.93	1000	100	0.93	0.11	U	0.0022	U	0.00066	J	0.0022	U	0.0022	U		
p/m-Xylene					0.11	U	0.0056		0.0024	U	0.0022	U	0.001	J		
o-Xylene					0.11	U	0.0088		0.0024	U	0.0022	U	0.00052	J		
Xylenes, Total	1.6	1000	100	0.26	-		-		-		-		-			
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.057	U	0.00092	J	0.0012	U	0.0011	U	0.0011	U		
1,2-Dichloroethene, Total					-		-		-		-		-			
Styrene					0.11	U	0.0039		0.0024	U	0.0022	U	0.0022	U		
Dichlorodifluoromethane					0.57	U	0.011	U	0.012	U	0.011	U	0.011	U		
Acetone	0.05	1000	100	0.05	0.099	J	0.16		0.018		0.091		0.14			
Carbon disulfide					0.57	U	0.0047	J	0.0015	J	0.0019	J	0.0019	J		
2-Butanone	0.12	1000	100	0.12	0.57	U	0.018		0.012	U	0.0082	J	0.016			
4-Methyl-2-pentanone					0.57	U	0.011	U	0.012	U	0.011	U	0.011	U		
2-Hexanone					0.57	U	0.011	U	0.012	U	0.011	U	0.011	U		
Bromochloromethane					0.28	U	0.0054	U	0.006	U	0.0055	U	0.0056	U		
1,2-Dibromoethane					0.23	U	0.0043	U	0.0048	U	0.0044	U	0.0045	U		
n-Butylbenzene	12	1000	100	12	-		-		-		-		-			
sec-Butylbenzene	11	1000	100	11	-		-		-		-		-			
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-		-		-			
1,2-Dibromo-3-chloropropane					0.28	U	0.0054	U	0.006	U	0.0055	U	0.0056	U		
Isopropylbenzene					0.057	U	0.0035		0.0011	J	0.00095	J	0.0011	U		
p-Isopropyltoluene					-		-		-		-		-			
Naphthalene	12	1000	100	12	-		-		-		-		-			
n-Propylbenzene	3.9	1000	100	3.9	-		-		-		-		-			
1,2,3-Trichlorobenzene					0.018	J	0.0054	U	0.006	U	0.0055	U	0.0056	U		
1,2,4-Trichlorobenzene					0.076	J	0.015		0.006	U	0.0055	U	0.0056	U		

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)		SB-14 (12-14)	SB-15 (2-4)	SB-15 (8-10)	SB-16 (2-4)	SB-17 (2-4)	SB-17 (2-4)							
		Monitoring Well ID		MW-2	MW-4	MW-4	MW-5	MW-8	MW-8							
		LAB ID:		L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1							
		COLLECTION DATE:		1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017							
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-					
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-							
Methyl Acetate					1.1	U	0.022	U	0.024	U	0.022	U	0.022	U		
Cyclohexane					1.1	U	0.022	U	0.024	U	0.022	U	0.022	U		
1,4-Dioxane	0.1	250	13	0.1	5.7	U	0.11	U	0.12	U	0.11	U	0.11	U		
Freon-113					1.1	U	0.022	U	0.024	U	0.022	U	0.022	U		
Methyl cyclohexane					0.23	U	0.0034	J	0.00057	J	0.0044	U	0.0045	U		
Total VOCs					-	-	0.23882	-	0.02208	-	0.10234	-	0.16314	-		

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				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Pentane, 2-methyl-					-		-		-		-					
Unknown Alkane					-		-		-		-					
Unknown Benzene					-		0.0298	J	-		0.00388	J				
Pentane, 2,3,3-trimethyl-					-		-		-		-					
Unknown Benzene					-		-		-		-					
Unknown					-		-		-		-					
Unknown Aromatic					-		-		-		0.00492	J				
Unknown Benzene					-		0.0218	J	-		0.00276	J				
Undecane, 2,6-dimethyl-					-		0.0247	NJ	0.0305	NJ	-	-				
Unknown Cycloalkane					-		-		-		-					
Pentane					-		-		-		-					
Tridecane, 7-methyl-					-		-		-		-					
Unknown					-		-		0.0413	J	-					
Unknown Benzene					-		-		-		-					
Unknown					-		-		0.0279	J	-					
Dodecane, 2,6,10-trimethyl-					-		-		-		-					
Unknown Cyclohexane					-		-		-		-					
Unknown Benzene					-		0.0372	J	-		-					
Pentane, 2,3,4-trimethyl-					-		-		-		-					
Unknown Naphthalene					-		-		-		-					
Fluorodichloromethane					-		-		-		-					
Unknown Alkane					-		-		-		-					
Ethane, 1-chloro-1-fluoro-					-		-		-		-					
Butane, 2-Methyl-					-		-		-		-					
n-Hexane					-		-		-		-					
Unknown Alkane					-		-		-		-					
Decane, 3,7-dimethyl-					-		-		0.0351	NJ	-	-				
Unknown Benzene					-		-		-		-					
Undecane					-		0.0855	NJ	-		-	-				
Unknown					-		-		-		-					
Unknown					0.213	J	0.024	J	0.0264	J	0.00435	J				
Cyclotrisiloxane, Hexamethyl-					-		-		-		-					
Unknown Alkane					-		0.0232	J	-		0.00382	J				
Unknown Naphthalene					-		-		-		-					
Dimethyl sulfide					-		-		-		-					
Unknown					-		-		0.0405	J	0.00295	J				

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				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane					-		-		-		-		-			
Unknown Benzene					-		-		-		-		-			
Unknown Aromatic					-		-		-		-		-			
Unknown					-		-	0.0313	J		-		-			
Unknown					0.495	J	0.0292	J	0.0261	J	0.00409	J				
Tridecane					-		-		-		-		-			
Unknown					0.263	J	0.0321	J	0.0248	J	0.00309	J				
1-Pentene					-		-		-		-		-			
Ethane, 1,1-Difluoro-					-		-		-		-		-			
Unknown Aromatic					-		-		-		-		-			
Unknown Naphthalene					-		-		-		-		-			
Unknown Aromatic					-		-		-		-		-			
Unknown					-		0.0246	J	0.0676	J	0.00441	J				
Unknown Cyclohexane																
Unknown													5.14	J		
Unknown													4.89	J		
Unknown Benzene													-			
No Tentatively Identified Compounds													-			
Tridecane, 7-methyl-													-			
Unknown Alkane													18.1	J		
Unknown Aromatic													-			
Pentane, 2,3,4-trimethyl-													-			
Unknown Naphthalene													-			
Dodecane, 2,6,10-trimethyl-													-			
Unknown Alkane													20.4	J		
Unknown													4.58	J		
Unknown Alkane													12.9	J		
Unknown													3.98	J		
Unknown													-			
Unknown													8.02	J		
Unknown																
Unknown																
Unknown Naphthalene																
Fluorodichloromethane																
Unknown																
Unknown																
Ethane, 1-chloro-1-fluoro-																
Unknown																
Pentane, 2-methyl-																
Unknown																
Unknown																
Unknown																
Unknown Cyclohexane																
Total TIC Compounds					0.971		0.3321		0.3515		0.03427		78.01			

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				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	98	1000	100	20	-		0.16		0.16	U	0.14	U	0.14	U		
Hexachlorobenzene	3.2	12	1.2	0.33	-		0.11	U	0.12	U	0.11	U	0.21	U		
Bis(2-chloroethyl)ether					-		0.16	U	0.18	U	0.16	U	0.16	U		
2-Chloronaphthalene					-		0.18	U	0.2	U	0.18	U	0.18	U		
3,3'-Dichlorobenzidine					-		0.18	U	0.2	U	0.18	U	0.18	U		
2,4-Dinitrotoluene					-		0.18	U	0.2	U	0.18	U	0.18	U		
2,6-Dinitrotoluene					-		0.18	U	0.2	U	0.18	U	0.18	U		
Fluoranthene	1000	1000	100	100	-		1.9		0.073	J	0.073	J	0.3			
4-Chlorophenyl phenyl ether					-		0.18	U	0.2	U	0.18	U	0.18	U		
4-Bromophenyl phenyl ether					-		0.18	U	0.2	U	0.18	U	0.18	U		
Bis(2-chloroisopropyl)ether					-		0.21	U	0.24	U	0.22	U	0.22	U		
Bis(2-chloroethoxy)methane					-		0.19	U	0.21	U	0.19	U	0.2	U		
Hexachlorobutadiene					-		0.18	U	0.2	U	0.18	U	0.18	U		
Hexachlorocyclopentadiene					-		0.51	U	0.57	U	0.52	U	0.52	U		
Hexachloroethane					-		0.14	U	0.16	U	0.14	U	0.14	U		
Isophorone					-		0.16	U	0.18	U	0.16	U	0.16	U		
Naphthalene	12	1000	100	12	-		0.14	J	0.2	U	0.18	U	0.091	J		
Nitrobenzene					-		0.16	U	0.18	U	0.16	U	0.16	U		
NDPA/DPA					-		0.14	U	0.16	U	0.14	U	0.14	U		
n-Nitrosodi-n-propylamine					-		0.18	U	0.2	U	0.18	U	0.18	U		
Bis(2-ethylhexyl)phthalate					-		4.8		0.52		0.12	J	2.2			
Butyl benzyl phthalate					-		0.18	U	0.2	U	0.18	U	0.47			
Di-n-butylphthalate					-		0.18	U	0.2	U	0.18	U	0.12	J		
Di-n-octylphthalate					-		0.18	U	0.2	U	0.18	U	0.18	U		
Diethyl phthalate					-		0.18	U	0.2	U	0.18	U	0.18	U		
Dimethyl phthalate					-		0.18	U	0.2	U	0.18	U	0.18	U		
Benzo(a)anthracene	1	11	1	1	-		0.67		0.12	U	0.042	J	0.18			
Benzo(a)pyrene	22	1.1	1	1	-		0.45		0.16	U	0.047	J	0.21			
Benzo(b)fluoranthene	1.7	11	1	1	-		0.64		0.12	U	0.078	J	0.3			
Benzo(k)fluoranthene	1.7	110	3.9	0.8	-		0.25		0.12	U	0.11	U	0.1	J		
Chrysene	1	110	3.9	1	-		0.7		0.12	U	0.055	J	0.22			
Acenaphthylene	107	1000	100	100	-		0.06	J	0.16	U	0.14	U	0.034	J		
Anthracene	1000	1000	100	100	-		0.3		0.12	U	0.11	U	0.065	J		
Benzo(ghi)perylene	1000	1000	100	100	-		0.27		0.16	U	0.038	J	0.15			
Fluorene	386	1000	100	30	-		0.23		0.021	J	0.18	U	0.032	J		
Phenanthrene	1000	1000	100	100	-		0.83		0.066	J	0.037	J	0.19			
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	-		0.054	J	0.12	U	0.11	U	0.038	J		
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	-		0.23		0.16	U	0.04	J	0.14			
Pyrene	1000	1000	100	100	-		1.8		0.074	J	0.066	J	0.41			
Biphenyl					-		0.058	J	0.45	U	0.41	U	0.046	J		
4-Chloroaniline					-		0.18	U	0.2	U	0.18	U	0.18	U		
2-Nitroaniline					-		0.18	U	0.2	U	0.18	U	0.18	U		
3-Nitroaniline					-		0.18	U	0.2	U	0.18	U	0.18	U		
4-Nitroaniline					-		0.18	U	0.2	U	0.18	U	0.18	U		
Dibenzofuran	210	1000	59	7	-		0.1	J	0.2	U	0.18	U	0.18	U		
2-Methylnaphthalene					-		0.22		0.24	U	0.22	U	0.092	J		
1,2,4,5-Tetrachlorobenzene					-		0.2		0.2	U	0.18	U	0.16	J		
Acetophenone					-		0.18	U	0.2	U	0.18	U	0.18	U		

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				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					-		0.11	U	0.12	U	0.11	U	0.11	U		
p-Chloro-m-cresol					-		0.18	U	0.2	U	0.18	U	0.18	U		
2-Chlorophenol					-		0.18	U	0.2	U	0.18	U	0.18	U		
2,4-Dichlorophenol					-		0.16	U	0.18	U	0.16	U	0.16	U		
2,4-Dimethylphenol					-		0.18	U	0.2	U	0.18	U	0.18	U		
2-Nitrophenol					-		0.38	U	0.43	U	0.39	U	0.39	U		
4-Nitrophenol					-		0.25	U	0.28	U	0.25	U	0.26	U		
2,4-Dinitrophenol					-		0.85	U	0.95	U	0.86	U	0.88	U		
4,6-Dinitro-o-cresol					-		0.46	U	0.52	U	0.47	U	0.47	U		
Pentachlorophenol	0.8	55	6.7	0.8	-		0.14	U	0.16	U	0.14	U	0.14	U		
Phenol	0.33	1000	100	0.33	-		0.18	U	0.2	U	0.18	U	0.036	J		
2-Methylphenol	0.33	1000	100	0.33	-		0.18	U	0.2	U	0.18	U	0.18	U		
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	-		0.07	J	0.28	U	0.26	U	0.26	U		
2,4,5-Trichlorophenol					-		0.18	U	0.2	U	0.18	U	0.18	U		
Carbazole					-		0.18	U	0.2	U	0.18	U	0.037	J		
Atrazine					-		0.14	U	0.16	U	0.14	U	0.14	U		
Benzaldehyde					-		0.23	U	0.26	U	0.24	U	0.24	U		
Caprolactam					-		0.18	U	0.2	U	0.18	U	0.18	U		
2,3,4,6-Tetrachlorophenol					-		0.18	U	0.2	U	0.18	U	0.18	U		
Total SVOCs					-	-	14.132	-	0.754	-	0.596	-	5.831	-		

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				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
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				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl							-	-	-	-	-	-				
Unknown Benzene							-	-	-	-	-	-				
Unknown							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Vitamin E							-	-	-	-	-	-				
Unknown Benzene							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown Biphenyl							-	-	-	-	-	-				
Unknown Organic Acid							-	-	-	-	-	-				
Unknown Alkane							-	-	-	-	-	-				
Unknown Alkane							-	-	-	-	-	-				
Unknown Benzene							-	-	-	-	-	-				
Unknown Naphthalene							-	-	-	-	-	-				
Unknown Benzene							-	-	-	-	-	-				
Unknown Biphenyl							-	-	-	-	-	-				
Cyclic Octaatomic Sulfur							-	-	-	-	-	-				
Unknown Naphthalene							-	-	-	-	-	-				
Unknown Biphenyl							-	-	-	-	-	-				
Unknown Benzene							-	-	-	-	-	-				
Unknown Alcohol							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown Biphenyl							-	-	-	-	-	-				
Unknown Alkane							-	-	-	-	-	-				
Unknown Alkane							-	-	-	-	-	-				
Unknown							-	-	-	-	-	-				
Unknown Alkane							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown Biphenyl							-	-	-	-	-	-				
Unknown Organic Acid							-	-	-	-	-	-				
Unknown Naphthalene							-	-	-	-	-	-				
Unknown Naphthalene							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown Benzene							-	-	-	-	-	-				
Unknown Phenol							-	-	-	-	-	-				
Unknown Alkane							-	-	-	-	-	-				
Unknown Naphthalene							-	-	-	-	-	-				
Unknown PAH							-	-	-	-	-	-				
Unknown							-	-	-	-	-	-				
Unknown Benzene							-	-	-	-	-	-				
Unknown							-	-	-	-	-	-				
Sulfur							-	-	0.255	NJ	0.42	NJ				
Unknown Thiophene							-	-	-	-	-	-				
Unknown Biphenyl							-	-	-	-	-	-				
Unknown Thiophene							-	-	-	-	-	-				

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-14 (12-14)	SB-15 (2-4)	SB-15 (8-10)	SB-16 (2-4)	SB-17 (2-4)	SB-17 (2-4)						
				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene																
Unknown Sulfur					-	-	-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phenol																
Unknown Biphenyl																
Unknown Alkane					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Phosphate																
Unknown Biphenyl																
Unknown Biphenyl																
Unknown Organic Acid																
Unknown Benzene																
2,2',3,3',4,5',6-Heptachlor...																
Unknown PAH					-	-	-	-	-	-	-	-	-	-	-	-
Unknown Alkane							0.22	J								
Unknown							0.356	J								
Unknown Benzene																
Unknown PAH																
Unknown Alkane							0.382	J	0.184	J						
Unknown Alkane							1.12	J								
Unknown							0.714	J								
Unknown							0.242	J								
Unknown Alkane							0.48	J	0.345	J						
Unknown Benzene																
Unknown							0.237	J								
Unknown Benzene																
Unknown Biphenyl																
Unknown Biphenyl																
Unknown Phenol							1.89	J								

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**Subsurface Soil Sample Results from Soil Borings**  
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				SAMPLE ID (Depth ft.)	SB-14 (12-14)	SB-15 (2-4)	SB-15 (8-10)	SB-16 (2-4)	SB-17 (2-4)	SB-17 (2-4)						
				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown					-		1.06	J	-		-					
Unknown PAH					-		-		-		-					
Unknown Naphthalene					-		0.911	J	-		-					
Unknown					-		1.21	J	-		-					
Unknown PAH					-		-		-		-					
Unknown Organic Acid					-		-		-		-					
Unknown					-		0.31	J	-		-					
Unknown					-		-		0.315	J	-					
Unknown					-		0.738	J	-		-					
Unknown Alkane					-		0.402	J	-		-					
Unknown Naphthalene					-		0.51	J	-		-					
Unknown Naphthalene					-		-		-		-					
Unknown Alkane					-		0.309	J	-		-					
Unknown Alkane													-			
Unknown													-			
Unknown Alkane													-			
Unknown Alkane													214	J		
Sulfur													589	NJ		
Unknown PAH													-			
Unknown Naphthalene													-			
Unknown Naphthalene													-			
Unknown Naphthalene													-			
Unknown Alkane													-			
Cyclic Octaatomic Sulfur													-			
Unknown Benzene													-			
Unknown Alkane													-			
Unknown Naphthalene													-			
Unknown Benzene													-			
Unknown Naphthalene													-			
Unknown Naphthalene													-			
Unknown Benzene													-			
Unknown Alkane													-			
Unknown													-			
Unknown PAH													-			
Unknown Alkane													-			
Unknown Benzene													-			
Unknown Naphthalene													-			
Unknown													-			
Unknown													-			
Unknown Alkane													-			
Unknown Alkane													-			
Unknown													-			
Unknown Benzene													-			
Unknown Alkane													-			
No Tentatively Identified Compounds													-			
Unknown PAH													-			
Unknown Alkane													-			

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-14 (12-14)	SB-15 (2-4)	SB-15 (8-10)	SB-16 (2-4)	SB-17 (2-4)	SB-17 (2-4)						
				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown Alkane																
Unknown																
Sulfur																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown Naphthalene																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Naphthalene																
Unknown Naphthalene																
Cyclic Octaatomic Sulfur																
Unknown Alkane																
Total SVOCs TICs							11.091		1.099		0.42		803		-	

Notes:  
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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
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**Green Island, New York**

		SAMPLE ID (Depth ft.)				SB-14 (12-14)		SB-15 (2-4)		SB-15 (8-10)		SB-16 (2-4)		SB-17 (2-4)		SB-17 (2-4)	
		Monitoring Well ID				MW-2		MW-4		MW-4		MW-5		MW-8		MW-8	
		LAB ID:				L1701349-07 R2		L1701349-01		L1701349-02		L1701349-03		L1701867-01		L1701867-01 R1	
		COLLECTION DATE:				1/10/2017		1/11/2017		1/11/2017		1/11/2017		1/16/2017		1/16/2017	
		Groundwater Protection Soil Cleanup Objective				IUSCO		RRSCO		UUSCO							
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>CHLORINATED HERBICIDES BY GC</b>																	
MCPP					-		3.55	U	3.92	U	3.6	U	3.72	U	-		
MCPA					-		3.55	U	3.92	U	3.6	U	3.72	U	-		
Dalapon					-		0.0355	U	0.0392	U	0.036	U	0.0372	U	-		
Dicamba					-		0.0355	U	0.0392	U	0.036	U	0.0372	U	-		
Dichloroprop					-		0.0355	U	0.0392	U	0.036	U	0.0372	U	-		
2,4-DB					-		0.177	U	0.196	U	0.18	U	0.186	U	-		
Dinoseb					-		0.0355	U	0.0392	U	0.036	U	0.186	U	-		
2,4-D					-		0.177	U	0.196	U	0.18	U	0.186	U	-		
2,4,5-T					-		0.177	U	0.196	U	0.18	U	0.186	U	-		
2,4,5-TP (Silvex)	3.8	1000	100	3.8	-		0.177	U	0.196	U	0.18	U	0.0372	U	-		
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																	
Delta-BHC	0.25	1000	100	0.04	-		0.00169	U	0.00183	U	0.00171	U	0.00172	U	-		
Lindane	0.1	23	1.3	0.1	-		0.000705	U	0.000763	U	0.000714	U	0.000715	U	-		
Alpha-BHC	0.02	6.8	0.48	0.02	-		0.000705	U	0.000763	U	0.000714	U	0.000715	U	-		
Beta-BHC	0.09	14	0.36	0.036	-		0.00169	U	0.00183	U	0.00171	U	0.00172	U	-		
Heptachlor	0.38	29	2.1	0.042	-		0.000846	U	0.000916	U	0.000857	U	0.0243	P	-		
Aldrin	0.19	1.4	0.097	0.005	-		0.00169	U	0.00183	U	0.00171	U	0.00172	U	-		
Heptachlor epoxide					-		0.00317	U	0.00344	U	0.00321	U	0.114	P	-		
Endrin	0.06	410	11	0.014	-		0.000705	U	0.0032	P	0.000714	U	0.0191	P	-		
Endrin aldehyde					-		0.00211	U	0.00229	U	0.00214	U	0.00214	U	-		
Endrin ketone					-		0.00169	U	0.00183	U	0.00171	U	0.00172	U	-		
Dieldrin	0.1	2.8	0.2	0.005	-		0.00106	U	0.00286	PI	0.00107	U	0.0207	P	-		
4,4'-DDE	17	120	8.9	0.0033	-		0.00169	U	0.00183	U	0.00171	U	0.00172	U	-		
4,4'-DDD	14	180	13	0.0033	-		0.00169	U	0.00183	U	0.00171	U	0.00172	U	-		
4,4'-DDT	136	94	7.9	0.0033	-		0.00317	U	0.00344	U	0.00321	U	0.212	E	0.238	P	
Endosulfan I	102	920	24	2.4	-		0.00169	U	0.00183	U	0.00171	U	0.00641	P	-		
Endosulfan II	102	920	24	2.4	-		0.00169	U	0.00136	JPI	0.00171	U	0.0758	P	-		
Endosulfan sulfate	1000	920	24	2.4	-		0.000705	U	0.000763	U	0.000714	U	0.000715	U	-		
Methoxychlor					-		0.00317	U	0.00344	U	0.00321	U	0.00674	-	-		
Toxaphene					-		0.0317	U	0.0344	U	0.0321	U	0.0322	U	-		
cis-Chlordane	2.9	47	4.2	0.094	-		0.00211	U	0.00229	U	0.00214	U	0.00214	U	-		
trans-Chlordane					-		0.00211	U	0.00229	U	0.00214	U	0.00214	U	-		
Chlordane					-		0.0137	U	0.0149	U	0.0139	U	0.0139	U	-		
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																	
Aroclor 1016	3.2	25	1	0.1	-		1.74	U	0.0378	U	0.0359	U	0.181	U	-		
Aroclor 1221	3.2	25	1	0.1	-		1.74	U	0.0378	U	0.0359	U	0.181	U	-		
Aroclor 1232	3.2	25	1	0.1	-		1.74	U	0.0378	U	0.0359	U	0.181	U	-		
Aroclor 1242	3.2	25	1	0.1	-		6.65		0.476		0.122		1.39	P	-		
Aroclor 1248	3.2	25	1	0.1	-		1.74	U	0.0378	U	0.0359	U	0.181	U	-		
Aroclor 1254	3.2	25	1	0.1	-		9		0.366		0.189		1.83		-		
Aroclor 1260	3.2	25	1	0.1	-		1.38	J	0.106		0.0369		0.61		-		
Aroclor 1262	3.2	25	1	0.1	-		1.74	U	0.0378	U	0.0359	U	0.181	U	-		
Aroclor 1268	3.2	25	1	0.1	-		1.74	U	0.0378	U	0.0359	U	0.181	U	-		
PCBs, Total	3.2	25	1	0.1	-		17	J	0.948		0.348		3.83		-		

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				SAMPLE ID (Depth ft.)	SB-14 (12-14)	SB-15 (2-4)	SB-15 (8-10)	SB-16 (2-4)	SB-17 (2-4)	SB-17 (2-4)						
				Monitoring Well ID	MW-2	MW-4	MW-4	MW-5	MW-8	MW-8						
				LAB ID:	L1701349-07 R2	L1701349-01	L1701349-02	L1701349-03	L1701867-01	L1701867-01 R1						
				COLLECTION DATE:	1/10/2017	1/11/2017	1/11/2017	1/11/2017	1/16/2017	1/16/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>																
Aluminum, Total					-		7100		8000		7200		11000			
Antimony, Total					-		4.2	U	4.7	U	4.4	U	9.2			
Arsenic, Total	16	16	16	13	-		4.1		5.6		6.4		9.1			
Barium, Total	820	10000	400	350	-		140		44		150		140			
Beryllium, Total	47	2700	72	7.2	-		0.66		0.36	J	0.25	J	0.44			
Cadmium, Total	7.5	60	4.3	2.5	-		0.43	J	0.32	J	0.95		5.5			
Calcium, Total					-		26000		5000		3700		9800			
Chromium, Total					-		22		16		17		58			
Cobalt, Total					-		3.6		7.2		7.3		21			
Copper, Total	1720	10000	270	50	-		30		42		150		280			
Iron, Total					-		20000		18000		24000		35000			
Lead, Total	450	3900	400	63	-		170		13		540		490			
Magnesium, Total					-		6400		4600		3700		5500			
Manganese, Total	2000	10000	2000	1600	-		550		280		470		830			
Mercury, Total	0.73	5.7	0.81	0.18	-		0.43		0.03	J	0.8		1.2			
Nickel, Total	130	10000	310	30	-		15		18		21		79			
Potassium, Total					-		660		580		520		650			
Selenium, Total	4	6800	180	3.9	-		1.7	U	1.9	U	1.7	U	1.7	U		
Silver, Total	8.3	6800	180	2	-		0.84	U	0.94	U	0.87	U	0.45	J		
Sodium, Total					-		500		110	J	320		240			
Thallium, Total					-		1.7	U	1.9	U	1.7	U	1.7	U		
Vanadium, Total					-		15		16		17		28			
Zinc, Total	2480	10000	10000	109	-		86		57		430		490			
<b>GENERAL CHEMISTRY</b>																
Solids, Total					-		92.6		83.8		90.4		89.2			
Cyanide, Total	40	10000	27	27	-		6.9		1.2	U	1	U	0.81	J		

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				SAMPLE ID (Depth ft.)	SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)						
				Monitoring Well ID	MW-8	MW-7	MW-7									
				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	0.05	1000	100	0.05	0.0025	J	0.0025	J	0.0032	J	0.0025	J	0.0019	J	0.0025	J
1,1-Dichloroethane	0.27	480	26	0.27	0.0017	U	0.0017	U	0.002	U	0.0017	U	0.0017	U	0.0017	U
Chloroform	0.37	700	49	0.37	0.0017	U	0.0017	U	0.002	U	0.0017	U	0.0017	U	0.0017	U
Carbon tetrachloride	0.76	44	2.4	0.76	0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
1,2-Dichloropropane					0.0039	U	0.0039	U	0.0048	U	0.004	U	0.004	U	0.0039	U
Dibromochloromethane					0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
1,1,2-Trichloroethane					0.0017	U	0.0017	U	0.002	U	0.0017	U	0.0017	U	0.0017	U
Tetrachloroethene	1.3	300	19	1.3	0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
Chlorobenzene	1.1	1000	100	1.1	0.00055	J	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
Trichlorofluoromethane					0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
Bromodichloromethane					0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
trans-1,3-Dichloropropene					0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
cis-1,3-Dichloropropene					0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
1,3-Dichloropropene, Total																
Bromoform					0.0045	U	0.0044	U	0.0055	U	0.0045	U	0.0046	U	0.0045	U
1,1,2,2-Tetrachloroethane					0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
Benzene	0.06	89	4.8	0.06	0.00035	J	0.00034	J	0.0024	U	0.0011	U	0.0012	U	0.0011	U
Toluene	0.7	1000	100	0.7	0.00041	J	0.00032	J	0.002	U	0.0017	U	0.0017	U	0.0017	U
Ethylbenzene	1	780	41	1	0.00056	J	0.00047	J	0.0014	U	0.0011	U	0.0012	U	0.0011	U
Chloromethane					0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
Bromomethane					0.0022	U	0.0022	U	0.0027	U	0.0022	U	0.0023	U	0.0022	U
Vinyl chloride	0.02	27	0.9	0.02	0.0022	U	0.0022	U	0.0027	U	0.0022	U	0.0023	U	0.0022	U
Chloroethane					0.0022	U	0.0022	U	0.0027	U	0.0022	U	0.0023	U	0.0022	U
1,1-Dichloroethene	0.33	1000	100	0.33	0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0017	U	0.0017	U	0.002	U	0.0017	U	0.0017	U	0.0017	U
Trichloroethene	0.47	400	21	0.47	0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
1,3-Dichlorobenzene	2.4	560	49	2.4	0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
1,4-Dichlorobenzene	1.8	250	13	1.8	0.00016	J	0.00055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
Methyl tert butyl ether	0.93	1000	100	0.93	0.0022	U	0.0022	U	0.0065	U	0.0022	U	0.0023	U	0.0029	U
p/m-Xylene					0.002	J	0.0019	J	0.0027	U	0.0022	U	0.0023	U	0.0022	U
o-Xylene					0.0014	J	0.0012	J	0.0027	U	0.0022	U	0.0023	U	0.0022	U
Xylenes, Total	1.6	1000	100	0.26												
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0011	U	0.0011	U	0.0014	U	0.0011	U	0.0012	U	0.0011	U
1,2-Dichloroethene, Total																
Styrene					0.0022	U	0.0007	J	0.0027	U	0.0022	U	0.0023	U	0.0022	U
Dichlorodifluoromethane					0.011	U	0.011	U	0.014	U	0.011	U	0.012	U	0.011	U
Acetone	0.05	1000	100	0.05	0.057		0.069		0.015		0.072		0.036		0.01	J
Carbon disulfide					0.0032	J	0.0016	J	0.014	U	0.011	U	0.0016	J	0.011	U
2-Butanone	0.12	1000	100	0.12	0.01	J	0.0082	J	0.014	U	0.011	U	0.0062	J	0.011	U
4-Methyl-2-pentanone					0.011	U	0.011	U	0.014	U	0.011	U	0.012	U	0.011	U
2-Hexanone					0.011	U	0.011	U	0.014	U	0.011	U	0.012	U	0.011	U
Bromochloromethane					0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
1,2-Dibromoethane					0.0045	U	0.0044	U	0.0055	U	0.0045	U	0.0046	U	0.0045	U
n-Butylbenzene	12	1000	100	12												
sec-Butylbenzene	11	1000	100	11												
tert-Butylbenzene	5.9	1000	100	5.9												
1,2-Dibromo-3-chloropropane					0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
Isopropylbenzene					0.00013	J	0.00036	J	0.0014	U	0.0011	U	0.0012	U	0.0011	U
p-Isopropyltoluene																
Naphthalene	12	1000	100	12												
n-Propylbenzene	3.9	1000	100	3.9												
1,2,3-Trichlorobenzene					0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U
1,2,4-Trichlorobenzene					0.0056	U	0.0055	U	0.0068	U	0.0056	U	0.0058	U	0.0056	U

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)		SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)							
		Monitoring Well ID		MW-8	MW-7	MW-7										
		LAB ID:		L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07							
		COLLECTION DATE:		1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017							
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,3,5-Trimethylbenzene	8.4	380	52	8.4												
1,2,4-Trimethylbenzene	3.6	380	52	3.6												
Methyl Acetate					0.022	U	0.022	U	0.027	U	0.022	U	0.023	U	0.022	U
Cyclohexane					0.022	U	0.022	U	0.027	U	0.022	U	0.023	U	0.022	U
1,4-Dioxane	0.1	250	13	0.1	0.11	U	0.11	U	0.14	U	0.11	U	0.12	U	0.11	U
Freon-113					0.022	U	0.022	U	0.027	U	0.022	U	0.023	U	0.022	U
Methyl cyclohexane					0.00054	J	0.0044	U	0.0055	U	0.0045	U	0.0046	U	0.0045	U
Total VOCs					0.0788	-	0.08659	-	0.0271	-	0.0745	-	0.0457	-	0.0154	-

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				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Pentane, 2-methyl-																
Unknown Alkane																
Unknown Benzene																
Pentane, 2,3,3-trimethyl-																
Unknown Benzene																
Unknown																
Unknown Aromatic																
Unknown Benzene																
Undecane, 2,6-dimethyl-																
Unknown Cycloalkane																
Pentane																
Tridecane, 7-methyl-																
Unknown																
Unknown Benzene																
Unknown																
Dodecane, 2,6,10-trimethyl-																
Unknown Cyclohexane																
Unknown Benzene																
Pentane, 2,3,4-trimethyl-																
Unknown Naphthalene																
Fluorodichloromethane																
Unknown Alkane																
Ethane, 1-chloro-1-fluoro-																
Butane, 2-Methyl-																
n-Hexane																
Unknown Alkane																
Decane, 3,7-dimethyl-																
Unknown Benzene																
Undecane																
Unknown																
Unknown																
Cyclotrisiloxane, Hexamethyl-																
Unknown Alkane																
Unknown Naphthalene																
Dimethyl sulfide																
Unknown																

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		COLLECTION DATE:		1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017							
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Cyclopentane																
Unknown Benzene																
Unknown Aromatic																
Unknown																
Unknown																
Tridecane																
Unknown																
1-Pentene																
Ethane, 1,1-Difluoro-																
Unknown Aromatic																
Unknown Naphthalene																
Unknown Aromatic																
Unknown																
Unknown Cyclohexane																
Unknown					3.43	J	-	-	-	-	-	-	-	-	-	-
Unknown					3.27	J	41.3	J	5.53	J	4.88	J	2.64	J	4.67	J
Unknown Benzene							22.4	J	-	-	-	-	-	-	-	-
No Tentatively Identified Compounds																
Tridecane, 7-methyl-																
Unknown Alkane					13.1	J	33	J	-	-	-	-	-	-	-	-
Unknown Aromatic							36.8	J	-	-	-	-	-	-	-	-
Pentane, 2,3,4-trimethyl-					7.19	NJ	-	-	-	-	-	-	-	-	-	-
Unknown Naphthalene							22.2	J	-	-	-	-	-	-	-	-
Dodecane, 2,6,10-trimethyl-																
Unknown Alkane							23.3	J	-	-	-	-	-	-	-	-
Unknown					3.79	J	56.2	J	5.34	J	12	J	4.82	J	5.5	J
Unknown Alkane					10.5	J	30.3	J	-	-	-	-	-	-	-	-
Unknown					2.62	J	23.3	J	-	-	-	-	3.78	J	-	-
Unknown																
Unknown					5.3	J	24.4	J	-	-	6.02	J	5.46	J	2.47	J
Unknown																
Unknown																
Unknown																
Unknown Naphthalene																
Fluorodichloromethane																
Unknown																
Unknown																
Ethane, 1-chloro-1-fluoro-																
Unknown																
Pentane, 2-methyl-																
Unknown																
Unknown																
Unknown																
Unknown Cyclohexane																
Total TIC Compounds					49.2		313.2		10.87		16.88		16.7		12.64	

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				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	98	1000	100	20	0.14	U	0.15	U	0.18	U	0.74	U	0.15	U	0.14	U
Hexachlorobenzene	3.2	12	1.2	0.33	0.11	U	0.11	U	0.14	U	0.56	U	0.11	U	0.11	U
Bis(2-chloroethyl)ether					0.16	U	0.16	U	0.2	U	0.84	U	0.17	U	0.16	U
2-Chloronaphthalene					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
3,3'-Dichlorobenzidine					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
2,4-Dinitrotoluene					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
2,6-Dinitrotoluene					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Fluoranthene	1000	1000	100	100	0.11	U	0.11	U	0.14		0.13	J	0.036	J	0.11	U
4-Chlorophenyl phenyl ether					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
4-Bromophenyl phenyl ether					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Bis(2-chloroisopropyl)ether					0.22	U	0.22	U	0.27	U	1.1	U	0.23	U	0.22	U
Bis(2-chloroethoxy)methane					0.2	U	0.2	U	0.24	U	1	U	0.2	U	0.2	U
Hexachlorobutadiene					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Hexachlorocyclopentadiene					0.52	U	0.52	U	0.65	U	2.7	U	0.54	U	0.52	U
Hexachloroethane					0.14	U	0.15	U	0.18	U	0.74	U	0.15	U	0.14	U
Isophorone					0.16	U	0.16	U	0.2	U	0.84	U	0.17	U	0.16	U
Naphthalene	12	1000	100	12	0.18	U	0.18	U	0.19	J	0.93	U	0.19	U	0.18	U
Nitrobenzene					0.16	U	0.16	U	0.2	U	0.84	U	0.17	U	0.16	U
NDPA/DPA					0.14	U	0.15	U	0.18	U	0.74	U	0.15	U	0.14	U
n-Nitrosodi-n-propylamine					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Bis(2-ethylhexyl)phthalate					0.18	U	0.22		1.3		0.93	U	0.19	U	0.18	U
Butyl benzyl phthalate					0.18	U	0.18	U	0.29		0.93	U	0.19	U	0.18	U
Di-n-butylphthalate					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Di-n-octylphthalate					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Diethyl phthalate					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Dimethyl phthalate					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Benzo(a)anthracene	1	11	1	1	0.11	U	0.11	U	0.067	J	0.12	J	0.024	J	0.11	U
Benzo(a)pyrene	22	1.1	1	1	0.14	U	0.15	U	0.086	J	0.74	U	0.15	U	0.14	U
Benzo(b)fluoranthene	1.7	11	1	1	0.11	U	0.11	U	0.11	J	0.56	U	0.11	U	0.11	U
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.11	U	0.11	U	0.037	J	0.56	U	0.11	U	0.11	U
Chrysene	1	110	3.9	1	0.11	U	0.11	U	0.074	J	0.2	J	0.026	J	0.11	U
Acenaphthylene	107	1000	100	100	0.14	U	0.15	U	0.18	U	0.74	U	0.15	U	0.14	U
Anthracene	1000	1000	100	100	0.11	U	0.11	U	0.14	U	0.56	U	0.11	U	0.11	U
Benzo(ghi)perylene	1000	1000	100	100	0.14	U	0.15	U	0.083	J	0.74	U	0.15	U	0.14	U
Fluorene	386	1000	100	30	0.18	U	0.18	U	0.04	J	0.93	U	0.19	U	0.18	U
Phenanthrene	1000	1000	100	100	0.11	U	0.11	U	0.12	J	0.56	U	0.023	J	0.11	U
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.11	U	0.11	U	0.14	U	0.56	U	0.11	U	0.11	U
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.14	U	0.15	U	0.073	J	0.74	U	0.15	U	0.14	U
Pyrene	1000	1000	100	100	0.11	U	0.11	U	0.13	J	0.21	J	0.036	J	0.11	U
Biphenyl					0.41	U	0.42	U	0.52	U	2.1	U	0.43	U	0.42	U
4-Chloroaniline					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
2-Nitroaniline					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
3-Nitroaniline					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
4-Nitroaniline					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Dibenzofuran	210	1000	59	7	0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
2-Methylnaphthalene					0.22	U	0.026	J	0.19	J	1.1	U	0.23	U	0.22	U
1,2,4,5-Tetrachlorobenzene					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U
Acetophenone					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U

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				LAB ID:		L1701867-02		L1701867-03		L1701867-04		L1701867-05		L1701867-06		L1701867-07	
				COLLECTION DATE:		1/16/2017		1/17/2017		1/17/2017		1/18/2017		1/18/2017		1/18/2017	
		Groundwater Protection Soil Cleanup Objective		IUSCO		RRSCO		UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
2,4,6-Trichlorophenol					0.11	U	0.11	U	0.14	U	0.56	U	0.11	U	0.11	U	
p-Chloro-m-cresol					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
2-Chlorophenol					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
2,4-Dichlorophenol					0.16	U	0.16	U	0.2	U	0.84	U	0.17	U	0.16	U	
2,4-Dimethylphenol					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
2-Nitrophenol					0.39	U	0.4	U	0.49	U	2	U	0.41	U	0.39	U	
4-Nitrophenol					0.25	U	0.26	U	0.32	U	1.3	U	0.27	U	0.26	U	
2,4-Dinitrophenol					0.87	U	0.88	U	1.1	U	4.5	U	0.91	U	0.88	U	
4,6-Dinitro-o-cresol					0.47	U	0.48	U	0.59	U	2.4	U	0.5	U	0.47	U	
Pentachlorophenol	0.8	55	6.7	0.8	0.14	U	0.15	U	0.18	U	0.74	U	0.15	U	0.14	U	
Phenol	0.33	1000	100	0.33	0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
2-Methylphenol	0.33	1000	100	0.33	0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.26	U	0.26	U	0.33	U	1.3	U	0.27	U	0.26	U	
2,4,5-Trichlorophenol					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
Carbazole					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
Atrazine					0.14	U	0.15	U	0.18	U	0.74	U	0.15	U	0.14	U	
Benzaldehyde					0.24	U	0.24	U	0.3	U	1.2	U	0.25	U	0.24	U	
Caprolactam					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
2,3,4,6-Tetrachlorophenol					0.18	U	0.18	U	0.23	U	0.93	U	0.19	U	0.18	U	
Total SVOCs					-	-	0.246	-	2.93	-	0.66	-	0.145	-	-	-	

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)						
				Monitoring Well ID	MW-8	MW-7	MW-7									
				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl																
Unknown Benzene																
Unknown																
Unknown PAH																
Vitamin E																
Unknown Benzene																
Unknown PAH																
Unknown PAH																
Unknown PAH																
Unknown PAH																
Unknown Biphenyl																
Unknown Organic Acid																
Unknown Alkane																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Biphenyl																
Cyclic Octaatomic Sulfur																
Unknown Naphthalene																
Unknown Biphenyl																
Unknown Benzene																
Unknown Alcohol																
Unknown PAH																
Unknown Biphenyl																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown PAH																
Unknown Biphenyl																
Unknown Organic Acid																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown PAH																
Unknown Benzene																
Unknown Phenol																
Unknown Alkane																
Unknown Naphthalene																
Unknown PAH																
Unknown																
Unknown Benzene																
Unknown																
Sulfur																
Unknown Thiophene																
Unknown Biphenyl																
Unknown Thiophene																

Notes:  
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				SAMPLE ID (Depth ft.)	SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)		
				Monitoring Well ID	MW-8	MW-7	MW-7					
				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07		
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene												
Unknown Sulfur												
Unknown PAH												
Unknown Phenol												
Unknown Biphenyl												
Unknown Alkane												
Unknown Phosphate												
Unknown Biphenyl												
Unknown Biphenyl												
Unknown Organic Acid												
Unknown Benzene												
2,2',3,3',4,5',6-Heptachlor...												
Unknown PAH												
Unknown Alkane												
Unknown												
Unknown Benzene												
Unknown PAH												
Unknown Alkane												
Unknown Alkane												
Unknown												
Unknown												
Unknown Alkane												
Unknown Benzene												
Unknown												
Unknown Benzene												
Unknown Biphenyl												
Unknown Biphenyl												
Unknown Phenol												

Notes:  
mg/Kg = Milligram per kilogram  
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**TABLE 4**  
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				SAMPLE ID (Depth ft.)	SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)						
				Monitoring Well ID	MW-8	MW-7	MW-7									
				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown																
Unknown PAH																
Unknown Naphthalene																
Unknown																
Unknown PAH																
Unknown Organic Acid																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown Alkane																
Sulfur					160	NJ	551	NJ	795	NJ			321	NJ		
Unknown PAH																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Alkane																
Cyclic Octaatomic Sulfur					3290	NJ									321	NJ
Unknown Benzene																
Unknown Alkane																
Unknown Naphthalene																
Unknown Benzene																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Benzene																
Unknown Alkane																
No Tentatively Identified Compounds																
Unknown PAH																
Unknown Alkane																

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
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**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)						
				Monitoring Well ID	MW-8	MW-7	MW-7									
				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane																
Unknown Naphthalene																
Unknown																
Unknown																
Unknown Alkane																
Unknown																
Sulfur																
Unknown Alkane																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown Naphthalene																
Unknown																
Unknown PAH																
Unknown PAH																
Unknown																
Unknown																
Unknown																
Unknown Alkane																
Unknown Naphthalene																
Unknown Naphthalene																
Cyclic Octaatomic Sulfur																
Unknown Alkane																
Total SVOCs TICs					3450	-	12805	-	7169	-	-	-	481	-	321	-

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
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				SAMPLE ID (Depth ft.)	SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)						
				Monitoring Well ID	MW-8	MW-7	MW-7									
				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
<b>CHLORINATED HERBICIDES BY GC</b>																
MCPP					3.67	U	3.63	U	4.49	U	3.71	U	3.85	U	3.72	U
MCPA					3.67	U	3.63	U	4.49	U	3.71	U	3.85	U	3.72	U
Dalapon					0.0367	U	0.0363	U	0.0449	U	0.0371	U	0.0385	U	0.0372	U
Dicamba					0.0367	U	0.0363	U	0.0449	U	0.0371	U	0.0385	U	0.0372	U
Dichloroprop					0.0367	U	0.0363	U	0.0449	U	0.0371	U	0.0385	U	0.0372	U
2,4-DB					0.183	U	0.182	U	0.224	U	0.185	U	0.193	U	0.186	U
Dinoseb					0.183	U	0.182	U	0.224	U	0.185	U	0.193	U	0.186	U
2,4-D					0.183	U	0.182	U	0.224	U	0.185	U	0.193	U	0.186	U
2,4,5-T					0.183	U	0.182	U	0.224	U	0.185	U	0.193	U	0.186	U
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.0367	U	0.0363	U	0.0449	U	0.0371	U	0.0385	U	0.0372	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																
Delta-BHC	0.25	1000	100	0.04	0.00173	U	0.0017	U	0.00207	U	0.00148	J	0.0018	U	0.00172	U
Lindane	0.1	23	1.3	0.1	0.000719	U	0.000707	U	0.0197	P	0.000612	JPI	0.000751	U	0.000718	U
Alpha-BHC	0.02	6.8	0.48	0.02	0.000719	U	0.000707	U	0.000864	U	0.000731	U	0.000751	U	0.000718	U
Beta-BHC	0.09	14	0.36	0.036	0.00173	U	0.0017	U	0.00207	U	0.00176	U	0.0018	U	0.00172	U
Heptachlor	0.38	29	2.1	0.042	0.000863	U	0.000848	U	0.00104	U	0.000878	U	0.000902	U	0.000862	U
Aldrin	0.19	1.4	0.097	0.005	0.00173	U	0.0017	U	0.00207	U	0.00176	U	0.0018	U	0.00172	U
Heptachlor epoxide					0.00324	U	0.00318	U	0.00388	U	0.0011	JPI	0.00338	U	0.00323	U
Endrin	0.06	410	11	0.014	0.000719	U	0.000707	U	0.000864	U	0.00156	U	0.00109	U	0.000718	U
Endrin aldehyde					0.00216	U	0.00212	U	0.00259	U	0.00219	U	0.00225	U	0.00216	U
Endrin ketone					0.00173	U	0.0017	U	0.00207	U	0.00176	U	0.0018	U	0.00172	U
Dieldrin	0.1	2.8	0.2	0.005	0.00168	P	0.00106	U	0.00161	P	0.00207	P	0.00152	P	0.00108	U
4,4'-DDE	17	120	8.9	0.0033	0.00173	U	0.0017	U	0.00207	U	0.00176	U	0.0018	U	0.00172	U
4,4'-DDD	14	180	13	0.0033	0.00173	U	0.0017	U	0.00207	U	0.00105	J	0.0018	U	0.00172	U
4,4'-DDT	136	94	7.9	0.0033	0.00324	U	0.00318	U	0.00388	U	0.00222	JPI	0.00332	J	0.00323	U
Endosulfan I	102	920	24	2.4	0.00173	U	0.0017	U	0.00207	U	0.00176	U	0.00209	P	0.00172	U
Endosulfan II	102	920	24	2.4	0.00128	J	0.0017	U	0.00269	P	0.00176	U	0.0018	U	0.00172	U
Endosulfan sulfate	1000	920	24	2.4	0.000719	U	0.000707	U	0.000864	U	0.000731	U	0.000751	U	0.000718	U
Methoxychlor					0.00324	U	0.00318	U	0.00388	U	0.00329	U	0.00338	U	0.00323	U
Toxaphene					0.0324	U	0.0318	U	0.0388	U	0.0329	U	0.0338	U	0.0323	U
cis-Chlordane	2.9	47	4.2	0.094	0.00216	U	0.00212	U	0.00259	U	0.00219	U	0.00225	U	0.00216	U
trans-Chlordane					0.00216	U	0.00212	U	0.0518	U	0.00231	PI	0.00235	PI	0.00216	U
Chlordane					0.014	U	0.0138	U	0.0168	U	0.0143	U	0.0146	U	0.014	U
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																
Aroclor 1016	3.2	25	1	0.1	0.0359	U	0.0348	U	0.0446	U	0.0367	U	0.0369	U	0.0353	U
Aroclor 1221	3.2	25	1	0.1	0.0359	U	0.0348	U	0.0446	U	0.0367	U	0.0369	U	0.0353	U
Aroclor 1232	3.2	25	1	0.1	0.0359	U	0.0348	U	0.0446	U	0.0367	U	0.0369	U	0.0353	U
Aroclor 1242	3.2	25	1	0.1	0.029	J	0.0393	U	0.241	U	0.0586	U	0.0796	P	0.0353	U
Aroclor 1248	3.2	25	1	0.1	0.0359	U	0.0348	U	0.0446	U	0.0367	U	0.0369	U	0.0353	U
Aroclor 1254	3.2	25	1	0.1	0.034	J	0.0303	J	0.107	U	0.0508	U	0.0468	U	0.0353	U
Aroclor 1260	3.2	25	1	0.1	0.0227	J	0.0113	J	0.114	U	0.024	J	0.0178	J	0.0353	U
Aroclor 1262	3.2	25	1	0.1	0.0359	U	0.0348	U	0.0446	U	0.0367	U	0.0369	U	0.0353	U
Aroclor 1268	3.2	25	1	0.1	0.0359	U	0.0348	U	0.0446	U	0.0367	U	0.0369	U	0.0353	U
PCBs, Total	3.2	25	1	0.1	0.0857	J	0.0809	J	0.462	U	0.133	J	0.144	J	0.0353	U

Notes:  
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**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-17 (6-8)	SB-18 (4-6)	SB-18 (10-12)	SB-19 (0-2)	SB-19 (4-7.5)	SB-19 (10-12)						
				Monitoring Well ID	MW-8	MW-7	MW-7									
				LAB ID:	L1701867-02	L1701867-03	L1701867-04	L1701867-05	L1701867-06	L1701867-07						
				COLLECTION DATE:	1/16/2017	1/17/2017	1/17/2017	1/18/2017	1/18/2017	1/18/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>																
Aluminum, Total					9700		7700		8400		4900		7100		9300	
Antimony, Total					4.3	U	4.2	U	5.3	U	8.7		4.4	U	4.2	U
Arsenic, Total	16	16	16	13	7		3.9		8.2		4.6		3.5		7.2	
Barium, Total	820	10000	400	350	67		32		68		57		31		48	
Beryllium, Total	47	2700	72	7.2	0.37	J	0.23	J	0.23	J	0.13	J	0.22	J	0.27	J
Cadmium, Total	7.5	60	4.3	2.5	0.86	U	0.85	U	1	U	3.3		0.89	U	0.85	U
Calcium, Total					2800		1100		32000		44000		1300		28000	
Chromium, Total					18		10		12		440		11		13	
Cobalt, Total					9.4		6.6		9.8		8.1		6.6		9.1	
Copper, Total	1720	10000	270	50	48		22		29		200		20		39	
Iron, Total					25000		17000		21000		31000		17000		20000	
Lead, Total	450	3900	400	63	30		9.5		13		190		9.1		10	
Magnesium, Total					4800		3500		8800		19000		3400		8400	
Manganese, Total	2000	10000	2000	1600	490		510		630		370		950		680	
Mercury, Total	0.73	5.7	0.81	0.18	0.071	J	0.02	J	0.04	J	0.33		0.02	J	0.02	J
Nickel, Total	130	10000	310	30	24		15		19		200		15		18	
Potassium, Total					740		560		720		530		430		690	
Selenium, Total	4	6800	180	3.9	1.7	U	1.7	U	2.1	U	1.7	U	1.8	U	1.7	U
Silver, Total	8.3	6800	180	2	0.86	U	0.85	U	1	U	0.55	J	0.89	U	0.85	U
Sodium, Total					73	J	190		190	J	250		72	J	92	J
Thallium, Total					1.7	U	1.7	U	2.1	U	1.7	U	1.8	U	1.7	U
Vanadium, Total					19		12		15		29		14		15	
Zinc, Total	2480	10000	10000	109	81		53		60		360		46		74	
<b>GENERAL CHEMISTRY</b>																
Solids, Total					89		90.2		73.2		88.5		86.3		89.1	
Cyanide, Total	40	10000	27	27	1.1	U	1.1	U	1.3	U	1.1	U	1.1	U	1.1	U

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**Subsurface Soil Sample Results from Soil Borings**  
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**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	0.05	1000	100	0.05	0.013	U	-	0.011	U	0.0027	J	0.0018	J	0.0027	J	
1,1-Dichloroethane	0.27	480	26	0.27	0.0019	U	-	0.0017	U	0.0017	U	0.0016	U	0.0018	U	
Chloroform	0.37	700	49	0.37	0.0019	U	-	0.0017	U	0.0017	U	0.0016	U	0.0018	U	
Carbon tetrachloride	0.76	44	2.4	0.76	0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
1,2-Dichloropropane					0.0044	U	-	0.0039	U	0.004	U	0.0038	U	0.0042	U	
Dibromochloromethane					0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
1,1,2-Trichloroethane					0.0019	U	-	0.0017	U	0.0017	U	0.0016	U	0.0018	U	
Tetrachloroethene	1.3	300	19	1.3	0.00039	J	-	0.0011	U	0.0011	U	0.0011	U	0.00071	J	
Chlorobenzene	1.1	1000	100	1.1	0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
Trichlorofluoromethane					0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
Bromodichloromethane					0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
trans-1,3-Dichloropropene					0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
cis-1,3-Dichloropropene					0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
1,3-Dichloropropene, Total																
Bromoform					0.005	U	-	0.0044	U	0.0046	U	0.0044	U	0.0048	U	
1,1,2,2-Tetrachloroethane					0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
Benzene	0.06	89	4.8	0.06	0.00046	J	-	0.0012	U	0.0011	U	0.00027	J	0.00022	J	
Toluene	0.7	1000	100	0.7	0.00033	J	-	0.0017	U	0.0017	U	0.0016	U	0.00024	J	
Ethylbenzene	1	780	41	1	0.00026	J	-	0.0011	U	0.0011	U	0.0011	U	0.00027	J	
Chloromethane					0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
Bromomethane					0.0025	U	-	0.0022	U	0.0023	U	0.0022	U	0.0024	U	
Vinyl chloride	0.02	27	0.9	0.02	0.0025	U	-	0.0022	U	0.0023	U	0.0022	U	0.0024	U	
Chloroethane					0.0025	U	-	0.0022	U	0.0023	U	0.0022	U	0.0024	U	
1,1-Dichloroethene	0.33	1000	100	0.33	0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0019	U	-	0.0017	U	0.0017	U	0.0016	U	0.0018	U	
Trichloroethene	0.47	400	21	0.47	0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
1,3-Dichlorobenzene	2.4	560	49	2.4	0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
1,4-Dichlorobenzene	1.8	250	13	1.8	0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
Methyl tert butyl ether	0.93	1000	100	0.93	0.0025	U	-	0.0022	U	0.0023	U	0.0022	U	0.0024	U	
p/m-Xylene					0.0025	U	-	0.0022	U	0.0023	U	0.0022	U	0.0024	U	
o-Xylene					0.0021	J	-	0.0022	U	0.0023	U	0.0022	U	0.0024	U	
Xylenes, Total	1.6	1000	100	0.26												
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
1,2-Dichloroethene, Total																
Styrene					0.0024	J	-	0.0022	U	0.0023	U	0.0022	U	0.0024	U	
Dichlorodifluoromethane					0.013	U	-	0.011	U	0.011	U	0.011	U	0.012	U	
Acetone	0.05	1000	100	0.05	0.2	-	-	0.1	0.012	0.0097	J	0.04				
Carbon disulfide					0.002	J	-	0.011	U	0.011	U	0.011	U	0.012	U	
2-Butanone	0.12	1000	100	0.12	0.022	-	-	0.011	U	0.011	U	0.0013	J	0.005	J	
4-Methyl-2-pentanone					0.013	U	-	0.011	U	0.011	U	0.011	U	0.012	U	
2-Hexanone					0.013	U	-	0.011	U	0.011	U	0.011	U	0.012	U	
Bromochloromethane					0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
1,2-Dibromoethane					0.005	U	-	0.0044	U	0.0046	U	0.0044	U	0.0048	U	
n-Butylbenzene	12	1000	100	12												
sec-Butylbenzene	11	1000	100	11												
tert-Butylbenzene	5.9	1000	100	5.9												
1,2-Dibromo-3-chloropropane					0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
Isopropylbenzene					0.0013	U	-	0.0011	U	0.0011	U	0.0011	U	0.0012	U	
p-Isopropyltoluene																
Naphthalene	12	1000	100	12												
n-Propylbenzene	3.9	1000	100	3.9												
1,2,3-Trichlorobenzene					0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	
1,2,4-Trichlorobenzene					0.0063	U	-	0.0056	U	0.0057	U	0.0055	U	0.006	U	

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,3,5-Trimethylbenzene	8.4	380	52	8.4												
1,2,4-Trimethylbenzene	3.6	380	52	3.6												
Methyl Acetate					0.025	U	-		0.022	U	0.023	U	0.022	U	0.024	U
Cyclohexane					0.025	U	-		0.022	U	0.023	U	0.022	U	0.024	U
1,4-Dioxane	0.1	250	13	0.1	0.13	U	-		0.11	U	0.11	U	0.11	U	0.12	U
Freon-113					0.025	U	-		0.022	U	0.023	U	0.022	U	0.024	U
Methyl cyclohexane					0.005	U	-		0.0044	U	0.0046	U	0.0044	U	0.0048	U
Total VOCs					0.22994	-	-		0.1012	-	0.0147	-	0.01307	-	0.04914	-

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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																
Pentane, 2-methyl-																
Unknown Alkane																
Unknown Benzene																
Pentane, 2,3,3-trimethyl-																
Unknown Benzene																
Unknown																
Unknown Aromatic																
Unknown Benzene																
Undecane, 2,6-dimethyl-																
Unknown Cycloalkane																
Pentane																
Tridecane, 7-methyl-																
Unknown																
Unknown Benzene																
Unknown																
Dodecane, 2,6,10-trimethyl-																
Unknown Cyclohexane																
Unknown Benzene																
Pentane, 2,3,4-trimethyl-																
Unknown Naphthalene																
Fluorodichloromethane																
Unknown Alkane																
Ethane, 1-chloro-1-fluoro-																
Butane, 2-Methyl-																
n-Hexane																
Unknown Alkane																
Decane, 3,7-dimethyl-																
Unknown Benzene																
Undecane																
Unknown																
Unknown																
Cyclotrisiloxane, Hexamethyl-																
Unknown Alkane																
Unknown Naphthalene																
Dimethyl sulfide																
Unknown																

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Subsurface Soil Sample Results from Soil Borings  
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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)							
				Monitoring Well ID													
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05							
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017							
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO													
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q					
Cyclopentane																	
Unknown Benzene																	
Unknown Aromatic																	
Unknown																	
Unknown																	
Tridecane																	
Unknown																	
1-Pentene																	
Ethane, 1,1-Difluoro-																	
Unknown Aromatic																	
Unknown Naphthalene																	
Unknown Aromatic																	
Unknown																	
Unknown Cyclohexane																	
Unknown																	
Unknown																	
Unknown Benzene																	
No Tentatively Identified Compounds																	
Tridecane, 7-methyl-																	
Unknown Alkane																	
Unknown Aromatic																	
Pentane, 2,3,4-trimethyl-																	
Unknown Naphthalene																	
Dodecane, 2,6,10-trimethyl-																	
Unknown Alkane																	
Unknown																	
Unknown Alkane																	
Unknown																	
Unknown																	
Unknown																	
Unknown																	
Unknown					-		-			0.00548	J	0.00489	J	0.00524	J		
Unknown					-		-			0.00818	J	0.013	J	0.00631	J		
Unknown					-		-			-		-		-			
Unknown Naphthalene					-		-			-		-		-			
Fluorodichloromethane					0.003	NJ	-	-	-	-	-	-	-	-	-		
Unknown					-		-			-		-		-			
Unknown					-		-			-		-		-			
Ethane, 1-chloro-1-fluoro-					0.00372	NJ	-	-	-	-	-	-	-	-	-		
Unknown					-		-			0.00823	J	0.00888	J	0.00893	J		
Pentane, 2-methyl-					-		-			-		-		-			
Unknown					-		-			-		-		-			
Unknown					-		-			-		-		-			
Unknown					-		-			0.00383	J	0.00347	J	-	-		
Unknown					-		-			0.0023	J	-		-	-		
Unknown Cyclohexane					-		-			-		-		-	-		
Total TIC Compounds					0.00672	J	-			0.0023	J	0.0257	J	0.0302	J	0.0205	J

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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	98	1000	100	20	0.031	J	-		0.026	J	0.15	U	0.14	U	0.025	J
Hexachlorobenzene	3.2	12	1.2	0.33	0.12	U	-		0.22	U	0.11	U	0.11	U	0.12	U
Bis(2-chloroethyl)ether					0.19	U	-		0.17	U	0.17	U	0.16	U	0.18	U
2-Chloronaphthalene					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
3,3'-Dichlorobenzidine					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
2,4-Dinitrotoluene					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
2,6-Dinitrotoluene					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Fluoranthene	1000	1000	100	100	0.51		-		1.2		0.03	J	0.11	U	0.64	
4-Chlorophenyl phenyl ether					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
4-Bromophenyl phenyl ether					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Bis(2-chloroisopropyl)ether					0.25	U	-		0.22	U	0.23	U	0.21	U	0.24	U
Bis(2-chloroethoxy)methane					0.22	U	-		0.2	U	0.2	U	0.19	U	0.21	U
Hexachlorobutadiene					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Hexachlorocyclopentadiene					0.6	U	-		0.53	U	0.54	U	0.51	U	0.57	U
Hexachloroethane					0.17	U	-		0.15	U	0.15	U	0.14	U	0.16	U
Isophorone					0.19	U	-		0.17	U	0.17	U	0.16	U	0.18	U
Naphthalene	12	1000	100	12	0.08	J	-		0.093	J	0.19	U	0.18	U	0.1	J
Nitrobenzene					0.19	U	-		0.17	U	0.17	U	0.16	U	0.18	U
NDPA/DPA					0.17	U	-		0.15	U	0.15	U	0.14	U	0.16	U
n-Nitrosodi-n-propylamine					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Bis(2-ethylhexyl)phthalate					6.7		-		0.49		0.076	J	0.062	J	4.3	
Butyl benzyl phthalate					0.69		-		0.68		0.19	U	0.18	U	0.95	
Di-n-butylphthalate					0.14	J	-		0.071	J	0.19	U	0.18	U	0.62	
Di-n-octylphthalate					0.32		-		0.18	U	0.19	U	0.18	U	1	
Diethyl phthalate					0.21	U	-		0.18	U	0.19	U	0.18	U	0.22	
Dimethyl phthalate					0.11	J	-		0.18	U	0.19	U	0.18	U	0.44	
Benzo(a)anthracene	1	11	1	1	0.27		-		0.62		0.11	U	0.11	U	0.36	
Benzo(a)pyrene	22	1.1	1	1	0.29		-		0.81		0.15	U	0.14	U	0.46	
Benzo(b)fluoranthene	1.7	11	1	1	0.41		-		0.85		0.11	U	0.11	U	0.6	
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.13		-		0.29		0.11	U	0.11	U	0.19	
Chrysene	1	110	3.9	1	0.28		-		0.66		0.11	U	0.11	U	0.38	
Acenaphthylene	107	1000	100	100	0.032	J	-		0.19		0.15	U	0.14	U	0.053	J
Anthracene	1000	1000	100	100	0.069	J	-		0.13		0.11	U	0.11	U	0.12	
Benzo(ghi)perylene	1000	1000	100	100	0.22		-		0.51		0.15	U	0.14	U	0.33	
Fluorene	386	1000	100	30	0.21	U	-		0.052	J	0.19	U	0.18	U	0.038	J
Phenanthrene	1000	1000	100	100	0.31		-		0.29		0.11	U	0.11	U	0.32	
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.055	J	-		0.1	J	0.11	U	0.11	U	0.079	J
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.22		-		0.52		0.15	U	0.14	U	0.35	
Pyrene	1000	1000	100	100	0.47		-		1.6		0.027	J	0.11	U	0.64	
Biphenyl					0.48	U	-		0.42	U	0.43	U	0.4	U	0.45	U
4-Chloroaniline					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
2-Nitroaniline					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
3-Nitroaniline					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
4-Nitroaniline					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Dibenzofuran	210	1000	59	7	0.036	J	-		0.034	J	0.19	U	0.18	U	0.2	U
2-Methylnaphthalene					0.075	J	-		0.092	J	0.23	U	0.21	U	0.11	J
1,2,4,5-Tetrachlorobenzene					0.21	U	-		0.2	U	0.19	U	0.18	U	0.2	U
Acetophenone					0.079	J	-		0.18	U	0.19	U	0.18	U	0.098	J

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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					0.12	U	-		0.11	U	0.11	U	0.11	U	0.12	U
p-Chloro-m-cresol					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
2-Chlorophenol					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
2,4-Dichlorophenol					0.19	U	-		0.17	U	0.17	U	0.16	U	0.18	U
2,4-Dimethylphenol					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
2-Nitrophenol					0.45	U	-		0.4	U	0.41	U	0.38	U	0.43	U
4-Nitrophenol					0.29	U	-		0.26	U	0.26	U	0.25	U	0.28	U
2,4-Dinitrophenol					1	U	-		0.89	U	0.91	U	0.85	U	0.95	U
4,6-Dinitro-o-cresol					0.54	U	-		0.48	U	0.49	U	0.46	U	0.52	U
Pentachlorophenol	0.8	55	6.7	0.8	0.17	U	-		0.15	U	0.15	U	0.14	U	0.16	U
Phenol	0.33	1000	100	0.33	0.052	J	-		0.18	U	0.19	U	0.18	U	0.078	J
2-Methylphenol	0.33	1000	100	0.33	0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.3	U	-		0.26	U	0.27	U	0.26	U	0.28	U
2,4,5-Trichlorophenol					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Carbazole					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Atrazine					0.17	U	-		0.15	U	0.15	U	0.14	U	0.16	U
Benzaldehyde					0.28	U	-		0.24	U	0.25	U	0.24	U	0.26	U
Caprolactam					0.21	U	-		0.18	U	0.19	U	0.18	U	0.14	J
2,3,4,6-Tetrachlorophenol					0.21	U	-		0.18	U	0.19	U	0.18	U	0.2	U
Total SVOCs					11.579	-	-	-	9.728	-	0.133	-	0.062	-	12.641	-

Notes:  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl																
Unknown Benzene																
Unknown																
Unknown PAH																
Vitamin E																
Unknown Benzene																
Unknown PAH																
Unknown PAH																
Unknown PAH																
Unknown PAH																
Unknown Biphenyl																
Unknown Organic Acid																
Unknown Alkane																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Biphenyl																
Cyclic Octaatomic Sulfur																
Unknown Naphthalene																
Unknown Biphenyl																
Unknown Benzene																
Unknown Alcohol																
Unknown PAH																
Unknown Biphenyl																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown PAH																
Unknown Biphenyl																
Unknown Organic Acid																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown PAH																
Unknown Benzene																
Unknown Phenol																
Unknown Alkane																
Unknown Naphthalene																
Unknown PAH																
Unknown																
Unknown Benzene																
Unknown																
Sulfur																
Unknown Thiophene																
Unknown Biphenyl																
Unknown Thiophene																

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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)		
				Monitoring Well ID								
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05		
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene												
Unknown Sulfur												
Unknown PAH												
Unknown Phenol												
Unknown Biphenyl												
Unknown Alkane												
Unknown Phosphate												
Unknown Biphenyl												
Unknown Biphenyl												
Unknown Organic Acid												
Unknown Benzene												
2,2',3,3',4,5',6-Heptachlor...												
Unknown PAH												
Unknown Alkane												
Unknown												
Unknown Benzene												
Unknown PAH												
Unknown Alkane												
Unknown Alkane												
Unknown												
Unknown												
Unknown Alkane												
Unknown Benzene												
Unknown												
Unknown Benzene												
Unknown Biphenyl												
Unknown Biphenyl												
Unknown Phenol												

Notes:  
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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)		
				Monitoring Well ID								
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05		
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown												
Unknown PAH												
Unknown Naphthalene												
Unknown												
Unknown PAH												
Unknown Organic Acid												
Unknown												
Unknown												
Unknown												
Unknown Alkane												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Alkane												
Unknown Alkane												
Unknown												
Unknown Alkane												
Unknown Alkane												
Sulfur												
Unknown PAH												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Alkane												
Cyclic Octaatomic Sulfur												
Unknown Benzene												
Unknown Alkane												
Unknown Naphthalene												
Unknown Benzene												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Benzene												
Unknown Alkane												
Unknown												
Unknown PAH												
Unknown Alkane												
Unknown Benzene												
Unknown Naphthalene												
Unknown												
Unknown												
Unknown												
Unknown Alkane					-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-
Unknown					-	-	-	-	-	-	0.35	J
Unknown Benzene					-	-	0.152	J	-	-	0.197	J
Unknown Alkane					-	-	-	-	-	-	-	-
No Tentatively Identified Compounds					-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-

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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
Unknown Alkane					-		-		-		-		-			
Unknown Naphthalene					-		-		-		-		-			
Unknown					-		-		-		-		0.37	J		
Unknown					0.352	J	-		0.669	J	-		0.619	J		
Unknown Alkane					-		-		-		-		-			
Unknown					0.264	J	-		-		-		0.356	J		
Sulfur					-		-		0.178	NJ	-		-			
Unknown Alkane					-		-		-		-		-			
Unknown					-		-		-		-		0.7	J		
Unknown PAH					-		-		-		-		-			
Unknown PAH					-		-		-		-		-			
Unknown Naphthalene					-		-		-		-		-			
Unknown					-		-		-		-		0.495	J		
Unknown PAH					-		-		-		-		-			
Unknown PAH					-		-		-		-		-			
Unknown					1.71	J	-		-		-		0.186	J		
Unknown					-		-		0.219	J	-		-			
Unknown					0.202	J	-		0.177	J	-		0.175	J		
Unknown Alkane					-		-		-		-		-			
Unknown Naphthalene					-		-		-		-		-			
Unknown Naphthalene					-		-		-		-		-			
Cyclic Octaatomic Sulfur					-		-		-		0.913	NJ	-			
Unknown Alkane					-		-		-		-		-			
Total SVOCs TICs					2.528	-	-	-	0.998	-	0.397	-	0.913	-	3.448	-

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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)						
				Monitoring Well ID												
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
		Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO											
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>CHLORINATED HERBICIDES BY GC</b>																
MCPP					4.11	U	-		3.67	U	3.79	U	3.63	U	3.89	U
MCPA					4.11	U	-		3.67	U	3.79	U	3.63	U	3.89	U
Dalapon					0.0411	U	-		0.0367	U	0.0379	U	0.0363	U	0.0389	U
Dicamba					0.0411	U	-		0.0367	U	0.0379	U	0.0363	U	0.0389	U
Dichloroprop					0.0411	U	-		0.0367	U	0.0379	U	0.0363	U	0.0389	U
2,4-DB					0.205	U	-		0.184	U	0.189	U	0.181	U	0.194	U
Dinoseb					0.0411	U	-		0.0367	U	0.0379	U	0.0363	U	0.0389	U
2,4-D					0.205	U	-		0.184	U	0.189	U	0.181	U	0.194	U
2,4,5-T					0.205	U	-		0.184	U	0.189	U	0.181	U	0.194	U
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.205	U	-		0.184	U	0.189	U	0.181	U	0.194	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																
Delta-BHC	0.25	1000	100	0.04	0.00198	U	-		0.00173	U	0.00117	JPI	0.0017	U	0.00186	U
Lindane	0.1	23	1.3	0.1	0.000826	U	-		0.000723	U	0.000732	U	0.000707	U	0.00236	P
Alpha-BHC	0.02	6.8	0.48	0.02	0.000826	U	-		0.000723	U	0.000732	U	0.000707	U	0.000776	U
Beta-BHC	0.09	14	0.36	0.036	0.00198	U	-		0.00173	U	0.00176	U	0.0017	U	0.00186	U
Heptachlor	0.38	29	2.1	0.042	0.000992	U	-		0.000867	U	0.000878	U	0.000848	U	0.000931	U
Aldrin	0.19	1.4	0.097	0.005	0.00198	U	-		0.00173	U	0.00176	U	0.0017	U	0.00186	U
Heptachlor epoxide					0.0112	PI	-		0.00325	U	0.00329	U	0.00318	U	0.00349	U
Endrin	0.06	410	11	0.014	0.0227	P	-		0.0106	P	0.000682	J	0.000707	U	0.0524	P
Endrin aldehyde					0.00248	U	-		0.00217	U	0.0022	U	0.00212	U	0.00233	U
Endrin ketone					0.00198	U	-		0.00173	U	0.00176	U	0.0017	U	0.00186	U
Dieldrin	0.1	2.8	0.2	0.005	0.0449		-		0.0156	P	0.0011	U	0.00106	U	0.0756	P
4,4'-DDE	17	120	8.9	0.0033	0.00198	U	-		0.00173	U	0.000466	JPI	0.0017	U	0.00186	U
4,4'-DDD	14	180	13	0.0033	0.0108		-		0.00173	U	0.00157	J	0.0017	U	0.00186	U
4,4'-DDT	136	94	7.9	0.0033	0.22	E	0.0355	PI	0.0929	P	0.00223	J	0.00318	U	0.462	E
Endosulfan I	102	920	24	2.4	0.00198	U	-		0.00173	U	0.00176	U	0.0017	U	0.00186	U
Endosulfan II	102	920	24	2.4	0.00612	PI	-		0.039	P	0.00176	U	0.0017	U	0.18	E
Endosulfan sulfate	1000	920	24	2.4	0.000826	U	-		0.000723	U	0.000732	U	0.000707	U	0.000776	U
Methoxychlor					0.0418		-		0.0209	P	0.00329	U	0.00318	U	0.00349	U
Toxaphene					0.0372	U	-		0.0325	U	0.0329	U	0.0318	U	0.0349	U
cis-Chlordane	2.9	47	4.2	0.094	0.00248	U	-		0.00217	U	0.0022	U	0.00212	U	0.00233	U
trans-Chlordane					0.00248	U	-		0.00217	U	0.0022	U	0.00121	JPI	0.00233	U
Chlordane					0.0161	U	-		0.0141	U	0.0143	U	0.0138	U	0.0151	U
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																
Aroclor 1016	3.2	25	1	0.1	0.417	U	-		0.177	U	0.0369	U	0.0349	U	0.778	U
Aroclor 1221	3.2	25	1	0.1	0.417	U	-		0.177	U	0.0369	U	0.0349	U	0.778	U
Aroclor 1232	3.2	25	1	0.1	0.417	U	-		0.177	U	0.0369	U	0.0349	U	0.778	U
Aroclor 1242	3.2	25	1	0.1	4.22		-		0.654	P	0.0769		0.0196	J	3.05	
Aroclor 1248	3.2	25	1	0.1	0.417	U	-		0.177	U	0.0369	U	0.0349	U	0.778	U
Aroclor 1254	3.2	25	1	0.1	2.16		-		0.366		0.0415		0.0127	J	1.39	
Aroclor 1260	3.2	25	1	0.1	0.931		-		0.278		0.0209	J	0.0057	J	0.658	J
Aroclor 1262	3.2	25	1	0.1	0.417	U	-		0.177	U	0.0369	U	0.0349	U	0.778	U
Aroclor 1268	3.2	25	1	0.1	0.417	U	-		0.177	U	0.0369	U	0.0349	U	0.778	U
PCBs, Total	3.2	25	1	0.1	7.31		-		1.3		0.139	J	0.038	J	5.1	J

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				SAMPLE ID (Depth ft.)	SB-21 (0-2)	SB-21 (0-2)	SB-21 (2-4)	SB-21 (4-8)	SB-21 (4-8) DUP	SB-22 (0-2)			
				Monitoring Well ID									
				LAB ID:	L1701908-01	L1701908-01 R1	L1701908-02	L1701908-03	L1701908-04	L1701908-05			
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017			
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>TOTAL METALS</b>													
Aluminum, Total					8000	-		7300	8000		7400	11000	
Antimony, Total					5.4	-		4.8	1.1	J	3.3	J	
Arsenic, Total	16	16	16	13	6.9	-		7.8	4.9		14	11	
Barium, Total	820	10000	400	350	180	-		130	82		97	300	
Beryllium, Total	47	2700	72	7.2	0.4	J	-	0.33	J	0.32	J	0.29	J
Cadmium, Total	7.5	60	4.3	2.5	3.4	-		5.4	0.72	J	1.3	10	
Calcium, Total					57000	-		28000	20000		9600	32000	
Chromium, Total					100	-		79	46		85	180	
Cobalt, Total					11	-		9.2	7.9		11	17	
Copper, Total	1720	10000	270	50	7900	-		580	170		190	5800	
Iron, Total					120000	-		42000	28000		96000	130000	
Lead, Total	450	3900	400	63	510	-		870	200		360	1500	
Magnesium, Total					5800	-		5500	5100		3700	4400	
Manganese, Total	2000	10000	2000	1600	740	-		1100	1100		1700	1000	
Mercury, Total	0.73	5.7	0.81	0.18	3.1	-		3.1	0.28		0.79	6.6	
Nickel, Total	130	10000	310	30	89	-		51	32		61	170	
Potassium, Total					760	-		590	690		590	710	
Selenium, Total	4	6800	180	3.9	2	U	-	1.7	1.8	U	1.7	1.8	U
Silver, Total	8.3	6800	180	2	0.71	J	-	0.75	0.9	U	0.85	2.7	U
Sodium, Total					410	-		220	190		110	J	580
Thallium, Total					2	U	-	1.7	1.8	U	1.7	1.8	U
Vanadium, Total					26	-		18	15		13	36	
Zinc, Total	2480	10000	10000	109	970	-		490	310		240	3600	
<b>GENERAL CHEMISTRY</b>													
Solids, Total					79.3	-		89.9	87.4		90.8	83.8	
Cyanide, Total	40	10000	27	27	0.74	J	-	1	1.1	U	1	0.5	J

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				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)						
				Monitoring Well ID												
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS</b>																
Methylene chloride	0.05	1000	100	0.05	-		0.0027	J	0.0025	J	0.0026	J	0.0021	J	0.0026	J
1,1-Dichloroethane	0.27	480	26	0.27	-		0.0017	U	0.0016	U	0.0017	U	0.0018	U	0.0016	U
Chloroform	0.37	700	49	0.37	-		0.0017	U	0.0016	U	0.0017	U	0.0018	U	0.0016	U
Carbon tetrachloride	0.76	44	2.4	0.76	-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
1,2-Dichloropropane					-		0.0039	U	0.0038	U	0.0041	U	0.0041	U	0.0038	U
Dibromochloromethane					-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
1,1,2-Trichloroethane					-		0.0017	U	0.0016	U	0.0017	U	0.0018	U	0.0016	U
Tetrachloroethene	1.3	300	19	1.3	-		0.0023	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
Chlorobenzene	1.1	1000	100	1.1	-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
Trichlorofluoromethane					-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
1,2-Dichloroethane	0.02	60	3.1	0.02	-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
Bromodichloromethane					-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
trans-1,3-Dichloropropene					-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
cis-1,3-Dichloropropene					-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
1,3-Dichloropropene, Total					-											
Bromoform					-		0.0045	U	0.0044	U	0.0046	U	0.0047	U	0.0044	U
1,1,2,2-Tetrachloroethane					-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
Benzene	0.06	89	4.8	0.06	-		0.00097	J	0.0011	U	0.0012	U	0.0012	U	0.0011	U
Toluene	0.7	1000	100	0.7	-		0.001	J	0.0016	U	0.0017	U	0.0018	U	0.0016	U
Ethylbenzene	1	780	41	1	-		0.00058	J	0.0011	U	0.0012	U	0.0012	U	0.0011	U
Chloromethane					-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
Bromomethane					-		0.0022	U	0.0022	U	0.0023	U	0.0023	U	0.0022	U
Vinyl chloride	0.02	27	0.9	0.02	-		0.00049	J	0.0022	U	0.0023	U	0.0023	U	0.0022	U
Chloroethane					-		0.0022	U	0.0022	U	0.0023	U	0.0023	U	0.0022	U
1,1-Dichloroethene	0.33	1000	100	0.33	-		0.0011	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	-		0.0014	J	0.0016	U	0.0017	U	0.0018	U	0.0016	U
Trichloroethene	0.47	400	21	0.47	-		0.0012	U	0.0011	U	0.0012	U	0.0012	U	0.0011	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
1,3-Dichlorobenzene	2.4	560	49	2.4	-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
1,4-Dichlorobenzene	1.8	250	13	1.8	-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
Methyl tert butyl ether	0.93	1000	100	0.93	-		0.00019	J	0.0022	U	0.0023	U	0.0023	U	0.0022	U
p/m-Xylene					-		0.0011	J	0.0022	U	0.0023	U	0.0023	U	0.0022	U
o-Xylene					-		0.0012	J	0.0022	U	0.0023	U	0.0023	U	0.0022	U
Xylenes, Total	1.6	1000	100	0.26	-											
cis-1,2-Dichloroethene	0.25	1000	100	0.25	-		0.018		0.0011	U	0.0012	U	0.0012	U	0.0011	U
1,2-Dichloroethene, Total					-											
Styrene					-		0.0022	U	0.0022	U	0.0023	U	0.0023	U	0.0022	U
Dichlorodifluoromethane					-		0.011	U	0.011	U	0.012	U	0.012	U	0.011	U
Acetone	0.05	1000	100	0.05	-		0.095		0.0019	J	0.028		0.012	U	0.011	U
Carbon disulfide					-		0.011	U	0.011	U	0.012	U	0.012	U	0.011	U
2-Butanone	0.12	1000	100	0.12	-		0.012		0.011	U	0.0033	J	0.012	U	0.011	U
4-Methyl-2-pentanone					-		0.011	U	0.011	U	0.012	U	0.012	U	0.011	U
2-Hexanone					-		0.011	U	0.011	U	0.012	U	0.012	U	0.011	U
Bromochloromethane					-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
1,2-Dibromoethane					-		0.0045	U	0.0044	U	0.0046	U	0.0047	U	0.0044	U
n-Butylbenzene	12	1000	100	12	-											
sec-Butylbenzene	11	1000	100	11	-											
tert-Butylbenzene	5.9	1000	100	5.9	-											
1,2-Dibromo-3-chloropropane					-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
Isopropylbenzene					-		0.00015	J	0.0011	U	0.0012	U	0.0012	U	0.0011	U
p-Isopropyltoluene					-											
Naphthalene	12	1000	100	12	-											
n-Propylbenzene	3.9	1000	100	3.9	-											
1,2,3-Trichlorobenzene					-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U
1,2,4-Trichlorobenzene					-		0.0056	U	0.0055	U	0.0058	U	0.0058	U	0.0055	U

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)						
				Monitoring Well ID												
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q				
1,3,5-Trimethylbenzene	8.4	380	52	8.4												
1,2,4-Trimethylbenzene	3.6	380	52	3.6												
Methyl Acetate					-		0.022	U	0.022	U	0.023	U	0.023	U	0.022	U
Cyclohexane					-		0.022	U	0.022	U	0.023	U	0.023	U	0.022	U
1,4-Dioxane	0.1	250	13	0.1	-		0.11	U	0.11	U	0.12	U	0.12	U	0.11	U
Freon-113					-		0.022	U	0.022	U	0.023	U	0.023	U	0.022	U
Methyl cyclohexane					-		0.0045	U	0.0044	U	0.0046	U	0.0047	U	0.0044	U
Total VOCs					-		0.13828	-	0.0044	-	0.0339	-	0.0021	-	0.0026	-

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				Monitoring Well ID								
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10		
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>												
Pentane, 2-methyl-												
Unknown Alkane												
Unknown Benzene												
Pentane, 2,3,3-trimethyl-												
Unknown Benzene												
Unknown												
Unknown Aromatic												
Unknown Benzene												
Undecane, 2,6-dimethyl-												
Unknown Cycloalkane												
Pentane												
Tridecane, 7-methyl-												
Unknown												
Unknown Benzene												
Unknown												
Dodecane, 2,6,10-trimethyl-												
Unknown Cyclohexane												
Unknown Benzene												
Pentane, 2,3,4-trimethyl-												
Unknown Naphthalene												
Fluorodichloromethane												
Unknown Alkane												
Ethane, 1-chloro-1-fluoro-												
Butane, 2-Methyl-												
n-Hexane												
Unknown Alkane												
Decane, 3,7-dimethyl-												
Unknown Benzene												
Undecane												
Unknown												
Unknown												
Cyclotrisiloxane, Hexamethyl-												
Unknown Alkane												
Unknown Naphthalene												
Dimethyl sulfide												
Unknown												

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				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)						
				Monitoring Well ID												
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																
Acenaphthene	98	1000	100	20	-		0.13	J	0.14	U	0.15	U	0.043	J	0.14	U
Hexachlorobenzene	3.2	12	1.2	0.33	-		0.11	U	0.11	U	0.11	U	0.12	U	0.11	U
Bis(2-chloroethyl)ether					-		0.17	U	0.16	U	0.17	U	0.17	U	0.16	U
2-Chloronaphthalene					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
3,3'-Dichlorobenzidine					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
2,4-Dinitrotoluene					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
2,6-Dinitrotoluene					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Fluoranthene	1000	1000	100	100	-		2.7		0.11	U	0.11	U	2.4		0.11	U
4-Chlorophenyl phenyl ether					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
4-Bromophenyl phenyl ether					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Bis(2-chloroisopropyl)ether					-		0.22	U	0.21	U	0.23	U	0.23	U	0.22	U
Bis(2-chloroethoxy)methane					-		0.2	U	0.19	U	0.2	U	0.21	U	0.2	U
Hexachlorobutadiene					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Hexachlorocyclopentadiene					-		0.53	U	0.51	U	0.54	U	0.55	U	0.52	U
Hexachloroethane					-		0.15	U	0.14	U	0.15	U	0.15	U	0.14	U
Isophorone					-		0.17	U	0.16	U	0.17	U	0.17	U	0.16	U
Naphthalene	12	1000	100	12	-		0.36		0.18	U	0.19	U	0.8		0.18	U
Nitrobenzene					-		0.17	U	0.16	U	0.17	U	0.17	U	0.16	U
NDPA/DPA					-		0.15	U	0.14	U	0.15	U	0.15	U	0.14	U
n-Nitrosodi-n-propylamine					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Bis(2-ethylhexyl)phthalate					-		2.7		0.18	U	0.19	U	0.19	U	0.18	U
Butyl benzyl phthalate					-		0.65		0.18	U	0.19	U	0.19	U	0.18	U
Di-n-butylphthalate					-		0.075	J	0.18	U	0.19	U	0.19	U	0.18	U
Di-n-octylphthalate					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Diethyl phthalate					-		0.06	J	0.18	U	0.19	U	0.19	U	0.18	U
Dimethyl phthalate					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Benzo(a)anthracene	1	11	1	1	-		1.3		0.11	U	0.11	U	1.4		0.11	U
Benzo(a)pyrene	22	1.1	1	1	-		1.5		0.14	U	0.15	U	1.3		0.14	U
Benzo(b)fluoranthene	1.7	11	1	1	-		2.1		0.11	U	0.11	U	2.7		0.11	U
Benzo(k)fluoranthene	1.7	110	3.9	0.8	-		0.55		0.11	U	0.11	U	0.86		0.11	U
Chrysene	1	110	3.9	1	-		1.4		0.11	U	0.11	U	1.9		0.11	U
Acenaphthylene	107	1000	100	100	-		0.15		0.14	U	0.15	U	0.35		0.14	U
Anthracene	1000	1000	100	100	-		0.46		0.11	U	0.11	U	0.43		0.11	U
Benzo(ghi)perylene	1000	1000	100	100	-		0.87		0.14	U	0.15	U	0.83		0.14	U
Fluorene	386	1000	100	30	-		0.15	J	0.18	U	0.19	U	0.19	U	0.18	U
Phenanthrene	1000	1000	100	100	-		1.4		0.11	U	0.11	U	1.3		0.11	U
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	-		0.22		0.11	U	0.11	U	0.29		0.11	U
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	-		0.99		0.14	U	0.15	U	1.1		0.14	U
Pyrene	1000	1000	100	100	-		2.7		0.11	U	0.11	U	2		0.11	U
Biphenyl					-		0.095	J	0.4	U	0.43	U	0.14	J	0.42	U
4-Chloroaniline					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
2-Nitroaniline					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
3-Nitroaniline					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
4-Nitroaniline					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Dibenzofuran	210	1000	59	7	-		0.13	J	0.18	U	0.19	U	0.36		0.18	U
2-Methylnaphthalene					-		0.58		0.21	U	0.23	U	0.81		0.22	U
1,2,4,5-Tetrachlorobenzene					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Acetophenone					-		0.11	J	0.18	U	0.19	U	0.11	J	0.18	U

Notes:  
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				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)						
				Monitoring Well ID												
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
				Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2,4,6-Trichlorophenol					-		0.11	U	0.11	U	0.11	U	0.12	U	0.11	U
p-Chloro-m-cresol					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
2-Chlorophenol					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
2,4-Dichlorophenol					-		0.17	U	0.16	U	0.17	U	0.17	U	0.16	U
2,4-Dimethylphenol					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
2-Nitrophenol					-		0.4	U	0.38	U	0.41	U	0.42	U	0.39	U
4-Nitrophenol					-		0.26	U	0.25	U	0.26	U	0.27	U	0.26	U
2,4-Dinitrophenol					-		0.9	U	0.85	U	0.91	U	0.93	U	0.87	U
4,6-Dinitro-o-cresol					-		0.49	U	0.46	U	0.49	U	0.5	U	0.47	U
Pentachlorophenol	0.8	55	6.7	0.8	-		0.15	U	0.14	U	0.15	U	0.15	U	0.14	U
Phenol	0.33	1000	100	0.33	-		1.4		0.18	U	0.19	U	0.19	U	0.18	U
2-Methylphenol	0.33	1000	100	0.33	-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	-		1.6		0.26	U	0.27	U	0.036	J	0.26	U
2,4,5-Trichlorophenol					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Carbazole					-		0.26		0.18	U	0.19	U	0.3		0.18	U
Atrazine					-		0.15	U	0.14	U	0.15	U	0.15	U	0.14	U
Benzaldehyde					-		0.25	U	0.23	U	0.25	U	0.29		0.24	U
Caprolactam					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
2,3,4,6-Tetrachlorophenol					-		0.19	U	0.18	U	0.19	U	0.19	U	0.18	U
Total SVOCs					-	-	24.64	-	-	-	-	-	19.749	-	-	-

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				Monitoring Well ID												
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																
Unknown Biphenyl																
Unknown Benzene																
Unknown																
Unknown PAH																
Vitamin E																
Unknown Benzene																
Unknown PAH																
Unknown PAH																
Unknown PAH																
Unknown PAH																
Unknown Biphenyl																
Unknown Organic Acid																
Unknown Alkane																
Unknown Alkane																
Unknown Benzene																
Unknown Naphthalene																
Unknown Benzene																
Unknown Biphenyl																
Cyclic Octaatomic Sulfur																
Unknown Naphthalene																
Unknown Biphenyl																
Unknown Benzene																
Unknown Alcohol																
Unknown PAH																
Unknown Biphenyl																
Unknown Alkane																
Unknown Alkane																
Unknown																
Unknown Alkane																
Unknown PAH																
Unknown Biphenyl																
Unknown Organic Acid																
Unknown Naphthalene																
Unknown Naphthalene																
Unknown PAH																
Unknown Benzene																
Unknown Phenol																
Unknown Alkane																
Unknown Naphthalene																
Unknown PAH																
Unknown																
Unknown Benzene																
Unknown																
Sulfur																
Unknown Thiophene																
Unknown Biphenyl																
Unknown Thiophene																

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
PI = Quality assurance exceedance

**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)		
				Monitoring Well ID								
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10		
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Benzene												
Unknown Sulfur												
Unknown PAH												
Unknown Phenol												
Unknown Biphenyl												
Unknown Alkane												
Unknown Phosphate												
Unknown Biphenyl												
Unknown Biphenyl												
Unknown Organic Acid												
Unknown Benzene												
2,2',3,3',4,5',6-Heptachlor...												
Unknown PAH												
Unknown Alkane												
Unknown												
Unknown Benzene												
Unknown PAH												
Unknown Alkane												
Unknown Alkane												
Unknown												
Unknown												
Unknown Alkane												
Unknown Benzene												
Unknown												
Unknown Benzene												
Unknown Biphenyl												
Unknown Biphenyl												
Unknown Phenol												

Notes:  
mg/Kg = Milligram per kilogram  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)		
				Monitoring Well ID								
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10		
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017		
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown												
Unknown PAH												
Unknown Naphthalene												
Unknown												
Unknown PAH												
Unknown Organic Acid												
Unknown												
Unknown												
Unknown												
Unknown Alkane												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Alkane												
Unknown Alkane												
Unknown												
Unknown Alkane												
Unknown Alkane												
Sulfur												
Unknown PAH												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Alkane												
Cyclic Octaatomic Sulfur												
Unknown Benzene												
Unknown Alkane												
Unknown Naphthalene												
Unknown Benzene												
Unknown Naphthalene												
Unknown Naphthalene												
Unknown Benzene												
Unknown Alkane												
Unknown												
Unknown PAH												
Unknown Alkane												
Unknown Benzene												
Unknown Naphthalene												
Unknown												
Unknown												
Unknown												
Unknown Alkane					-	-	-	0.2	J	-	-	-
Unknown Alkane					-	3.34	J	-	0.178	J	1.36	J
Unknown					-	0.27	J	-	-	0.484	J	-
Unknown Benzene					-	0.293	J	-	-	0.419	J	-
Unknown Alkane					-	-	-	0.282	J	-	-	-
No Tentatively Identified Compounds					-	-	0	U	-	-	0	U
Unknown PAH					-	-	-	-	0.443	J	-	-
Unknown Alkane					-	0.377	J	-	0.21	J	0.443	J

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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)						
				Monitoring Well ID												
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane					-		-		0.239	J	-		-		-	
Unknown Naphthalene					-		-		-		0.467	J	-		-	
Unknown					-		0.394	J	-		-		-		-	
Unknown					-		0.393	J	-		0.246	J	0.372	J	-	
Unknown Alkane					-		0.26	J	-		0.166	J	0.434	J	-	
Unknown					-		0.18	J	-		0.182	J	1.05	J	-	
Sulfur					-		-		-		-		-		-	
Unknown Alkane					-		-		0.234	J	-		-		-	
Unknown					-		-		-		-		-		-	
Unknown PAH					-		-		-		0.657	J	-		-	
Unknown PAH					-		-		-		0.69	J	-		-	
Unknown Naphthalene					-		-		-		0.426	J	-		-	
Unknown					-		0.466	J	-		-		-		-	
Unknown PAH					-		-		-		1.98	J	-		-	
Unknown PAH					-		-		-		0.749	J	-		-	
Unknown					-		0.186	J	-		0.639	J	-		-	
Unknown					-		-		-		-		-		-	
Unknown					-		0.562	J	-		0.16	J	0.511	J	-	
Unknown Alkane					-		-		0.32	J	0.514	J	-		-	
Unknown Naphthalene					-		-		-		0.497	J	-		-	
Unknown Naphthalene					-		-		-		0.67	J	-		-	
Cyclic Octaatomic Sulfur					-		-		3.1	NJ	-		-		-	
Unknown Alkane					-		0.366	J	-		0.291	J	0.389	J	-	
Total SVOCs TICs					-		7.087	-	-		5.808	-	13.194	-	-	

Notes:  
mg/Kg = Milligram per kilogram  
U = Compound not found above concentration shown  
J = Compound found below lab report limit  
E= Estimated  
R1 = Repeated analysis  
PI = Quality assurance exceedance

**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

		SAMPLE ID (Depth ft.)				SB-22 (0-2)		SB-23 (0-2)		SB-24 (0-2)		SB-24 (4-8)		SB-25 (0-2)		SB-25 (4-8)	
		Monitoring Well ID															
		LAB ID:				L1701908-05 R1		L1701908-06		L1701908-07		L1701908-08		L1701908-09		L1701908-10	
		COLLECTION DATE:				1/19/2017		1/19/2017		1/19/2017		1/19/2017		1/19/2017		1/19/2017	
Groundwater Protection Soil Cleanup Objective		IUSCO	RRSCO	UUSCO													
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>CHLORINATED HERBICIDES BY GC</b>																	
MCPP					-		3.74	U	3.59	U	3.84	U	3.82	U	3.64	U	
MCPA					-		3.74	U	3.59	U	3.84	U	3.82	U	3.64	U	
Dalapon					-		0.0374	U	0.0359	U	0.0384	U	0.0382	U	0.0364	U	
Dicamba					-		0.0374	U	0.0359	U	0.0384	U	0.0382	U	0.0364	U	
Dichloroprop					-		0.0374	U	0.0359	U	0.0384	U	0.0382	U	0.0364	U	
2,4-DB					-		0.187	U	0.18	U	0.192	U	0.191	U	0.182	U	
Dinoseb					-		0.0374	U	0.0359	U	0.0384	U	0.0382	U	0.0364	U	
2,4-D					-		0.187	U	0.18	U	0.192	U	0.191	U	0.182	U	
2,4,5-T					-		0.187	U	0.18	U	0.192	U	0.191	U	0.182	U	
2,4,5-TP (Silvex)	3.8	1000	100	3.8	-		0.187	U	0.18	U	0.192	U	0.191	U	0.182	U	
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																	
Delta-BHC	0.25	1000	100	0.04	-		0.00338	P	0.00174	U	0.0018	U	0.00182	U	0.00168	U	
Lindane	0.1	23	1.3	0.1	-		0.000738	U	0.000723	U	0.000748	U	0.00076	U	0.000702	U	
Alpha-BHC	0.02	6.8	0.48	0.02	-		0.000738	U	0.000723	U	0.000748	U	0.00076	U	0.000702	U	
Beta-BHC	0.09	14	0.36	0.036	-		0.00177	U	0.00174	U	0.0018	U	0.00182	U	0.00168	U	
Heptachlor	0.38	29	2.1	0.042	-		0.000886	U	0.000868	U	0.000898	U	0.000912	U	0.000843	U	
Aldrin	0.19	1.4	0.097	0.005	-		0.00177	U	0.00174	U	0.0018	U	0.00182	U	0.00168	U	
Heptachlor epoxide					-		0.00332	U	0.00325	U	0.00337	U	0.00278	J	0.00316	U	
Endrin	0.06	410	11	0.014	-		0.007	P	0.000723	U	0.000748	U	0.00076	U	0.000702	U	
Endrin aldehyde					-		0.00221	U	0.00217	U	0.00224	U	0.00228	U	0.00211	U	
Endrin ketone					-		0.00177	U	0.00174	U	0.0018	U	0.00182	U	0.00168	U	
Dieldrin	0.1	2.8	0.2	0.005	-		0.00454	P	0.00108	U	0.00112	U	0.00114	U	0.00105	U	
4,4'-DDE	17	120	8.9	0.0033	-		0.0133	P	0.00174	U	0.0018	U	0.00158	JPI	0.00168	U	
4,4'-DDD	14	180	13	0.0033	-		0.00991	P	0.00174	U	0.0018	U	0.00182	U	0.00168	U	
4,4'-DDT	136	94	7.9	0.0033	0.446	P	0.0499	P	0.00325	U	0.00337	U	0.0259		0.00316	U	
Endosulfan I	102	920	24	2.4	-		0.00177	U	0.00174	U	0.0018	U	0.00182	U	0.00168	U	
Endosulfan II	102	920	24	2.4	0.206	P	0.0184	P	0.00174	U	0.0018	U	0.00182	U	0.00168	U	
Endosulfan sulfate	1000	920	24	2.4	-		0.00328	P	0.000723	U	0.000748	U	0.00394	PI	0.000702	U	
Methoxychlor					-		0.00332	U	0.00325	U	0.00337	U	0.00342	U	0.00316	U	
Toxaphene					-		0.0332	U	0.0325	U	0.0337	U	0.0342	U	0.0316	U	
cis-Chlordane	2.9	47	4.2	0.094	-		0.00221	U	0.00217	U	0.00224	U	0.00228	U	0.00211	U	
trans-Chlordane					-		0.00221	U	0.00217	U	0.00224	U	0.00228	U	0.00211	U	
Chlordane					-		0.0144	U	0.0141	U	0.0146	U	0.0148	U	0.0137	U	
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																	
Aroclor 1016	3.2	25	1	0.1	-		0.182	U	0.0347	U	0.0377	U	0.0376	U	0.036	U	
Aroclor 1221	3.2	25	1	0.1	-		0.182	U	0.0347	U	0.0377	U	0.0376	U	0.036	U	
Aroclor 1232	3.2	25	1	0.1	-		0.182	U	0.0347	U	0.0377	U	0.0376	U	0.036	U	
Aroclor 1242	3.2	25	1	0.1	-		0.938		0.0347	U	0.0377	U	0.0376	U	0.036	U	
Aroclor 1248	3.2	25	1	0.1	-		0.182	U	0.0347	U	0.0377	U	0.0376	U	0.036	U	
Aroclor 1254	3.2	25	1	0.1	-		0.697		0.0347	U	0.0377	U	0.0162	J	0.036	U	
Aroclor 1260	3.2	25	1	0.1	-		0.21		0.0347	U	0.0377	U	0.0397		0.036	U	
Aroclor 1262	3.2	25	1	0.1	-		0.182	U	0.0347	U	0.0377	U	0.0376	U	0.036	U	
Aroclor 1268	3.2	25	1	0.1	-		0.182	U	0.0347	U	0.0377	U	0.0376	U	0.036	U	
PCBs, Total	3.2	25	1	0.1	-		1.85		0.0347	U	0.0377	U	0.0559	J	0.036	U	

Notes:  
mg/Kg = Milligram per kilogram  
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**TABLE 4**  
**Subsurface Soil Sample Results from Soil Borings**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.)	SB-22 (0-2)	SB-23 (0-2)	SB-24 (0-2)	SB-24 (4-8)	SB-25 (0-2)	SB-25 (4-8)						
				Monitoring Well ID												
				LAB ID:	L1701908-05 R1	L1701908-06	L1701908-07	L1701908-08	L1701908-09	L1701908-10						
				COLLECTION DATE:	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017	1/19/2017						
	Groundwater Protection Soil Cleanup Objective	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q				
<b>TOTAL METALS</b>																
Aluminum, Total					-		9700		8500		8300		5100		7800	
Antimony, Total					-		14		4.3	U	4.5	U	3.4	J	4.2	U
Arsenic, Total	16	16	16	13	-		27		2.6		6.7		10		3.9	
Barium, Total	820	10000	400	350	-		180		60		88		63		44	
Beryllium, Total	47	2700	72	7.2	-		0.31	J	0.32	J	0.3	J	0.32	J	0.27	J
Cadmium, Total	7.5	60	4.3	2.5	-		5.8		0.86	U	0.91	U	0.92	U	0.84	U
Calcium, Total					-		32000		820		1200		2000		980	
Chromium, Total					-		190		11		13		12		11	
Cobalt, Total					-		22		8.4		7.5		9.3		6.3	
Copper, Total	1720	10000	270	50	-		680		33		23		210		17	
Iron, Total					-		150000		18000		21000		38000		19000	
Lead, Total	450	3900	400	63	-		980		12		12		460		7.7	
Magnesium, Total					-		4200		3800		4300		1500		3400	
Manganese, Total	2000	10000	2000	1600	-		1200		300		280		350		500	
Mercury, Total	0.73	5.7	0.81	0.18	-		1.5		0.04	J	0.04	J	0.95		0.04	J
Nickel, Total	130	10000	310	30	-		180		15		16		16		15	
Potassium, Total					-		1100		490		540		380		550	
Selenium, Total	4	6800	180	3.9	-		1.7	U	1.7	U	1.8	U	1	J	1.7	U
Silver, Total	8.3	6800	180	2	-		1.1		0.86	U	0.91	U	0.92	U	0.84	U
Sodium, Total					-		450		120	J	86	J	46	J	31	J
Thallium, Total					-		1.7	U	1.7	U	1.8	U	1.8	U	1.7	U
Vanadium, Total					-		46		13		13		16		15	
Zinc, Total	2480	10000	10000	109	-		1200		58		59		110		50	
<b>GENERAL CHEMISTRY</b>																
Solids, Total					-		88.8		91.4		86.2		85.7		90.8	
Cyanide, Total	40	10000	27	27	-		0.91	J	1	U	1.1	U	1.1	U	1	U

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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)		BERM-2 (4)		BERM-2 (4) DUP		BERM-3 (5)		BERM-3 (5)		BERM-4 (7)		BERM-5 (6)		BERM-6 (6)		
				LAB ID:	L1642026-16		L1642026-17		L1642026-18		L1642026-19		L1642026-19 R1		L1642026-20		L1642026-21		L1642026-22		
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS</b>																					
Methylene chloride	0.05	1000	100	0.05	0.012	U	0.015	U	0.012	U	0.012	U	-	0.012	U	0.012	U	0.012	U	0.012	U
1,1-Dichloroethane	0.27	480	26	0.27	0.0018	U	0.0022	U	0.0018	U	0.0018	U	-	0.0018	U	0.0018	U	0.0018	U	0.0018	U
Chloroform	0.37	700	49	0.37	0.0018	U	0.0022	U	0.0018	U	0.0018	U	-	0.0018	U	0.0018	U	0.0018	U	0.0018	U
Carbon tetrachloride	0.76	44	2.4	0.76	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
1,2-Dichloropropane					0.0043	U	0.0051	U	0.0043	U	0.0042	U	-	0.0043	U	0.0041	U	0.0042	U	0.0042	U
Dibromochloromethane					0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
1,1,2-Trichloroethane					0.0018	U	0.0022	U	0.0018	U	0.0018	U	-	0.0018	U	0.0018	U	0.0018	U	0.0018	U
Tetrachloroethene	1.3	300	19	1.3	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
Chlorobenzene	1.1	1000	100	1.1	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
Trichlorofluoromethane					0.0061	U	0.0012	J	0.00082	J	0.0061	U	-	0.00066	J	0.0059	U	0.0061	U	0.0061	U
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
Bromodichloromethane					0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
trans-1,3-Dichloropropene					0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
cis-1,3-Dichloropropene					0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
1,3-Dichloropropene, Total					-		-		-		-		-	-		-		-		-	
Bromoform					0.0049	U	0.0058	U	0.0049	U	0.0048	U	-	0.005	U	0.0047	U	0.0048	U	0.0048	U
1,1,1,2-Tetrachloroethane					0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
Benzene	0.06	89	4.8	0.06	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
Toluene	0.7	1000	100	0.7	0.0018	U	0.00028	J	0.00025	J	0.00036	J	-	0.0018	U	0.0007	J	0.00052	J	0.00052	J
Ethylbenzene	1	780	41	1	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
Chloromethane					0.0061	U	0.0073	U	0.0061	U	0.0061	U	-	0.0062	U	0.0059	U	0.0061	U	0.0061	U
Bromomethane					0.0024	U	0.0029	U	0.0024	U	0.0024	U	-	0.0025	U	0.0024	U	0.0024	U	0.0024	U
Vinyl chloride	0.02	27	0.9	0.02	0.0024	U	0.0029	U	0.0024	U	0.0024	U	-	0.0025	U	0.0024	U	0.0024	U	0.0024	U
Chloroethane					0.0024	U	0.0029	U	0.0024	U	0.0024	U	-	0.0025	U	0.0024	U	0.0024	U	0.0024	U
1,1-Dichloroethene	0.33	1000	100	0.33	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0018	U	0.0022	U	0.0018	U	0.0018	U	-	0.0018	U	0.0018	U	0.0018	U	0.0018	U
Trichloroethene	0.47	400	21	0.47	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.0061	U	0.0073	U	0.0061	U	0.0061	U	-	0.0062	U	0.0059	U	0.0061	U	0.0061	U
1,3-Dichlorobenzene	2.4	560	49	2.4	0.0061	U	0.0073	U	0.0061	U	0.0061	U	-	0.0062	U	0.0059	U	0.0061	U	0.0061	U
1,4-Dichlorobenzene	1.8	250	13	1.8	0.0061	U	0.0073	U	0.0061	U	0.0061	U	-	0.0062	U	0.0059	U	0.0061	U	0.0061	U
Methyl tert butyl ether	0.93	1000	100	0.93	0.0024	U	0.0029	U	0.0024	U	0.0024	U	-	0.0025	U	0.0024	U	0.0024	U	0.0024	U
p/m-Xylene					0.0024	U	0.0029	U	0.0024	U	0.0024	U	-	0.0025	U	0.0024	U	0.0024	U	0.0024	U
o-Xylene					0.0024	U	0.0029	U	0.0024	U	0.0024	U	-	0.0025	U	0.0024	U	0.0024	U	0.0024	U
Xylenes, Total	1.6	1000	100	0.26	-		-		-		-		-	-		-		-		-	
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0012	U	0.0015	U	0.0012	U	0.0012	U	-	0.0012	U	0.0012	U	0.0012	U	0.0012	U
1,2-Dichloroethene, Total					-		-		-		-		-	-		-		-		-	
Styrene					0.0024	U	0.0029	U	0.0024	U	0.0024	U	-	0.0025	U	0.0024	U	0.0024	U	0.0024	U
Dichlorodifluoromethane					0.012	U	0.015	U	0.012	U	0.012	U	-	0.012	U	0.012	U	0.012	U	0.012	U
Acetone	0.05	1000	100	0.05	0.012	U	0.015	U	0.012	U	0.0017	J	-	0.012	U	0.012	U	0.012	U	0.012	U
Carbon disulfide					0.012	U	0.015	U	0.012	U	0.012	U	-	0.012	U	0.012	U	0.012	U	0.012	U

Notes:  
mg/kg = Milligrams per kilogram  
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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)	BERM-2 (4)	BERM-2 (4) DUP	BERM-3 (5)	BERM-3 (5)	BERM-4 (7)	BERM-5 (6)	BERM-6 (6)
				LAB ID:	L1642026-16	L1642026-17	L1642026-18	L1642026-19	L1642026-19 R1	L1642026-20	L1642026-21	L1642026-22
				COLLECTION DATE:	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2-Butanone	0.12	1000	100	0.12	0.012	U	0.015	U	0.012	U	0.012	U
4-Methyl-2-pentanone					0.012	U	0.015	U	0.012	U	0.012	U
2-Hexanone					0.012	U	0.015	U	0.012	U	0.012	U
Bromochloromethane					0.0061	U	0.0073	U	0.0061	U	0.0061	U
1,2-Dibromoethane					0.0049	U	0.0058	U	0.0049	U	0.0048	U
n-Butylbenzene	12	1000	100	12	-		-		-		-	
sec-Butylbenzene	11	1000	100	11	-		-		-		-	
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-		-	
1,2-Dibromo-3-chloropropane					0.0061	U	0.0073	U	0.0061	U	0.0061	U
Isopropylbenzene					0.0012	U	0.0015	U	0.0012	U	0.0012	U
p-Isopropyltoluene					-		-		-		-	
Naphthalene	12	1000	100	12	-		-		-		-	
n-Propylbenzene	3.9	1000	100	3.9	-		-		-		-	
1,2,3-Trichlorobenzene					0.0061	U	0.0073	U	0.0061	U	0.0061	U
1,2,4-Trichlorobenzene					0.0061	U	0.0073	U	0.0061	U	0.0061	U
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-	
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-	
Methyl Acetate					0.024	U	0.029	U	0.024	U	0.024	U
Cyclohexane					0.024	U	0.029	U	0.024	U	0.024	U
1,4-Dioxane	0.1	250	13	0.1	0.12	U	0.15	U	0.12	U	0.12	U
Freon-113					0.024	U	0.029	U	0.024	U	0.024	U
Methyl cyclohexane					0.0049	U	0.0058	U	0.0049	U	0.0048	U
Total VOCs					-	-	0.00148	-	0.00107	-	0.00206	-
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>												
Pentane, 2-methyl-					-		-		-		0.00335	NJ
Unknown Alkane					-		-		-		-	
Unknown Benzene					-		-		-		-	
Pentane, 2,3,3-trimethyl-					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown					-		-		-		-	
Unknown Aromatic					-		-		-		-	
Unknown Benzene					-		-		-		-	
Undecane, 2,6-dimethyl-					-		-		-		-	
Unknown Cycloalkane					-		-		-		-	
Pentane					-		-		-		-	
Tridecane, 7-methyl-					-		-		-		-	
Unknown					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown					-		-		-		-	
Dodecane, 2,6,10-trimethyl-					-		-		-		-	
Unknown Cyclohexane					-		-		-		-	
Unknown Benzene					-		-		-		-	

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**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)		BERM-2 (4)		BERM-2 (4) DUP		BERM-3 (5)		BERM-3 (5)		BERM-4 (7)		BERM-5 (6)		BERM-6 (6)			
				LAB ID:	L1642026-16		L1642026-17		L1642026-18		L1642026-19		L1642026-19 R1		L1642026-20		L1642026-21		L1642026-22			
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016			
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																		
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
Pentane, 2,3,4-trimethyl-					-		-		-		-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-		-		-		-	
Fluorodichloromethane					-		-		-		-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-		-		-		-	
Ethane, 1-chloro-1-fluoro-					-		-		-		-		-		-		-		-		-	
Butane, 2-Methyl-					-		-		-		-		-		-		-		-		-	
No Tentatively Identified Compounds					0	U	-		-		-		-		0	U	-		-		-	
n-Hexane					-		-		-		-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-		-		-		-	
Decane, 3,7-dimethyl-					-		-		-		-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-		-		-		-	
Undecane					-		-		-		-		-		-		-		-		-	
Unknown					-		0.031	J	0.00275	J	-		-		-		-		-		-	
Unknown					-		-		-		0.00428	J	-		-		0.00462	J	0.00289	J	-	
Cyclotrisiloxane, Hexamethyl-					-		-		-		-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-		-		-		-	
Dimethyl sulfide					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		-		-		-		-		-		-	
Cyclopentane					-		-		-		-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		0.0101	J	-		-		0.0216	J	0.00445	J	-	
Tridecane					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		0.00533	J	-		-		0.0132	J	0.0266	J	-	
1-Pentene					-		-		-		-		-		-		-		-		-	
Ethane, 1,1-Difluoro-					-		-		-		-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		-		-		-		-		-		0.0194	J
Total TIC Compounds					-		0.031	J	0.00275	J	0.0197	J	-		-		0.0428	J	0.0533	J	-	
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																						
Acenaphthene	98	1000	100	20	0.16	U	0.79		0.81	U	0.16	U	-		0.057	J	0.045	J	0.17			
Hexachlorobenzene	3.2	12	1.2	0.33	0.12	U	0.29	U	0.61	U	0.18		-		0.051	J	0.12	U	0.074	J		
Bis(2-chloroethyl)ether					0.18	U	0.43	U	0.91	U	0.18	U	-		0.18	U	0.18	U	0.18	U		
2-Chloronaphthalene					0.2	U	0.48	U	1	U	0.2	U	-		0.2	U	0.2	U	0.2	U		
3,3'-Dichlorobenzidine					0.2	U	0.48	U	1	U	0.2	U	-		0.2	U	0.2	U	0.2	U		
2,4-Dinitrotoluene					0.2	U	0.48	U	1	U	0.2	U	-		0.2	U	0.2	U	0.2	U		
2,6-Dinitrotoluene					0.2	U	0.48	U	1	U	0.2	U	-		0.2	U	0.2	U	0.2	U		
Fluoranthene	1000	1000	100	100	0.023	J	16		1.3		0.2		-		0.48		1.1		0.68			

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**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)	BERM-2 (4)	BERM-2 (4) DUP	BERM-3 (5)	BERM-3 (5)	BERM-4 (7)	BERM-5 (6)	BERM-6 (6)							
				LAB ID:	L1642026-16	L1642026-17	L1642026-18	L1642026-19	L1642026-19 R1	L1642026-20	L1642026-21	L1642026-22							
				COLLECTION DATE:	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016							
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO															
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
4-Chlorophenyl phenyl ether					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
4-Bromophenyl phenyl ether					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
Bis(2-chloroisopropyl)ether					0.24	U	0.58	U	1.2	U	0.24	U	-	0.24	U	0.23	U	0.24	U
Bis(2-chloroethoxy)methane					0.22	U	0.52	U	1.1	U	0.21	U	-	0.22	U	0.21	U	0.21	U
Hexachlorobutadiene					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
Hexachlorocyclopentadiene					0.58	U	1.4	U	2.9	U	0.56	U	-	0.58	U	0.56	U	0.56	U
Hexachloroethane					0.16	U	0.38	U	0.81	U	0.16	U	-	0.16	U	0.16	U	0.16	U
Isophorone					0.18	U	0.43	U	0.91	U	0.18	U	-	0.18	U	0.18	U	0.18	U
Naphthalene	12	1000	100	12	0.2	U	0.17	J	0.13	J	0.041	J	-	0.092	J	0.08	J	0.033	J
Nitrobenzene					0.18	U	0.43	U	0.91	U	0.18	U	-	0.18	U	0.18	U	0.18	U
NDPA/DPA					0.16	U	0.38	U	0.81	U	0.16	U	-	0.16	U	0.16	U	0.16	U
n-Nitrosodi-n-propylamine					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
Bis(2-ethylhexyl)phthalate					0.14	J	2.4		34		1.7		-	1.6		2.2		0.13	J
Butyl benzyl phthalate					0.2	U	1.2		1.6		1		-	0.46		0.16	J	0.05	J
Di-n-butylphthalate					0.2	U	0.27	J	0.35	J	0.12	J	-	0.094	J	0.074	J	0.2	U
Di-n-octylphthalate					0.35		0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
Diethyl phthalate					0.2	U	0.48	U	0.095	J	0.2	U	-	0.2	U	0.2	U	0.2	U
Dimethyl phthalate					0.2	U	0.21	J	0.9	J	0.2	U	-	1.6		0.06	J	0.063	J
Benzo(a)anthracene	1	11	1	1	0.028	J	6.3		0.7		0.13		-	0.31		0.48		0.35	
Benzo(a)pyrene	22	1.1	1	1	0.16	U	3		0.72	J	0.16		-	0.23		0.28		0.22	
Benzo(b)fluoranthene	1.7	11	1	1	0.12	U	4.4		0.93		0.21		-	0.4		0.4		0.38	
Benzo(k)fluoranthene	1.7	110	3.9	0.8	0.12	U	1.8		0.29	J	0.078	J	-	0.12		0.21		0.24	
Chrysene	1	110	3.9	1	0.022	J	5.5		0.68		0.13		-	0.35		0.64		0.43	
Acenaphthylene	107	1000	100	100	0.16	U	0.078	J	0.81	U	0.16	U	-	0.033	J	0.035	J	0.049	J
Anthracene	1000	1000	100	100	0.12	U	2.8		0.24	J	0.12	U	-	0.094	J	0.19		0.15	
Benzo(ghi)perylene	1000	1000	100	100	0.16	U	1.1		0.51	J	0.16		-	0.16		0.16		0.11	J
Fluorene	386	1000	100	30	0.2	U	1.1		0.1	J	0.2	U	-	0.042	J	0.055	J	0.11	J
Phenanthrene	1000	1000	100	100	0.12	U	9.5		0.75		0.093	J	-	0.28		0.73		0.31	
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	0.12	U	0.37		0.61	U	0.031	J	-	0.036	J	0.039	J	0.039	J
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	0.16	U	1.4		0.52	J	0.15	J	-	0.19		0.2		0.15	J
Pyrene	1000	1000	100	100	0.022	J	12		1.1		0.18		-	0.46		0.96		0.55	
Biphenyl					0.46	U	1.1	U	2.3	U	0.45	U	-	0.47	U	0.44	U	0.45	U
4-Chloroaniline					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
2-Nitroaniline					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
3-Nitroaniline					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
4-Nitroaniline					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
Dibenzofuran	210	1000	59	7	0.2	U	0.51		1	U	0.2	U	-	0.041	J	0.042	J	0.088	J
2-Methylnaphthalene					0.24	U	0.15	J	0.12	J	0.048	J	-	0.1	J	0.094	J	0.055	J
1,2,4,5-Tetrachlorobenzene					0.2	U	0.48	U	1	U	0.042	J	-	0.2	U	0.2	U	0.2	U
Acetophenone					0.2	U	0.18	J	0.39	J	0.2	U	-	0.076	J	0.2	U	0.2	U
2,4,6-Trichlorophenol					0.12	U	0.29	U	0.61	U	0.12	U	-	0.12	U	0.12	U	0.12	U
p-Chloro-m-cresol					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U

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**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)	BERM-2 (4)	BERM-2 (4) DUP	BERM-3 (5)	BERM-3 (5)	BERM-4 (7)	BERM-5 (6)	BERM-6 (6)							
				LAB ID:	L1642026-16	L1642026-17	L1642026-18	L1642026-19	L1642026-19 R1	L1642026-20	L1642026-21	L1642026-22							
				COLLECTION DATE:	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016							
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO															
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
2-Chlorophenol					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
2,4-Dichlorophenol					0.18	U	0.43	U	0.91	U	0.18	U	-	0.18	U	0.18	U	0.18	U
2,4-Dimethylphenol					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
2-Nitrophenol					0.44	U	1	U	2.2	U	0.42	U	-	0.44	U	0.42	U	0.42	U
4-Nitrophenol					0.28	U	0.67	U	1.4	U	0.27	U	-	0.29	U	0.27	U	0.27	U
2,4-Dinitrophenol					0.98	U	2.3	U	4.9	U	0.94	U	-	0.98	U	0.94	U	0.94	U
4,6-Dinitro-o-cresol					0.53	U	1.2	U	2.6	U	0.51	U	-	0.53	U	0.51	U	0.51	U
Pentachlorophenol	0.8	55	6.7	0.8	0.16	U	0.38	U	0.81	U	0.16	U	-	0.16	U	0.16	U	0.16	U
Phenol	0.33	1000	100	0.33	0.2	U	0.48	U	0.61	J	0.2	U	-	0.2	U	0.2	U	0.2	U
2-Methylphenol	0.33	1000	100	0.33	0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.29	U	0.69	U	1.5	U	0.28	U	-	0.29	U	0.28	U	0.28	U
2,4,5-Trichlorophenol					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
Carbazole					0.2	U	1.2		0.13	J	0.2	U	-	0.043	J	0.078	J	0.034	J
Atrazine					0.16	U	0.38	U	0.81	U	0.16	U	-	0.16	U	0.16	U	0.16	U
Benzaldehyde					0.27	U	0.63	U	1.1	J	0.26	U	-	0.27	U	0.26	U	0.26	U
Caprolactam					0.2	U	0.38	U	1	J	0.2	U	-	0.2	U	0.2	U	0.2	U
2,3,4,6-Tetrachlorophenol					0.2	U	0.48	U	1	U	0.2	U	-	0.2	U	0.2	U	0.2	U
Total SVOCs					0.585	-	72.808	-	47.265	-	4.653	-	-	7.399	-	8.312	-	4.465	-
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																			
Unknown Biphenyl					-		-		-		-		-		-		-		-
Unknown Benzene					-		-		-		-		-		-		-		-
Unknown					-		-		-		-		1.05	J	-		-		-
Unknown PAH					-		1.27	J	-		-		-		-		-		-
Vitamin E					-		-		-		-		-		-		-		-
Unknown Benzene					-		-		-		-		-		-		-		-
Unknown PAH					-		0.421	J	-		-		-		-		-		-
Unknown PAH					-		-		-		-		-		-		-		-
Unknown PAH					-		0.882	J	-		-		-		-		-		-
Unknown PAH					-		0.652	J	-		-		-		-		-		-
Unknown Biphenyl					-		-		-		-		-		-		-		-
Unknown Organic Acid					0.223	J	-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		0.166	J	-		-
Unknown Benzene					-		-		-		-		-		-		-		-
Unknown Naphthalene					-		-		-		-		-		-		-		-
Unknown Benzene					-		-		-		-		-		-		-		-
Unknown Biphenyl					-		-		-		-		-		-		-		-
Cyclic Octaatomic Sulfur					-		-		-		-		-		-		-		-
Unknown Naphthalene					-		-		-		-		-		-		-		-
Unknown Biphenyl					-		-		-		-		-		-		-		-
Unknown Benzene					-		-		-		-		-		-		-		-
Unknown Alcohol					-		-		-		-		-		-		-		-

Notes:  
mg/kg = Milligrams per kilogram  
U = Compound not found above the value shown  
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PI = Quality assurance exceedance



**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)	BERM-2 (4)	BERM-2 (4) DUP	BERM-3 (5)	BERM-3 (5)	BERM-4 (7)	BERM-5 (6)	BERM-6 (6)				
				LAB ID:	L1642026-16	L1642026-17	L1642026-18	L1642026-19	L1642026-19 R1	L1642026-20	L1642026-21	L1642026-22				
				COLLECTION DATE:	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016				
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
No Tentatively Identified Compounds					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					0.267	J	-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Phenol					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown					-		-		-		0.665	J	-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		-		-		3.32	J	-		-	
Sulfur					-		-		-		-		-		-	
Unknown Thiophene					-		0.512	J	-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Thiophene					-		0.388	J	-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown Sulfur					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Phenol					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown Phosphate					-		-		1.98	J	-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Organic Acid					0.198	J	-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
2,2',3,3',4,5',6-Heptachlor...					-		-		-		-		-		-	
Unknown PAH					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		0.878	J	-		-		0.255	J	-	
Unknown Benzene					-		-		-		-		-		-	
Unknown PAH					-		0.407	J	-		-		-		-	

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**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)	BERM-2 (4)	BERM-2 (4) DUP	BERM-3 (5)	BERM-3 (5)	BERM-4 (7)	BERM-5 (6)	BERM-6 (6)				
				LAB ID:	L1642026-16	L1642026-17	L1642026-18	L1642026-19	L1642026-19 R1	L1642026-20	L1642026-21	L1642026-22				
				COLLECTION DATE:	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/22/2016				
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO												
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Unknown					-		0.476	J	-		-		0.483	J	-	
Unknown					-		0.644	J	1.07	J	0.236	J	-		0.355	J
Unknown Alkane					-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-	
Unknown					-		0.549	J	3.16	J	0.618	J	-		0.256	J
Unknown Benzene					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-		-	
Unknown Phenol					-		-		4.46	J	-		-		5.4	J
Unknown					-		1.39	J	-		-		-		2.02	J
Unknown PAH					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown					-		0.423	J	-		-		-		3.85	J
Unknown PAH					-		0.87	J	-		-		-		-	
Unknown Organic Acid					-		-		5.21	J	-		-		-	
Unknown					-		1.36	J	-		0.434	J	-		0.575	J
Unknown					-		-		-		-		-		0.28	J
Unknown					-		0.799	J	3.71	J	0.17	J	-		0.573	J
Unknown Alkane					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-	
Total TIC Compounds					-		-		-		-		-		-	
<b>CHLORINATED HERBICIDES BY GC</b>																
MCP					3.98	U	4.84	U	4.06	U	3.94	U	-		4.04	U
MCPA					3.98	U	4.84	U	4.06	U	3.94	U	-		4.04	U
Dalapon					0.0398	U	0.0484	U	0.0406	U	0.0394	U	-		0.0404	U
Dicamba					0.0398	U	0.0484	U	0.0406	U	0.0394	U	-		0.0404	U
Dichloroprop					0.0398	U	0.0484	U	0.0406	U	0.0394	U	-		0.0404	U
2,4-DB					0.199	U	0.242	U	0.203	U	0.197	U	-		0.202	U
Dinoseb					0.0398	U	0.0484	U	0.0406	U	0.0394	U	-		0.0404	U
2,4-D					0.199	U	0.242	U	0.203	U	0.197	U	-		0.202	U
2,4,5-T					0.199	U	0.242	U	0.203	U	0.197	U	-		0.202	U
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.199	U	0.242	U	0.203	U	0.197	U	-		0.202	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																
Delta-BHC	0.25	1000	100	0.04	0.00191	U	0.00224	U	0.00191	U	0.00185	U	-		0.0019	U
Lindane	0.1	23	1.3	0.1	0.000796	U	0.000936	U	0.000796	U	0.00077	U	-		0.00079	U
Alpha-BHC	0.02	6.8	0.48	0.02	0.000796	U	0.000936	U	0.000796	U	0.00077	U	-		0.00079	U
Beta-BHC	0.09	14	0.36	0.036	0.00191	U	0.00224	U	0.00191	U	0.00185	U	-		0.0019	U
Heptachlor	0.38	29	2.1	0.042	0.000955	U	0.00112	U	0.000956	U	0.000923	U	-		0.000948	U

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**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)		BERM-2 (4)		BERM-2 (4) DUP		BERM-3 (5)		BERM-3 (5)		BERM-4 (7)		BERM-5 (6)		BERM-6 (6)		
				LAB ID:	L1642026-16		L1642026-17		L1642026-18		L1642026-19		L1642026-19 R1		L1642026-20		L1642026-21		L1642026-22		
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
Aldrin	0.19	1.4	0.097	0.005	0.00191	U	0.00224	U	0.00191	U	0.00185	U	-	0.0019	U	0.00179	U	0.00187	U		
Heptachlor epoxide					0.00358	U	0.00421	U	0.00358	U	0.0394	PI	-	0.00356	U	0.00335	U	0.00351	U		
Endrin	0.06	410	11	0.014	0.000796	U	0.000936	U	0.000796	U	0.066	P	-	0.00079	U	0.000745	U	0.000781	U		
Endrin aldehyde					0.00239	U	0.00281	U	0.00239	U	0.00231	U	-	0.00237	U	0.00223	U	0.00234	U		
Endrin ketone					0.00191	U	0.00224	U	0.00191	U	0.00185	U	-	0.0019	U	0.00179	U	0.00187	U		
Dieldrin	0.1	2.8	0.2	0.005	0.00132	P	0.0611	P	0.0396		0.17	E	0.313	P	0.00118	U	0.00112	U	0.00117	U	
4,4'-DDE	17	120	8.9	0.0033	0.00191	U	0.00224	U	0.00191	U	0.00185	U	-	0.0019	U	0.00179	U	0.00187	U		
4,4'-DDD	14	180	13	0.0033	0.00191	U	0.00224	U	0.00191	U	0.00185	U	-	0.0162		0.00353		0.00187	U		
4,4'-DDT	136	94	7.9	0.0033	0.00358	U	0.00421	U	0.00358	U	0.00346	U	-	0.00356	U	0.00335	U	0.00351	U		
Endosulfan I	102	920	24	2.4	0.00191	U	0.00224	U	0.00191	U	0.00185	U	-	0.0019	U	0.00179	U	0.00187	U		
Endosulfan II	102	920	24	2.4	0.00191	U	0.00829	PI	0.141	P	0.0189	PI	-	0.0019	U	0.00179	U	0.00187	U		
Endosulfan sulfate	1000	920	24	2.4	0.000796	U	0.000936	U	0.000796	U	0.00077	U	-	0.00079	U	0.000745	U	0.000781	U		
Methoxychlor					0.00358	U	0.00421	U	0.00358	U	0.00346	U	-	0.00356	U	0.00335	U	0.00351	U		
Toxaphene					0.0358	U	0.0421	U	0.0358	U	0.0346	U	-	0.0356	U	0.0335	U	0.0351	U		
cis-Chlordane	2.9	47	4.2	0.094	0.00239	U	0.00281	U	0.00239	U	0.00231	U	-	0.00237	U	0.00223	U	0.00234	U		
trans-Chlordane					0.00239	U	0.00281	U	0.00239	U	0.00231	U	-	0.00237	U	0.00223	U	0.00234	U		
Chlordane					0.0155	U	0.0182	U	0.0155	U	0.015	U	-	0.0154	U	0.0145	U	0.0152	U		
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																					
Aroclor 1016	3.2	25	1	0.1	0.0388	U	0.46	U	0.4	U	0.402	U	-	0.404	U	0.0378	U	0.0388	U		
Aroclor 1221	3.2	25	1	0.1	0.0388	U	0.46	U	0.4	U	0.402	U	-	0.404	U	0.0378	U	0.0388	U		
Aroclor 1232	3.2	25	1	0.1	0.0388	U	0.46	U	0.4	U	0.402	U	-	0.404	U	0.0378	U	0.0388	U		
Aroclor 1242	3.2	25	1	0.1	0.027	J	4.18		3.85	P	2.8		-	1.85		0.185	PI	0.154	PI		
Aroclor 1248	3.2	25	1	0.1	0.0388	U	0.46	U	0.4	U	0.402	U	-	0.404	U	0.0378	U	0.0388	U		
Aroclor 1254	3.2	25	1	0.1	0.066		3.33		2.86		5.35		-	2.57		0.413		0.289			
Aroclor 1260	3.2	25	1	0.1	0.0135	J	1.26		1.08		2.8		-	2.04		0.169		0.108			
Aroclor 1262	3.2	25	1	0.1	0.0388	U	0.46	U	0.4	U	0.402	U	-	0.404	U	0.0378	U	0.0388	U		
Aroclor 1268	3.2	25	1	0.1	0.0388	U	0.46	U	0.4	U	0.402	U	-	0.404	U	0.0378	U	0.0388	U		
PCBs, Total	3.2	25	1	0.1	0.107	J	8.77		7.79		11		-	6.46		0.767		0.551			
<b>TOTAL METALS</b>																					
Aluminum, Total					11000		9900		8100		15000		-	9900		8100		7600			
Antimony, Total					1.3	J	18		17		33		-	27		12		8.6			
Arsenic, Total	16	16	16	13	6.5		9.3		8.7		13		-	12		7.4		9			
Barium, Total	820	10000	400	350	130		220		210		850		-	200		90		82			
Beryllium, Total	47	2700	72	7.2	0.43	J	0.24	J	0.21	J	0.44	J	-	0.3	J	0.3	J	0.34	J		
Cadmium, Total	7.5	60	4.3	2.5	0.94	U	9.2		15		9.1		-	12		0.98		1.2			
Calcium, Total					19000		26000		19000		13000		-	24000		3200		3400			
Chromium, Total					23		110		140		130		-	140		25		40			
Cobalt, Total					11		15		16		18		-	16		8.2		11			
Copper, Total	1720	10000	270	50	400		1200		1000		2800		-	2200		230		290			
Iron, Total					23000		95000		100000		100000		-	100000		29000		30000			
Lead, Total	450	3900	400	63	62		1000		810		2600		-	1500		370		330			
Magnesium, Total					12000		6800		4900		4100		-	6300		3400		3200			

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**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-1 (6)		BERM-2 (4)		BERM-2 (4) DUP		BERM-3 (5)		BERM-3 (5)		BERM-4 (7)		BERM-5 (6)		BERM-6 (6)	
				LAB ID:	L1642026-16		L1642026-17		L1642026-18		L1642026-19		L1642026-19 R1		L1642026-20		L1642026-21		L1642026-22	
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/22/2016	
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Manganese, Total	2000	10000	2000	1600	740		750		740		910		-		840		820		620	
Mercury, Total	0.73	5.7	0.81	0.18	0.1		3.8		2.8		3.2		-		4.1		0.69		0.73	
Nickel, Total	130	10000	310	30	27		160		130		200		-		140		32		47	
Potassium, Total					500		590		480		1400		-		530		350		290	
Selenium, Total	4	6800	180	3.9	1.9	U	2.3	U	1.9	U	1.9	U	-		1.9	U	1.8	U	1.8	U
Silver, Total	8.3	6800	180	2	0.94	U	3.1		1.4		1.8		-		4.2		0.89	U	0.93	U
Sodium, Total					85	J	260		200		1700		-		230		67	J	48	J
Thallium, Total					1.9	U	2.3	U	1.9	U	1.9	U	-		1.9	U	1.8	U	1.8	U
Vanadium, Total					18		25		21		24		-		30		17		23	
Zinc, Total	2480	10000	10000	109	95		4400		3500		5200		-		3600		320		370	
<b>GENERAL CHEMISTRY</b>																				
Solids, Total					81.8		68.3		81.7		82.4		-		80.8		85		82.4	
Cyanide, Total	40	10000	27	27	1.1	U	1.4	U	0.23	J	0.31	J	-		0.63	J	1.1	U	1.2	U

Notes:  
mg/kg = Milligrams per kilogram  
U = Compound not found above the value shown  
J = Compound found below the lab reporting value  
PI = Quality assurance exceedance

**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-7 (6)		BERM-7 (6)		BERM-8 (6)		BERM-9 (6)		BERM-10 (5)		BERM-11 (4)		BERM-11 (4)		BERM-11 (4) DUP		
				LAB ID:	L1642026-23		L1642026-23 R1		L1642026-24		L1642026-25		L1642026-30		L1642026-26		L1642026-26 R1		L1642026-28		
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016		
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
<b>VOLATILE ORGANICS BY GC/MS</b>																					
Methylene chloride	0.05	1000	100	0.05	0.012	U	-		0.011	U	0.013	U	0.012	U	0.013	U	-		0.013	U	
1,1-Dichloroethane	0.27	480	26	0.27	0.0018	U	-		0.0016	U	0.002	U	0.0018	U	0.0019	U	-		0.0019	U	
Chloroform	0.37	700	49	0.37	0.0018	U	-		0.0016	U	0.002	U	0.0018	U	0.0019	U	-		0.0019	U	
Carbon tetrachloride	0.76	44	2.4	0.76	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
1,2-Dichloropropane					0.0042	U	-		0.0038	U	0.0046	U	0.0042	U	0.0044	U	-		0.0045	U	
Dibromochloromethane					0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
1,1,2-Trichloroethane					0.0018	U	-		0.0016	U	0.002	U	0.0018	U	0.0019	U	-		0.0019	U	
Tetrachloroethene	1.3	300	19	1.3	0.0012	U	-		0.0011	U	0.0096	U	0.0012	U	0.0013	U	-		0.0013	U	
Chlorobenzene	1.1	1000	100	1.1	0.0012	U	-		0.0011	U	0.0018	U	0.0012	U	0.0013	U	-		0.0013	U	
Trichlorofluoromethane					0.006	U	-		0.0055	U	0.0066	U	0.0061	U	0.0063	U	-		0.0064	U	
1,2-Dichloroethane	0.02	60	3.1	0.02	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
1,1,1-Trichloroethane	0.68	1000	100	0.68	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
Bromodichloromethane					0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
trans-1,3-Dichloropropene					0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
cis-1,3-Dichloropropene					0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
1,3-Dichloropropene, Total					-	-	-		-	-	-	-	-	-	-	-	-		-	-	
Bromoform					0.0048	U	-		0.0044	U	0.0052	U	0.0048	U	0.005	U	-		0.0052	U	
1,1,1,2-Tetrachloroethane					0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
Benzene	0.06	89	4.8	0.06	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.00015	J	-		0.00017	J	
Toluene	0.7	1000	100	0.7	0.00023	J	-		0.0016	U	0.0011	J	0.0018	U	0.00052	J	-		0.00065	J	
Ethylbenzene	1	780	41	1	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.00029	J	-		0.00073	J	
Chloromethane					0.006	U	-		0.0055	U	0.0066	U	0.0061	U	0.0063	U	-		0.0064	U	
Bromomethane					0.0024	U	-		0.0022	U	0.0026	U	0.0024	U	0.0025	U	-		0.0026	U	
Vinyl chloride	0.02	27	0.9	0.02	0.0024	U	-		0.0022	U	0.0026	U	0.0024	U	0.0025	U	-		0.0026	U	
Chloroethane					0.0024	U	-		0.0022	U	0.0026	U	0.0024	U	0.0025	U	-		0.0026	U	
1,1-Dichloroethene	0.33	1000	100	0.33	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
trans-1,2-Dichloroethene	0.19	1000	100	0.19	0.0018	U	-		0.0016	U	0.002	U	0.0018	U	0.0019	U	-		0.0019	U	
Trichloroethene	0.47	400	21	0.47	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
1,2-Dichlorobenzene	1.1	1000	100	1.1	0.006	U	-		0.0055	U	0.00021	J	0.0061	U	0.0063	U	-		0.0064	U	
1,3-Dichlorobenzene	2.4	560	49	2.4	0.006	U	-		0.0055	U	0.0026	J	0.0061	U	0.0063	U	-		0.0064	U	
1,4-Dichlorobenzene	1.8	250	13	1.8	0.006	U	-		0.0055	U	0.0011	J	0.0061	U	0.0063	U	-		0.0064	U	
Methyl tert butyl ether	0.93	1000	100	0.93	0.0024	U	-		0.0022	U	0.0026	U	0.0024	U	0.0025	U	-		0.0026	U	
p/m-Xylene					0.0024	U	-		0.0022	U	0.0026	U	0.0024	U	0.00044	J	-		0.001	J	
o-Xylene					0.0024	U	-		0.0022	U	0.0026	U	0.0024	U	0.0025	U	-		0.0011	J	
Xylenes, Total	1.6	1000	100	0.26	-	-	-		-	-	-	-	-	-	-	-	-		-	-	
cis-1,2-Dichloroethene	0.25	1000	100	0.25	0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.0013	U	-		0.0013	U	
1,2-Dichloroethene, Total					-	-	-		-	-	-	-	-	-	-	-	-		-	-	
Styrene					0.0024	U	-		0.0022	U	0.0026	U	0.0024	U	0.0025	U	-		0.0026	U	
Dichlorodifluoromethane					0.012	U	-		0.011	U	0.013	U	0.012	U	0.013	U	-		0.013	U	
Acetone	0.05	1000	100	0.05	0.012	U	-		0.011	U	0.013	U	0.012	U	0.0055	J	-		0.0085	J	
Carbon disulfide					0.012	U	-		0.011	U	0.013	U	0.012	U	0.013	U	-		0.0015	J	

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**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-7 (6)		BERM-7 (6)		BERM-8 (6)		BERM-9 (6)		BERM-10 (5)		BERM-11 (4)		BERM-11 (4)		BERM-11 (4) DUP		
				LAB ID:	L1642026-23		L1642026-23 R1		L1642026-24		L1642026-25		L1642026-30		L1642026-26		L1642026-26 R1		L1642026-28		
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016		
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
2-Butanone	0.12	1000	100	0.12	0.012	U	-		0.011	U	0.013	U	0.012	U	0.013	U	-		0.013	U	
4-Methyl-2-pentanone					0.012	U	-		0.011	U	0.013	U	0.012	U	0.013	U	-		0.013	U	
2-Hexanone					0.012	U	-		0.011	U	0.013	U	0.012	U	0.013	U	-		0.013	U	
Bromochloromethane					0.006	U	-		0.0055	U	0.0066	U	0.0061	U	0.0063	U	-		0.0064	U	
1,2-Dibromoethane					0.0048	U	-		0.0044	U	0.0052	U	0.0048	U	0.005	U	-		0.0052	U	
n-Butylbenzene	12	1000	100	12	-		-		-		-		-		-		-		-		
sec-Butylbenzene	11	1000	100	11	-		-		-		-		-		-		-		-		
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-		-		-		-		-		-		
1,2-Dibromo-3-chloropropane					0.006	U	-		0.0055	U	0.0066	U	0.0061	U	0.0063	U	-		0.0064	U	
Isopropylbenzene					0.0012	U	-		0.0011	U	0.0013	U	0.0012	U	0.00014	J	-		0.00035	J	
p-Isopropyltoluene					-		-		-		-		-		-		-		-		
Naphthalene	12	1000	100	12	-		-		-		-		-		-		-		-		
n-Propylbenzene	3.9	1000	100	3.9	-		-		-		-		-		-		-		-		
1,2,3-Trichlorobenzene					0.006	U	-		0.0055	U	0.0012	J	0.0061	U	0.0063	U	-		0.0064	U	
1,2,4-Trichlorobenzene					0.006	U	-		0.0055	U	0.0014	J	0.0061	U	0.0063	U	-		0.0064	U	
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-		-		-		-		-		
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-		-		-		-		-		
Methyl Acetate					0.024	U	-		0.022	U	0.026	U	0.024	U	0.025	U	-		0.026	U	
Cyclohexane					0.024	U	-		0.022	U	0.026	U	0.024	U	0.025	U	-		0.026	U	
1,4-Dioxane	0.1	250	13	0.1	0.12	U	-		0.11	U	0.13	U	0.12	U	0.13	U	-		0.13	U	
Freon-113					0.024	U	-		0.022	U	0.026	U	0.024	U	0.025	U	-		0.026	U	
Methyl cyclohexane					0.0048	U	-		0.0044	U	0.0052	U	0.0048	U	0.005	U	-		0.0052	U	
Total VOCs					0.00023	-	-		-		0.01901	-	-		0.00704	-	-		0.014	-	
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>																					
Pentane, 2-methyl-					-		-		-		-		-		-		-		-		
Unknown Alkane					-		-		-		-		-		-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Pentane, 2,3,3-trimethyl-					-		-		-		-		-		-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Unknown					-		-		-		-		-		-		-		0.00492	J	
Unknown Aromatic					-		-		-		-		-		-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Undecane, 2,6-dimethyl-					-		-		-		-		-		-		-		-		
Unknown Cycloalkane					-		-		-		-		-		-		-		-		
Pentane					-		-		-		-		-		-		-		-		
Tridecane, 7-methyl-					-		-		-		-		-		-		-		-		
Unknown					-		-		-		-		-		-		-		0.00435	J	
Unknown Benzene					-		-		-		-		-		-		-		-		
Unknown					-		-		-		-		-		-		-		0.01	J	
Dodecane, 2,6,10-trimethyl-					-		-		-		-		-		-		-		-		
Unknown Cyclohexane					-		-		-		-		-		-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		

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**Soil Sample Results from Berm Test Pit Samples**  
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**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-7 (6)		BERM-7 (6)		BERM-8 (6)		BERM-9 (6)		BERM-10 (5)		BERM-11 (4)		BERM-11 (4)		BERM-11 (4) DUP			
				LAB ID:	L1642026-23		L1642026-23 R1		L1642026-24		L1642026-25		L1642026-30		L1642026-26		L1642026-26 R1		L1642026-28			
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016			
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																		
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q		
Pentane, 2,3,4-trimethyl-					-		-		-		-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-		-		-		-	
Fluorodichloromethane					-		-		-		-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-		-		-		-	
Ethane, 1-chloro-1-fluoro-					-		-		-		-		-		-		-		-		-	
Butane, 2-Methyl-					-		-		-		-		-		-		-		-		-	
No Tentatively Identified Compounds					-		-		-		-		-		-		-		-		-	
n-Hexane					-		-		-		-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-		-		-		-	
Decane, 3,7-dimethyl-					-		-		-		-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-		-		-		-	
Undecane					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		-		-		-		-		-		-	
Unknown					0.00498	J	-		0.00291	J	0.0042	J	0.00468	J	0.00485	J	-		0.00605	J		
Cyclotrisiloxane, Hexamethyl-					-		-		-		-		-		-		-		-		-	
Unknown Alkane					-		-		-		-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-		-		-		-	
Dimethyl sulfide					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		-		-		-		-		-		0.00451	J
Cyclopentane					-		-		-		-		-		-		-		-		-	
Unknown Benzene					-		-		-		-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-		-		-		-	
Unknown					-		-		-		-		-		-		-		-		0.00391	J
Unknown					0.0148	J	-		0.00489	J	0.0102	J	0.0111	J	0.0182	J	-		0.00367	J		
Tridecane					-		-		-		-		-		-		-		-		-	
Unknown					0.00721	J	-		0.019	J	0.00496	J	0.00614	J	0.0128	J	-		0.00641	J		
1-Pentene					-		-		-		-		-		-		-		-		-	
Ethane, 1,1-Difluoro-					-		-		-		-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-		-		-		-		-	
Unknown Aromatic					-		-		-		-		-		-		-		-		-	
Unknown					-		-		0.00883	J	-		0.00369	J	-		0.00486	J				
Total TIC Compounds					0.027	J	-		0.0356	J	0.0194	J	0.0219	J	0.0395	J	-		0.0487	J		
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																						
Acenaphthene	98	1000	100	20	0.062	J	-		0.29	U	0.08	J	0.042	J	0.034	J	-		1	J		
Hexachlorobenzene	3.2	12	1.2	0.33	0.12	U	-		0.21	U	0.14	U	0.12	U	0.13	U	-		2.6	U		
Bis(2-chloroethyl)ether					0.18	U	-		0.32	U	0.2	U	0.18	U	0.19	U	-		3.8	U		
2-Chloronaphthalene					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U		
3,3'-Dichlorobenzidine					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U		
2,4-Dinitrotoluene					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U		
2,6-Dinitrotoluene					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U		
Fluoranthene	1000	1000	100	100	0.92		-		0.28		3		0.86		0.28		-		5.8			

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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-7 (6)		BERM-7 (6)		BERM-8 (6)		BERM-9 (6)		BERM-10 (5)		BERM-11 (4)		BERM-11 (4)		BERM-11 (4) DUP		
				LAB ID:	L1642026-23		L1642026-23 R1		L1642026-24		L1642026-25		L1642026-30		L1642026-26		L1642026-26 R1		L1642026-28		
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016		
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
2-Chlorophenol					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U	
2,4-Dichlorophenol					0.18	U	-		0.32	U	0.2	U	0.18	U	0.19	U	-		3.8	U	
2,4-Dimethylphenol					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U	
2-Nitrophenol					0.43	U	-		0.77	U	0.47	U	0.43	U	0.45	U	-		9.2	U	
4-Nitrophenol					0.28	U	-		0.5	U	0.3	U	0.28	U	0.29	U	-		6	U	
2,4-Dinitrophenol					0.96	U	-		1.7	U	1	U	0.96	U	1	U	-		20	U	
4,6-Dinitro-o-cresol					0.52	U	-		0.93	U	0.56	U	0.52	U	0.55	U	-		11	U	
Pentachlorophenol	0.8	55	6.7	0.8	0.16	U	-		0.29	U	0.17	U	0.16	U	0.17	U	-		3.4	U	
Phenol	0.33	1000	100	0.33	0.2	U	-		0.36	U	0.11	J	0.2	U	0.2	J	-		4.3	U	
2-Methylphenol	0.33	1000	100	0.33	0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U	
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	0.29	U	-		0.52	U	0.038	J	0.039	J	0.11	J	-		6.2	U	
2,4,5-Trichlorophenol					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U	
Carbazole					0.082	J	-		0.36	U	0.15	J	0.083	J	0.21	U	-		0.86	J	
Atrazine					0.16	U	-		0.29	U	0.17	U	0.16	U	0.17	U	-		3.4	U	
Benzaldehyde					0.26	U	-		0.47	U	0.29	U	0.26	U	0.28	U	-		5.6	U	
Caprolactam					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U	
2,3,4,6-Tetrachlorophenol					0.2	U	-		0.36	U	0.22	U	0.2	U	0.21	U	-		4.3	U	
Total SVOCs					15.939	-	9.9	-	3.04	-	24.105	-	9.309	-	20.5	-	15	-	220	-	
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>																					
Unknown Biphenyl					-		-		-		-		2.38	J	-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Unknown					-		-		-		0.604	J	-		-		-		-		
Unknown PAH					-		-		-		-		-		-		-		-		
Vitamin E					-		-		-		-		-		-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Unknown PAH					-		-		-		-		-		-		-		-		
Unknown PAH					-		-		-		-		-		-		-		-		
Unknown PAH					-		-		-		-		-		-		-		-		
Unknown PAH					-		-		-		-		-		-		-		-		
Unknown Biphenyl					-		-		-		-		1.56	J	-		-		-		
Unknown Organic Acid					-		-		-		-		-		1.06	J	-		-		
Unknown Alkane					-		-		-		-		-		-		-		-		
Unknown Alkane					0.171	J	-		-		-		0.288	J	-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Unknown Naphthalene					-		-		-		-		-		-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Unknown Biphenyl					-		-		-		-		1.68	J	-		-		-		
Cyclic Octaatomic Sulfur					-		-		-		-		-		-		-		-		
Unknown Naphthalene					-		-		-		-		-		-		-		-		
Unknown Biphenyl					0.207	J	-		-		0.279	J	-		-		-		-		
Unknown Benzene					-		-		-		-		-		-		-		-		
Unknown Alcohol					0.776	J	-		-		-		-		-		-		-		

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**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-7 (6)	BERM-7 (6)	BERM-8 (6)	BERM-9 (6)	BERM-10 (5)	BERM-11 (4)	BERM-11 (4)	BERM-11 (4) DUP
				LAB ID:	L1642026-23	L1642026-23 R1	L1642026-24	L1642026-25	L1642026-30	L1642026-26	L1642026-26 R1	L1642026-28
				COLLECTION DATE:	12/22/2016	12/22/2016	12/22/2016	12/22/2016	12/23/2016	12/23/2016	12/23/2016	12/23/2016
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown PAH					-		-		-		-	
Unknown Biphenyl					-		-		0.908	J	-	
Unknown Alkane					-		-		-		-	
Unknown Alkane					-		-		-		-	
Unknown					-		-		0.209	J	-	
Unknown Alkane					-		-		-		-	
No Tentatively Identified Compounds					-		-		-		-	
Unknown PAH					-		-		-		-	
Unknown Biphenyl					-		-		0.361	J	-	
Unknown Organic Acid					-		-		-	1.62	J	
Unknown Naphthalene					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Unknown PAH					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown Phenol					-		-		-		-	
Unknown Alkane					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Unknown PAH					-		-		-		-	
Unknown					4.15	J	-		0.471	J	-	
Unknown Benzene					-		-		-		-	
Unknown					1.52	J	-		0.447	J	-	
Sulfur					-		-		-		-	
Unknown Thiophene					-		-		-		-	
Unknown Biphenyl					-		-		0.516	J	-	
Unknown Thiophene					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown Sulfur					-		-		-		-	
Unknown PAH					-		-		-		-	
Unknown Phenol					-		-		-		-	
Unknown Biphenyl					-		-		0.822	J	-	
Unknown Alkane					-		-		-		-	
Unknown Phosphate					0.186	J	-		-	0.532	J	
Unknown Biphenyl					-		-		0.722	J	-	
Unknown Biphenyl					-		-		0.566	J	-	
Unknown Organic Acid					-		-		-		-	
Unknown Benzene					-		-		-		-	
2,2',3,3',4,5',6-Heptachlor...					-		-		0.822	NJ	-	
Unknown PAH					-		-		-		-	
Unknown Alkane					-		-		-		-	
Unknown					2.01	J	-		0.522	J	5.29	J
Unknown Benzene					-		-		-		-	
Unknown PAH					-		-		0.216	J	-	

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				LAB ID:	L1642026-23		L1642026-23 R1		L1642026-24		L1642026-25		L1642026-30		L1642026-26		L1642026-26 R1		L1642026-28		
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016		
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown					0.635	J	-		-		0.313	J	-		-		-		-		-
Unknown					0.16	J	-		-		0.2	J	0.288	J	1.44	J	-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown Benzene					-		-		-		-		-		-		-		-		-
Unknown					1.51	J	-		-		0.199	J	0.972	J	0.76	J	-		-		-
Unknown Benzene					-		-		-		-		-		-		-		-		-
Unknown Biphenyl					-		-		-		-		0.532	J	-		-		-		-
Unknown Biphenyl					-		-		-		-		0.654	J	-		-		-		-
Unknown Phenol					3.57	J	-		-		0.502	J	-		4.17	J	-		72		J
Unknown					1.6	J	-		-		0.498	J	-		-		-		-		-
Unknown PAH					-		-		-		-		0.168	J	4.32	J	-		-		-
Unknown Naphthalene					-		-		-		-		-		-		-		-		-
Unknown					1.55	J	-		-		0.346	J	-		-		-		-		-
Unknown PAH					-		-		-		0.265	J	-		-		-		-		-
Unknown Organic Acid					-		-		-		-		-		-		-		-		-
Unknown					1.21	J	-		-		0.744	J	-		1.29	J	-		-		-
Unknown					-		-		0.724	J	-		-		-		-		-		-
Unknown					0.584	J	-		-		0.25	J	0.524	J	0.84	J	-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Unknown Naphthalene					-		-		-		-		-		-		-		-		-
Unknown Naphthalene					-		-		-		-		-		-		-		-		-
Unknown Alkane					-		-		-		-		-		-		-		-		-
Total TIC Compounds					-		-		-		-		-		-		-		-		-
<b>CHLORINATED HERBICIDES BY GC</b>																					
MCPP					3.98	U	-		3.65	U	4.3	U	3.98	U	4.17	U	-		4.18		U
MCPA					3.98	U	-		3.65	U	4.3	U	3.98	U	4.17	U	-		4.18		U
Dalapon					0.0398	U	-		0.0365	U	0.043	U	0.0398	U	0.0417	U	-		0.0418		U
Dicamba					0.0398	U	-		0.0365	U	0.043	U	0.0398	U	0.0417	U	-		0.0418		U
Dichloroprop					0.0398	U	-		0.0365	U	0.043	U	0.0398	U	0.0417	U	-		0.0418		U
2,4-DB					0.199	U	-		0.182	U	0.215	U	0.199	U	0.208	U	-		0.209		U
Dinoseb					0.0398	U	-		0.0365	U	0.043	U	0.0398	U	0.0417	U	-		0.0418		U
2,4-D					0.199	U	-		0.182	U	0.215	U	0.199	U	0.208	U	-		0.209		U
2,4,5-T					0.199	U	-		0.182	U	0.215	U	0.199	U	0.208	U	-		0.209		U
2,4,5-TP (Silvex)	3.8	1000	100	3.8	0.199	U	-		0.182	U	0.215	U	0.199	U	0.208	U	-		0.209		U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																					
Delta-BHC	0.25	1000	100	0.04	0.00187	U	-		0.00169	U	0.00207	U	0.0019	U	0.00195	U	-		0.00203		U
Lindane	0.1	23	1.3	0.1	0.000778	U	-		0.000704	U	0.000861	U	0.000791	U	0.000811	U	-		0.000847		U
Alpha-BHC	0.02	6.8	0.48	0.02	0.000778	U	-		0.000704	U	0.000861	U	0.000791	U	0.000811	U	-		0.000847		U
Beta-BHC	0.09	14	0.36	0.036	0.00187	U	-		0.00169	U	0.00207	U	0.0019	U	0.00195	U	-		0.00203		U
Heptachlor	0.38	29	2.1	0.042	0.000933	U	-		0.000845	U	0.00103	U	0.000949	U	0.000974	U	-		0.00102		U

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				SAMPLE ID (Depth ft.):	BERM-7 (6)		BERM-7 (6)		BERM-8 (6)		BERM-9 (6)		BERM-10 (5)		BERM-11 (4)		BERM-11 (4)		BERM-11 (4) DUP		
				LAB ID:	L1642026-23		L1642026-23 R1		L1642026-24		L1642026-25		L1642026-30		L1642026-26		L1642026-26 R1		L1642026-28		
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016		
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																	
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
Aldrin	0.19	1.4	0.097	0.005	0.00187	U	-		0.00169	U	0.00207	U	0.0019	U	0.00195	U	-		0.00203	U	
Heptachlor epoxide					0.0035	U	-		0.00317	U	0.00388	U	0.00356	U	0.00365	U	-		0.00381	U	
Endrin	0.06	410	11	0.014	0.000778	U	-		0.000704	U	0.000861	U	0.000791	U	0.000811	U	-		0.000847	U	
Endrin aldehyde					0.00233	U	-		0.00211	U	0.00258	U	0.00237	U	0.00243	U	-		0.00254	U	
Endrin ketone					0.00187	U	-		0.00169	U	0.00207	U	0.0019	U	0.00195	U	-		0.00203	U	
Dieldrin	0.1	2.8	0.2	0.005	0.00117	U	-		0.00106	U	0.00129	U	0.00118	U	0.00122	U	-		0.00127	U	
4,4'-DDE	17	120	8.9	0.0033	0.00187	U	-		0.00169	U	0.00207	U	0.0019	U	0.00195	U	-		0.00203	U	
4,4'-DDD	14	180	13	0.0033	0.0148		-		0.00293	P	0.0596		0.0019	U	0.00849		-		0.00203	U	
4,4'-DDT	136	94	7.9	0.0033	0.0035	U	-		0.00317	U	0.00388	U	0.00356	U	0.00365	U	-		0.00381	U	
Endosulfan I	102	920	24	2.4	0.00189	PI	-		0.00169	U	0.00207	U	0.0019	U	0.00195	U	-		0.00203	U	
Endosulfan II	102	920	24	2.4	0.00187	U	-		0.00169	U	0.00207	U	0.0019	U	0.00195	U	-		0.00203	U	
Endosulfan sulfate	1000	920	24	2.4	0.000778	U	-		0.000704	U	0.000861	U	0.000791	U	0.000811	U	-		0.000847	U	
Methoxychlor					0.0035	U	-		0.00317	U	0.00388	U	0.00356	U	0.00365	U	-		0.00381	U	
Toxaphene					0.035	U	-		0.0317	U	0.0388	U	0.0356	U	0.0365	U	-		0.0381	U	
cis-Chlordane	2.9	47	4.2	0.094	0.00233	U	-		0.00211	U	0.00258	U	0.00237	U	0.00243	U	-		0.00254	U	
trans-Chlordane					0.00233	U	-		0.00211	U	0.00258	U	0.00237	U	0.00243	U	-		0.00254	U	
Chlordane					0.0152	U	-		0.0137	U	0.0168	U	0.0154	U	0.0158	U	-		0.0165	U	
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																					
Aroclor 1016	3.2	25	1	0.1	0.382	U	-		0.0362	U	0.869	U	3.94	U	0.83	U	-		2.12	U	
Aroclor 1221	3.2	25	1	0.1	0.382	U	-		0.0362	U	0.869	U	3.94	U	0.83	U	-		2.12	U	
Aroclor 1232	3.2	25	1	0.1	0.382	U	-		0.0362	U	0.869	U	3.94	U	0.83	U	-		2.12	U	
Aroclor 1242	3.2	25	1	0.1	1.38		-		0.0951	P	5.23		4.25		9.1		-		7.84		
Aroclor 1248	3.2	25	1	0.1	0.382	U	-		0.0362	U	0.869	U	3.94	U	0.83	U	-		2.12	U	
Aroclor 1254	3.2	25	1	0.1	1.91		-		0.333		5.23		3.94	U	4.47		-		5.74		
Aroclor 1260	3.2	25	1	0.1	0.926		-		0.168		1.68		37.1		2.35		-		1.75	J	
Aroclor 1262	3.2	25	1	0.1	0.382	U	-		0.0362	U	0.869	U	3.94	U	0.83	U	-		2.12	U	
Aroclor 1268	3.2	25	1	0.1	0.382	U	-		0.0362	U	0.869	U	3.94	U	0.83	U	-		2.12	U	
PCBs, Total	3.2	25	1	0.1	4.22		-		0.596		12.1		41.4		15.9		-		15.3	J	
<b>TOTAL METALS</b>																					
Aluminum, Total					8200		-		6500		11000		7500		22000		-		29000		
Antimony, Total					16		-		3.1	J	26		12		39		-		39		
Arsenic, Total	16	16	16	13	12		-		5.3		11		6.4		15		-		10		
Barium, Total	820	10000	400	350	170		-		83		320		210		420		-		410		
Beryllium, Total	47	2700	72	7.2	0.24	J	-		0.21	J	0.27	J	0.34	J	0.3	J	-		0.34	J	
Cadmium, Total	7.5	60	4.3	2.5	7		-		2		19		7.4		14		-		19		
Calcium, Total					28000		-		45000		15000		9800		24000		-		31000		
Chromium, Total					120		-		110		190		91		160		-		150		
Cobalt, Total					12		-		7.3		19		10		22		-		23		
Copper, Total	1720	10000	270	50	1400		-		270		2200		400		2300		-		2800		
Iron, Total					120000		-		25000		100000		38000		130000		-		110000		
Lead, Total	450	3900	400	63	1000		-		210		1300		810		1700		-		2800		
Magnesium, Total					8700		-		21000		3800		3300		5300		-		5600		

Notes:  
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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-7 (6)		BERM-7 (6)		BERM-8 (6)		BERM-9 (6)		BERM-10 (5)		BERM-11 (4)		BERM-11 (4)		BERM-11 (4) DUP	
				LAB ID:	L1642026-23		L1642026-23 R1		L1642026-24		L1642026-25		L1642026-30		L1642026-26		L1642026-26 R1		L1642026-28	
				COLLECTION DATE:	12/22/2016		12/22/2016		12/22/2016		12/22/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016	
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO																
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Manganese, Total	2000	10000	2000	1600	990		-		450		770		580		880		-		830	
Mercury, Total	0.73	5.7	0.81	0.18	2.7		-		0.74		5.4		0.99		4.8		-		3.3	
Nickel, Total	130	10000	310	30	100		-		90		160		57		210		-		210	
Potassium, Total					520		-		460		550		570		800		-		790	
Selenium, Total	4	6800	180	3.9	1.9	U	-		1.7	U	2	U	1.9	U	1.9	U	-		2	U
Silver, Total	8.3	6800	180	2	1.5		-		0.31	J	1.8		1.4		3.8		-		4.1	
Sodium, Total					270		-		170		310		220		960		-		1100	
Thallium, Total					1.9	U	-		1.7	U	2	U	1.9	U	1.9	U	-		2	U
Vanadium, Total					28		-		18		37		21		26		-		21	
Zinc, Total	2480	10000	10000	109	1700		-		310		3900		1000		9100		-		9200	
<b>GENERAL CHEMISTRY</b>																				
Solids, Total					82.9		-		90.8		76.2		82.4		79.2		-		77.4	
Cyanide, Total	40	10000	27	27	0.53	J	-		1	U	0.43	J	0.98	J	0.32	J	-		0.56	J

Notes:  
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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP		BERM-12 (5)		BERM-12 (5)		BERM-13 (5)		BERM-13 (5)	
				LAB ID:	L1642026-28 R1		L1642026-27		L1642026-27 R1		L1642026-29		L1642026-29 R1	
				COLLECTION DATE:	12/23/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016	
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>VOLATILE ORGANICS BY GC/MS</b>														
Methylene chloride	0.05	1000	100	0.05	-		0.012	U	-		0.012	U	-	
1,1-Dichloroethane	0.27	480	26	0.27	-		0.0019	U	-		0.0019	U	-	
Chloroform	0.37	700	49	0.37	-		0.0019	U	-		0.0019	U	-	
Carbon tetrachloride	0.76	44	2.4	0.76	-		0.0012	U	-		0.0012	U	-	
1,2-Dichloropropane					-		0.0044	U	-		0.0044	U	-	
Dibromochloromethane					-		0.0012	U	-		0.0012	U	-	
1,1,2-Trichloroethane					-		0.0019	U	-		0.0019	U	-	
Tetrachloroethene	1.3	300	19	1.3	-		0.0012	U	-		0.0012	U	-	
Chlorobenzene	1.1	1000	100	1.1	-		0.0012	U	-		0.0012	U	-	
Trichlorofluoromethane					-		0.0063	U	-		0.0063	U	-	
1,2-Dichloroethane	0.02	60	3.1	0.02	-		0.0012	U	-		0.0012	U	-	
1,1,1-Trichloroethane	0.68	1000	100	0.68	-		0.0012	U	-		0.0012	U	-	
Bromodichloromethane					-		0.0012	U	-		0.0012	U	-	
trans-1,3-Dichloropropene					-		0.0012	U	-		0.0012	U	-	
cis-1,3-Dichloropropene					-		0.0012	U	-		0.0012	U	-	
1,3-Dichloropropene, Total					-		-	-	-		-	-	-	
Bromoform					-		0.005	U	-		0.005	U	-	
1,1,1,2-Tetrachloroethane					-		0.0012	U	-		0.0012	U	-	
Benzene	0.06	89	4.8	0.06	-		0.0012	U	-		0.00023	J	-	
Toluene	0.7	1000	100	0.7	-		0.0019	U	-		0.0018	J	-	
Ethylbenzene	1	780	41	1	-		0.0012	U	-		0.0012	U	-	
Chloromethane					-		0.0063	U	-		0.0063	U	-	
Bromomethane					-		0.0025	U	-		0.0025	U	-	
Vinyl chloride	0.02	27	0.9	0.02	-		0.0025	U	-		0.0025	U	-	
Chloroethane					-		0.0025	U	-		0.0025	U	-	
1,1-Dichloroethene	0.33	1000	100	0.33	-		0.0012	U	-		0.0012	U	-	
trans-1,2-Dichloroethene	0.19	1000	100	0.19	-		0.0019	U	-		0.0019	U	-	
Trichloroethene	0.47	400	21	0.47	-		0.0012	U	-		0.0012	U	-	
1,2-Dichlorobenzene	1.1	1000	100	1.1	-		0.0063	U	-		0.0063	U	-	
1,3-Dichlorobenzene	2.4	560	49	2.4	-		0.0063	U	-		0.0063	U	-	
1,4-Dichlorobenzene	1.8	250	13	1.8	-		0.0063	U	-		0.0063	U	-	
Methyl tert butyl ether	0.93	1000	100	0.93	-		0.0025	U	-		0.0025	U	-	
p/m-Xylene					-		0.0025	U	-		0.0025	U	-	
o-Xylene					-		0.0025	U	-		0.0025	U	-	
Xylenes, Total	1.6	1000	100	0.26	-		-	-	-		-	-	-	
cis-1,2-Dichloroethene	0.25	1000	100	0.25	-		0.0012	U	-		0.0012	U	-	
1,2-Dichloroethene, Total					-		-	-	-		-	-	-	
Styrene					-		0.0025	U	-		0.0025	U	-	
Dichlorodifluoromethane					-		0.012	U	-		0.012	U	-	
Acetone	0.05	1000	100	0.05	-		0.012	U	-		0.012	U	-	
Carbon disulfide					-		0.012	U	-		0.012	U	-	

Notes:

mg/kg = Milligrams per kilogram

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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP		BERM-12 (5)		BERM-12 (5)		BERM-13 (5)		BERM-13 (5)	
				LAB ID:	L1642026-28 R1		L1642026-27		L1642026-27 R1		L1642026-29		L1642026-29 R1	
				COLLECTION DATE:	12/23/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016	
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2-Butanone	0.12	1000	100	0.12	-		0.012	U	-		0.012	U	-	
4-Methyl-2-pentanone					-		0.012	U	-		0.012	U	-	
2-Hexanone					-		0.012	U	-		0.012	U	-	
Bromochloromethane					-		0.0063	U	-		0.0063	U	-	
1,2-Dibromoethane					-		0.005	U	-		0.005	U	-	
n-Butylbenzene	12	1000	100	12	-		-		-		-		-	
sec-Butylbenzene	11	1000	100	11	-		-		-		-		-	
tert-Butylbenzene	5.9	1000	100	5.9	-		-		-		-		-	
1,2-Dibromo-3-chloropropane					-		0.0063	U	-		0.0063	U	-	
Isopropylbenzene					-		0.0012	U	-		0.0012	U	-	
p-Isopropyltoluene					-		-		-		-		-	
Naphthalene	12	1000	100	12	-		-		-		-		-	
n-Propylbenzene	3.9	1000	100	3.9	-		-		-		-		-	
1,2,3-Trichlorobenzene					-		0.0063	U	-		0.0063	U	-	
1,2,4-Trichlorobenzene					-		0.0063	U	-		0.0063	U	-	
1,3,5-Trimethylbenzene	8.4	380	52	8.4	-		-		-		-		-	
1,2,4-Trimethylbenzene	3.6	380	52	3.6	-		-		-		-		-	
Methyl Acetate					-		0.025	U	-		0.025	U	-	
Cyclohexane					-		0.025	U	-		0.025	U	-	
1,4-Dioxane	0.1	250	13	0.1	-		0.12	U	-		0.12	U	-	
Freon-113					-		0.025	U	-		0.025	U	-	
Methyl cyclohexane					-		0.005	U	-		0.005	U	-	
Total VOCs					-		-		-		0.00203	-	-	-
<b>VOLATILE ORGANICS BY GC/MS-TIC</b>														
Pentane, 2-methyl-					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Pentane, 2,3,3-trimethyl-					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown					-		-		-		-		-	-
Unknown Aromatic					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Undecane, 2,6-dimethyl-					-		-		-		-		-	
Unknown Cycloalkane					-		-		-		-		-	
Pentane					-		-		-		-		-	
Tridecane, 7-methyl-					-		-		-		-		-	
Unknown					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown					-		-		-		-		-	
Dodecane, 2,6,10-trimethyl-					-		-		-		-		-	
Unknown Cyclohexane					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	

Notes:  
mg/kg = Milligrams per kilogram  
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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP	BERM-12 (5)	BERM-12 (5)	BERM-13 (5)	BERM-13 (5)			
				LAB ID:	L1642026-28 R1	L1642026-27	L1642026-27 R1	L1642026-29	L1642026-29 R1			
				COLLECTION DATE:	12/23/2016	12/23/2016	12/23/2016	12/23/2016	12/23/2016			
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Pentane, 2,3,4-trimethyl-					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Fluorodichloromethane					-		-		-		-	
Unknown Alkane					-		-		-		-	
Ethane, 1-chloro-1-fluoro-					-		-		-		-	
Butane, 2-Methyl-					-		-		-		-	
No Tentatively Identified Compounds					-		-		-		-	
n-Hexane					-		-		-		-	
Unknown Alkane					-		-		-		-	
Decane, 3,7-dimethyl-					-		-		-		-	
Unknown Benzene					-		-		-		-	
Undecane					-		-		-		-	
Unknown					-		-		-		-	
Unknown					-		0.00465	J	-		0.00546	J
Cyclotrisiloxane, Hexamethyl-					-		-		-		-	
Unknown Alkane					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Dimethyl sulfide					-		-		-		-	
Unknown					-		-		-		-	
Cyclopentane					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown Aromatic					-		-		-		-	
Unknown					-		-		-		-	
Unknown					-		0.00819	J	-		0.023	J
Tridecane					-		-		-		-	
Unknown					-		0.00391	J	-		0.00958	J
1-Pentene					-		-		-		-	
Ethane, 1,1-Difluoro-					-		-		-		-	
Unknown Aromatic					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Unknown Aromatic					-		-		-		-	
Unknown					-		-		-		-	
Total TIC Compounds					-		0.0168	J	-		0.038	J
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>												
Acenaphthene	98	1000	100	20	-		0.04	J	-		0.16	U
Hexachlorobenzene	3.2	12	1.2	0.33	-		0.12	U	-		0.12	U
Bis(2-chloroethyl)ether					-		0.19	U	-		0.18	U
2-Chloronaphthalene					-		0.21	U	-		0.2	U
3,3'-Dichlorobenzidine					-		0.21	U	-		0.2	U
2,4-Dinitrotoluene					-		0.21	U	-		0.2	U
2,6-Dinitrotoluene					-		0.21	U	-		0.2	U
Fluoranthene	1000	1000	100	100	-		0.72		-		0.49	

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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP	BERM-12 (5)	BERM-12 (5)	BERM-13 (5)	BERM-13 (5)				
				LAB ID:	L1642026-28 R1	L1642026-27	L1642026-27 R1	L1642026-29	L1642026-29 R1				
				COLLECTION DATE:	12/23/2016	12/23/2016	12/23/2016	12/23/2016	12/23/2016				
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO									
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
4-Chlorophenyl phenyl ether					-	-	0.21	U	-	-	0.2	U	
4-Bromophenyl phenyl ether					-	-	0.21	U	-	-	0.2	U	
Bis(2-chloroisopropyl)ether					-	-	0.25	U	-	-	0.24	U	
Bis(2-chloroethoxy)methane					-	-	0.22	U	-	-	0.22	U	
Hexachlorobutadiene					-	-	0.21	U	-	-	0.2	U	
Hexachlorocyclopentadiene					-	-	0.59	U	-	-	0.58	U	
Hexachloroethane					-	-	0.17	U	-	-	0.16	U	
Isophorone					-	-	0.19	U	-	-	0.18	U	
Naphthalene	12	1000	100	12	-	-	0.086	J	-	-	0.082	J	
Nitrobenzene					-	-	0.19	U	-	-	0.18	U	
NDPA/DPA					-	-	0.17	U	-	-	0.16	U	
n-Nitrosodi-n-propylamine					-	-	0.21	U	-	-	0.2	U	
Bis(2-ethylhexyl)phthalate					210	E	11		11	E	57	E	99
Butyl benzyl phthalate					-	-	1.1		-	-	1		-
Di-n-butylphthalate					-	-	0.14	J	-	-	0.23		-
Di-n-octylphthalate					-	-	0.23		-	-	2.7		-
Diethyl phthalate					-	-	0.21	U	-	-	0.2	U	-
Dimethyl phthalate					-	-	0.18	J	-	-	0.19	J	-
Benzo(a)anthracene	1	11	1	1	-	-	0.49		-	-	0.27		-
Benzo(a)pyrene	22	1.1	1	1	-	-	0.55		-	-	0.31		-
Benzo(b)fluoranthene	1.7	11	1	1	-	-	0.77		-	-	0.42		-
Benzo(k)fluoranthene	1.7	110	3.9	0.8	-	-	0.25		-	-	0.15		-
Chrysene	1	110	3.9	1	-	-	0.48		-	-	0.32		-
Acenaphthylene	107	1000	100	100	-	-	0.054	J	-	-	0.04	J	-
Anthracene	1000	1000	100	100	-	-	0.13		-	-	0.094	J	-
Benzo(ghi)perylene	1000	1000	100	100	-	-	0.39		-	-	0.27		-
Fluorene	386	1000	100	30	-	-	0.045	J	-	-	0.032	J	-
Phenanthrene	1000	1000	100	100	-	-	0.34		-	-	0.28		-
Dibenzo(a,h)anthracene	1000	1.1	0.33	0.33	-	-	0.091	J	-	-	0.06	J	-
Indeno(1,2,3-cd)pyrene	8.2	11	0.5	0.5	-	-	0.42		-	-	0.26		-
Pyrene	1000	1000	100	100	-	-	0.67		-	-	0.47		-
Biphenyl					-	-	0.47	U	-	-	0.46	U	-
4-Chloroaniline					-	-	0.21	U	-	-	0.2	U	-
2-Nitroaniline					-	-	0.21	U	-	-	0.2	U	-
3-Nitroaniline					-	-	0.21	U	-	-	0.2	U	-
4-Nitroaniline					-	-	0.21	U	-	-	0.2	U	-
Dibenzofuran	210	1000	59	7	-	-	0.034	J	-	-	0.029	J	-
2-Methylnaphthalene					-	-	0.11	J	-	-	0.11	J	-
1,2,4,5-Tetrachlorobenzene					-	-	0.13	J	-	-	0.2	U	-
Acetophenone					-	-	0.48		-	-	0.13	J	-
2,4,6-Trichlorophenol					-	-	0.12	U	-	-	0.12	U	-
p-Chloro-m-cresol					-	-	0.21	U	-	-	0.2	U	-

Notes:  
mg/kg = Milligrams per kilogram  
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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP	BERM-12 (5)	BERM-12 (5)	BERM-13 (5)	BERM-13 (5)					
				LAB ID:	L1642026-28 R1	L1642026-27	L1642026-27 R1	L1642026-29	L1642026-29 R1					
				COLLECTION DATE:	12/23/2016	12/23/2016	12/23/2016	12/23/2016	12/23/2016					
				NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO							
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
2-Chlorophenol					-	-	0.21	U	-	-	0.2	U	-	-
2,4-Dichlorophenol					-	-	0.19	U	-	-	0.18	U	-	-
2,4-Dimethylphenol					-	-	0.21	U	-	-	0.2	U	-	-
2-Nitrophenol					-	-	0.45	U	-	-	0.44	U	-	-
4-Nitrophenol					-	-	0.29	U	-	-	0.28	U	-	-
2,4-Dinitrophenol					-	-	1	U	-	-	0.98	U	-	-
4,6-Dinitro-o-cresol					-	-	0.54	U	-	-	0.53	U	-	-
Pentachlorophenol	0.8	55	6.7	0.8	-	-	0.17	U	-	-	0.16	U	-	-
Phenol	0.33	1000	100	0.33	-	-	0.16	J	-	-	0.14	J	-	-
2-Methylphenol	0.33	1000	100	0.33	-	-	0.21	U	-	-	0.2	U	-	-
3-Methylphenol/4-Methylphenol	0.33	1000	100	0.33	-	-	0.3	U	-	-	0.29	U	-	-
2,4,5-Trichlorophenol					-	-	0.21	U	-	-	0.2	U	-	-
Carbazole					-	-	0.061	J	-	-	0.047	J	-	-
Atrazine					-	-	0.17	U	-	-	0.16	U	-	-
Benzaldehyde					-	-	0.27	U	-	-	0.27	U	-	-
Caprolactam					-	-	0.21	U	-	-	0.22	U	-	-
2,3,4,6-Tetrachlorophenol					-	-	0.21	U	-	-	0.2	U	-	-
Total SVOCs					248.82	-	11	-	19.151	-	65.344	-	99	-
<b>SEMIVOLATILE ORGANICS BY GC/MS-TIC</b>														
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown					-	-	1.66	J	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-
Vitamin E					-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-
Unknown PAH					-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-
Unknown Organic Acid					-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-
Unknown Alkane					-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown Naphthalene					-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-
Cyclic Octaatomic Sulfur					-	-	-	-	-	-	-	-	-	-
Unknown Naphthalene					-	-	-	-	-	-	-	-	-	-
Unknown Biphenyl					-	-	-	-	-	-	-	-	-	-
Unknown Benzene					-	-	-	-	-	-	-	-	-	-
Unknown Alcohol					-	-	-	-	-	-	-	-	-	-

Notes:  
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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP	BERM-12 (5)	BERM-12 (5)	BERM-13 (5)	BERM-13 (5)					
				LAB ID:	L1642026-28 R1	L1642026-27	L1642026-27 R1	L1642026-29	L1642026-29 R1					
				COLLECTION DATE:	12/23/2016	12/23/2016	12/23/2016	12/23/2016	12/23/2016					
				NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO							
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown PAH					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown					-		1.27	J	-		-		-	
Unknown Alkane					-		-		-		-		-	
No Tentatively Identified Compounds					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown Phenol					-		0.301	J	-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown Naphthalene					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown					-		1.18	J	-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown					-		0.731	J	-		-		-	
Sulfur					-		-		-		-		-	
Unknown Thiophene					-		-		-		-		-	
Unknown Biphenyl					-		0.481	J	-		-		-	
Unknown Thiophene					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown Sulfur					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Phenol					-		1.86	J	-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown Phosphate					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Biphenyl					-		-		-		-		-	
Unknown Organic Acid					-		-		-		-		-	
Unknown Benzene					-		-		-		-		-	
2,2',3,3',4,5',6-Heptachlor...					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	
Unknown Alkane					-		-		-		-		-	
Unknown					-		0.192	J	-		-		-	
Unknown Benzene					-		-		-		-		-	
Unknown PAH					-		-		-		-		-	

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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP	BERM-12 (5)	BERM-12 (5)	BERM-13 (5)	BERM-13 (5)			
				LAB ID:	L1642026-28 R1	L1642026-27	L1642026-27 R1	L1642026-29	L1642026-29 R1			
				COLLECTION DATE:	12/23/2016	12/23/2016	12/23/2016	12/23/2016	12/23/2016			
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Unknown Alkane					-		-		-		-	
Unknown Alkane					-		-		-		-	
Unknown					-		0.199	J	-		-	
Unknown					-		0.266	J	-		0.294	J
Unknown Alkane					-		-		-		-	
Unknown Benzene					-		-		-		-	
Unknown					-		0.383	J	-		-	
Unknown Benzene					-		-		-		-	
Unknown Biphenyl					-		0.268	J	-		-	
Unknown Biphenyl					-		0.217	J	-		-	
Unknown Phenol					-		-		-		11.4	J
Unknown					-		1.04	J	-		-	
Unknown PAH					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Unknown					-		0.311	J	-		-	
Unknown PAH					-		-		-		-	
Unknown Organic Acid					-		-		-		1.65	J
Unknown					-		0.569	J	-		-	
Unknown					-		-		-		-	
Unknown					-		0.294	J	-		0.349	J
Unknown Alkane					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Unknown Naphthalene					-		-		-		-	
Unknown Alkane					-		-		-		-	
Total TIC Compounds					-		-		-		-	
<b>CHLORINATED HERBICIDES BY GC</b>												
MCPP					-		4.13	U	-		4.15	U
MCPA					-		4.13	U	-		4.15	U
Dalapon					-		0.0413	U	-		0.0415	U
Dicamba					-		0.0413	U	-		0.0415	U
Dichloroprop					-		0.0413	U	-		0.0415	U
2,4-DB					-		0.206	U	-		0.207	U
Dinoseb					-		0.0413	U	-		0.0415	U
2,4-D					-		0.206	U	-		0.207	U
2,4,5-T					-		0.206	U	-		0.207	U
2,4,5-TP (Silvex)	3.8	1000	100	3.8	-		0.206	U	-		0.207	U
<b>ORGANOCHLORINE PESTICIDES BY GC</b>												
Delta-BHC	0.25	1000	100	0.04	-		0.00965	U	-		0.00191	U
Lindane	0.1	23	1.3	0.1	-		0.00402	U	-		0.000795	U
Alpha-BHC	0.02	6.8	0.48	0.02	-		0.00402	U	-		0.000795	U
Beta-BHC	0.09	14	0.36	0.036	-		0.00965	U	-		0.00191	U
Heptachlor	0.38	29	2.1	0.042	-		0.00482	U	-		0.000954	U

Notes:

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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP	BERM-12 (5)	BERM-12 (5)	BERM-13 (5)	BERM-13 (5)			
				LAB ID:	L1642026-28 R1	L1642026-27	L1642026-27 R1	L1642026-29	L1642026-29 R1			
				COLLECTION DATE:	12/23/2016	12/23/2016	12/23/2016	12/23/2016	12/23/2016			
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO								
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Aldrin	0.19	1.4	0.097	0.005	-		0.00965	U	-		0.00191	U
Heptachlor epoxide					-		0.0785	PI	-		0.00358	U
Endrin	0.06	410	11	0.014	-		0.00402	U	-		0.000795	U
Endrin aldehyde					-		0.0121	U	-		0.00238	U
Endrin ketone					-		0.00965	U	-		0.00191	U
Dieldrin	0.1	2.8	0.2	0.005	-		0.286	P	-		0.00119	U
4,4'-DDE	17	120	8.9	0.0033	-		0.00965	U	-		0.00191	U
4,4'-DDD	14	180	13	0.0033	-		0.0804	PI	-		0.00191	U
4,4'-DDT	136	94	7.9	0.0033	-		0.208	PI	-		0.00358	U
Endosulfan I	102	920	24	2.4	-		0.00965	U	-		0.00191	U
Endosulfan II	102	920	24	2.4	-		0.0506	PI	-		0.00191	U
Endosulfan sulfate	1000	920	24	2.4	-		0.00402	U	-		0.000795	U
Methoxychlor					-		0.0181	U	-		0.00358	U
Toxaphene					-		0.181	U	-		0.0358	U
cis-Chlordane	2.9	47	4.2	0.094	-		0.0121	U	-		0.00238	U
trans-Chlordane					-		0.0121	U	-		0.00238	U
Chlordane					-		0.0784	U	-		0.0155	U
<b>POLYCHLORINATED BIPHENYLS BY GC</b>												
Aroclor 1016	3.2	25	1	0.1	-		1.98	U	-		0.791	U
Aroclor 1221	3.2	25	1	0.1	-		1.98	U	-		0.791	U
Aroclor 1232	3.2	25	1	0.1	-		1.98	U	-		0.791	U
Aroclor 1242	3.2	25	1	0.1	-		6.34		-		3.04	
Aroclor 1248	3.2	25	1	0.1	-		1.98	U	-		0.791	U
Aroclor 1254	3.2	25	1	0.1	-		8.93		-		2.77	
Aroclor 1260	3.2	25	1	0.1	-		2.12		-		1.93	
Aroclor 1262	3.2	25	1	0.1	-		1.98	U	-		0.791	U
Aroclor 1268	3.2	25	1	0.1	-		1.98	U	-		0.791	U
PCBs, Total	3.2	25	1	0.1	-		17.4		-		7.74	
<b>TOTAL METALS</b>												
Aluminum, Total					-		13000		-		14000	
Antimony, Total					-		23		-		37	
Arsenic, Total	16	16	16	13	-		12		-		9.2	
Barium, Total	820	10000	400	350	-		240		-		260	
Beryllium, Total	47	2700	72	7.2	-		0.83		-		0.44	J
Cadmium, Total	7.5	60	4.3	2.5	-		18		-		14	
Calcium, Total					-		29000		-		23000	
Chromium, Total					-		170		-		280	
Cobalt, Total					-		19		-		19	
Copper, Total	1720	10000	270	50	-		1700		-		2300	
Iron, Total					-		150000		-		89000	
Lead, Total	450	3900	400	63	-		1700		-		1500	
Magnesium, Total					-		3800		-		4300	

Notes:

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**TABLE 5**  
**Soil Sample Results from Berm Test Pit Samples**  
**Former Freedman and Son**  
**Site Code 401033**  
**Green Island, New York**

				SAMPLE ID (Depth ft.):	BERM-11 (4) DUP		BERM-12 (5)		BERM-12 (5)		BERM-13 (5)		BERM-13 (5)	
				LAB ID:	L1642026-28 R1		L1642026-27		L1642026-27 R1		L1642026-29		L1642026-29 R1	
				COLLECTION DATE:	12/23/2016		12/23/2016		12/23/2016		12/23/2016		12/23/2016	
	NY-Restricted - Protection of Groundwater	IUSCO	RRSCO	UUSCO										
ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Manganese, Total	2000	10000	2000	1600	-		1000	-	-		740	-	-	
Mercury, Total	0.73	5.7	0.81	0.18	-		3.7	-	-		82	-	-	
Nickel, Total	130	10000	310	30	-		240	-	-		160	-	-	
Potassium, Total					-		610	-	-		650	-	-	
Selenium, Total	4	6800	180	3.9	-		1.9	U	-		1.9	U	-	
Silver, Total	8.3	6800	180	2	-		2.2	-	-		3.2	-	-	
Sodium, Total					-		510	-	-		420	-	-	
Thallium, Total					-		1.9	U	-		1.9	U	-	
Vanadium, Total					-		22	-	-		22	-	-	
Zinc, Total	2480	10000	10000	109	-		12000	-	-		3500	-	-	
<b>GENERAL CHEMISTRY</b>														
Solids, Total					-		79.7	-	-		79.5	-	-	
Cyanide, Total	40	10000	27	27	-		0.27	J	-		0.27	J	-	

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TABLE 6  
Soil Sample Results from Mound Area  
R. Freeman Son  
Site Code #401033  
Green Island, New York

LOCATION				TP-1 0-1' S-1		TP-1 3-4' S-2		TP-2 0-1 S-1		TP-2 5-7' S-2		TP-3 0-2 S-1		TP-3 5-7 S-2		TP-3 7-9 S-3		DUP TP-3		
SAMPLING DATE				2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		
LAB SAMPLE ID				L1904860-01		L1904860-02		L1904860-03		L1904860-04		L1904860-05		L1904860-06		L1904860-07		L1904860-08		
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																				
	IUSCO	RRSCO	UUSCO	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>General Chemistry</b>																				
Solids, Total				%	82.9		81		92		82.7		93.5		88.3		94.3		92	
Cyanide, Total	10000	27	27	mg/kg	0.31	J	4.3		1	U	2.6		0.3	J	1	U	1	U	1.1	U
<b>Chlorinated Herbicides by GC</b>																				
2,4-D				mg/kg	0.197	U	0.203	U	0.178	U	0.198	U	0.178	U	0.188	U	0.176	U	0.178	U
2,4,5-T				mg/kg	0.197	U	0.203	U	0.178	U	0.198	U	0.178	U	0.188	U	0.176	U	0.178	U
2,4,5-TP (Silvex)	1000	100	3.8	mg/kg	0.197	U	0.203	U	0.178	U	0.198	U	0.178	U	0.188	U	0.176	U	0.178	U
<b>Organochlorine Pesticides by GC</b>																				
Delta-BHC	1000	100	0.04	mg/kg	0.00184	U	0.0019	U	0.00167	U	0.00185	U	0.00164	U	0.00174	U	0.00162	U	0.00172	U
Lindane	23	1.3	0.1	mg/kg	0.000767	U	0.00079	U	0.000696	U	0.00077	U	0.000683	U	0.000724	U	0.000674	U	0.000718	U
Alpha-BHC	6.8	0.48	0.02	mg/kg	0.000767	U	0.00079	U	0.000696	U	0.00077	U	0.000683	U	0.000724	U	0.000674	U	0.000718	U
Beta-BHC	14	0.36	0.036	mg/kg	0.00184	U	0.0019	U	0.00167	U	0.00185	U	0.00164	U	0.00174	U	0.00162	U	0.00172	U
Heptachlor	29	2.1	0.042	mg/kg	0.00092	U	0.000948	U	0.000835	U	0.000924	U	0.00082	U	0.000868	U	0.00081	U	0.000862	U
Aldrin	1.4	0.097	0.005	mg/kg	0.00184	U	0.0019	U	0.00167	U	0.00185	U	0.00164	U	0.00174	U	0.00162	U	0.00172	U
Heptachlor epoxide				mg/kg	0.00345	U	0.00356	U	0.00313	U	0.00346	U	0.00308	U	0.00326	U	0.00304	U	0.00323	U
Endrin	410	11	0.014	mg/kg	0.000767	U	0.00079	U	0.000696	U	0.00077	U	0.000683	U	0.000724	U	0.000674	U	0.000718	U
Endrin aldehyde				mg/kg	0.0023	U	0.00237	U	0.00209	U	0.00231	U	0.00205	U	0.00217	U	0.00202	U	0.00215	U
Endrin ketone				mg/kg	0.00184	U	0.0019	U	0.00167	U	0.00185	U	0.00164	U	0.00174	U	0.00162	U	0.00172	U
Dieldrin	2.8	0.2	0.005	mg/kg	0.00115	U	0.00118	U	0.000752	JIP	0.00115	U	0.0179		0.00114	IP	0.00101	U	0.00108	U
4,4'-DDE	120	8.9	0.0033	mg/kg	0.00184	U	0.0019	U	0.00167	U	0.00185	U	0.00164	U	0.00174	U	0.00162	U	0.00172	U
4,4'-DDD	180	13	0.0033	mg/kg	0.00184	U	0.0019	U	0.00167	U	0.00185	U	0.00164	U	0.00174	U	0.00162	U	0.00172	U
4,4'-DDT	94	7.9	0.0033	mg/kg	0.00345	U	0.00356	U	0.00313	U	0.00346	U	0.00308	U	0.00326	U	0.00304	U	0.00323	U
Endosulfan I	920	24	2.4	mg/kg	0.00184	U	0.0019	U	0.00167	U	0.00185	U	0.00164	U	0.00174	U	0.00162	U	0.00172	U
Endosulfan II	920	24	2.4	mg/kg	0.00184	U	0.0122	IP	0.00167	U	0.00629	IP	0.00164	U	0.00174	U	0.00162	U	0.00172	U
Endosulfan sulfate	920	24	2.4	mg/kg	0.000767	U	0.00079	U	0.000696	U	0.00077	U	0.000683	U	0.000724	U	0.000674	U	0.000718	U
Methoxychlor				mg/kg	0.00345	U	0.00356	U	0.00313	U	0.00346	U	0.00308	U	0.00326	U	0.00304	U	0.00323	U
Toxaphene				mg/kg	0.0345	U	0.0356	U	0.0313	U	0.0346	U	0.0308	U	0.0326	U	0.0304	U	0.0323	U
cis-Chlordane	47	4.2	0.094	mg/kg	0.0023	U	0.00237	U	0.00209	U	0.00231	U	0.00205	U	0.00217	U	0.00202	U	0.00215	U
trans-Chlordane				mg/kg	0.0023	U	0.00237	U	0.00209	U	0.00231	U	0.00205	U	0.00217	U	0.00202	U	0.00215	U
Chlordane				mg/kg	0.015	U	0.0154	U	0.0136	U	0.015	U	0.0133	U	0.0141	U	0.0132	U	0.014	U

Notes:  
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J = Compound at a concentration below the reporting limit  
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TABLE 6  
Soil Sample Results from Mound Area  
R. Freeman Son  
Site Code #401033  
Green Island, New York

LOCATION				TP-1 0-1' S-1		TP-1 3-4' S-2		TP-2 0-1 S-1		TP-2 5-7' S-2		TP-3 0-2 S-1		TP-3 5-7 S-2		TP-3 7-9 S-3		DUP TP-3		
SAMPLING DATE				2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		
LAB SAMPLE ID				L1904860-01		L1904860-02		L1904860-03		L1904860-04		L1904860-05		L1904860-06		L1904860-07		L1904860-08		
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																				
	IUSCO	RRSCO	UUSCO	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Polychlorinated Biphenyls by GC</b>																				
Aroclor 1016	25	1	0.1	mg/kg	0.385	U	0.786	U	0.0359	U	0.402	U	0.168	U	0.0372	U	0.0349	U	0.0342	U
Aroclor 1221	25	1	0.1	mg/kg	0.385	U	0.786	U	0.0359	U	0.402	U	0.168	U	0.0372	U	0.0349	U	0.0342	U
Aroclor 1232	25	1	0.1	mg/kg	0.385	U	0.786	U	0.0359	U	0.402	U	0.168	U	0.0372	U	0.0349	U	0.0342	U
Aroclor 1242	25	1	0.1	mg/kg	0.385	U	0.786	U	0.0359	U	0.402	U	0.168	U	0.0372	U	0.0349	U	0.0342	U
Aroclor 1248	25	1	0.1	mg/kg	2.11		4.46		0.0908		2.35		0.855		0.14		0.0289	J	0.0428	
Aroclor 1254	25	1	0.1	mg/kg	2.02		2.82		0.0712		1.44		0.71		0.0997		0.0341	J	0.0275	J
Aroclor 1260	25	1	0.1	mg/kg	0.99		2.1		0.0377		0.584		0.582		0.0365	JIP	0.00666	J	0.0208	J
Aroclor 1262	25	1	0.1	mg/kg	0.385	U	0.786	U	0.0359	U	0.402	U	0.168	U	0.0372	U	0.0349	U	0.0342	U
Aroclor 1268	25	1	0.1	mg/kg	0.385	U	0.786	U	0.0359	U	0.402	U	0.168	U	0.0372	U	0.0349	U	0.0342	U
PCBs, Total	25	1	0.1	mg/kg	5.12		9.38		0.2		4.37		2.15		0.276	J	0.0697	J	0.0911	J

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TABLE 6  
Soil Sample Results from Mound Area  
R. Freeman Son  
Site Code #401033  
Green Island, New York

LOCATION					TP-1 0-1' S-1		TP-1 3-4' S-2		TP-2 0-1 S-1		TP-2 5-7' S-2		TP-3 0-2 S-1		TP-3 5-7 S-2		TP-3 7-9 S-3		DUP TP-3	
SAMPLING DATE					2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019	
LAB SAMPLE ID					L1904860-01		L1904860-02		L1904860-03		L1904860-04		L1904860-05		L1904860-06		L1904860-07		L1904860-08	
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
SAMPLE DEPTH (ft.)																				
	IUSCO	RRSCO	UUSCO	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Benzaldehyde				mg/kg	0.52	U	0.54	U	2.4	U	0.52	U	0.23	U	0.49	U	0.23	U	0.24	U
Caprolactam				mg/kg	0.39	U	0.41	U	1.8	U	0.39	U	0.17	U	0.37	U	0.18	U	0.18	U
2,3,4,6-Tetrachlorophenol				mg/kg	0.39	U	0.41	U	1.8	U	0.39	U	0.17	U	0.37	U	0.18	U	0.18	U

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Site Code #401033  
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LOCATION				TP-1 0-1' S-1		TP-1 3-4' S-2		TP-2 0-1 S-1		TP-2 5-7' S-2		TP-3 0-2 S-1		TP-3 5-7 S-2		TP-3 7-9 S-3		DUP TP-3			
SAMPLING DATE				2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019			
LAB SAMPLE ID				L1904860-01		L1904860-02		L1904860-03		L1904860-04		L1904860-05		L1904860-06		L1904860-07		L1904860-08			
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL			
SAMPLE DEPTH (ft.)																					
	IUSCO	RRSCO	UUSCO	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	
<b>Total TIC Compounds</b>				mg/kg	3.29	J	14.1	J	1.79	J	17	J	14.8	J	2.27	J	1.18	J	0.756	J	
<b>Semivolatile Organics by GC/MS-TIC</b>																					
Unknown Alkane				mg/kg	-	-	-	-	-	-	-	-	0.394	J	-	-	-	-	-	-	
Unknown				mg/kg	-	-	-	-	-	-	-	-	1.85	J	3.09	J	-	-	-	0.3	J
Unknown				mg/kg	-	-	0.346	J	-	-	-	-	0.401	J	0.473	J	-	-	-	0.225	J
Unknown Biphenyl				mg/kg	-	-	0.77	J	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown Alkane				mg/kg	-	-	-	-	-	-	-	-	0.539	J	-	-	-	-	-	-	
Unknown Benzene				mg/kg	0.395	J	-	-	-	-	-	-	0.368	J	-	-	-	-	-	-	
Unknown Biphenyl				mg/kg	-	-	0.416	J	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown PAH				mg/kg	-	-	-	-	-	-	-	-	-	0.317	J	-	-	-	-	-	
Unknown Naphthalene				mg/kg	-	-	-	-	-	-	-	-	-	0.387	J	-	-	-	-	-	
Unknown Alkane				mg/kg	-	-	-	-	-	-	-	-	0.405	J	0.298	J	-	-	-	-	
Unknown Phenol				mg/kg	2.52	J	5.14	J	1.79	J	-	-	5.02	J	-	-	1.56	J	-	-	
Unknown Alkane				mg/kg	-	-	-	-	-	-	-	-	0.781	J	-	-	-	-	-	-	
Unknown				mg/kg	-	-	-	-	-	-	-	-	-	2.36	J	-	-	-	-	-	
Unknown Naphthalene				mg/kg	-	-	-	-	-	-	-	-	0.339	J	-	-	-	-	-	-	
Unknown PAH				mg/kg	-	-	0.42	J	-	-	-	-	0.322	J	-	-	-	-	-	-	
Unknown Naphthalene				mg/kg	-	-	-	-	-	-	-	-	-	0.362	J	-	-	-	-	-	
Unknown Benzene				mg/kg	-	-	0.436	J	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown				mg/kg	-	-	-	-	-	-	-	-	-	2.67	J	-	-	-	-	-	
Unknown				mg/kg	-	-	-	-	-	-	-	-	-	1.45	J	-	-	-	-	-	
Unknown Alkane				mg/kg	-	-	-	-	-	-	-	-	1.84	J	-	-	-	-	-	-	
Unknown				mg/kg	-	-	3.27	J	-	-	-	-	0.398	J	0.441	J	-	-	-	0.251	J
Unknown PAH				mg/kg	-	-	-	-	-	-	-	-	-	0.321	J	-	-	-	-	-	
Unknown Alkane				mg/kg	-	-	-	-	-	-	-	-	1.02	J	0.578	J	-	-	-	-	
Unknown Organic Acid				mg/kg	-	-	-	-	-	-	-	-	-	0.909	J	0.405	J	-	-	-	
Unknown Benzene				mg/kg	-	-	0.4	J	-	-	-	-	-	-	-	-	-	-	-	-	
Unknown				mg/kg	-	-	-	-	-	-	-	-	2.56	J	0.578	J	-	-	-	0.191	J
Unknown				mg/kg	0.37	J	-	-	-	-	-	-	-	-	-	0.308	J	-	-	-	
Unknown				mg/kg	-	-	2.89	J	-	-	-	-	0.737	J	0.609	J	-	-	-	0.215	J

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TABLE 6  
Soil Sample Results from Mound Area  
R. Freeman Son  
Site Code #401033  
Green Island, New York

LOCATION				TP-1 0-1' S-1		TP-1 3-4' S-2		TP-2 0-1 S-1		TP-2 5-7' S-2		TP-3 0-2 S-1		TP-3 5-7 S-2		TP-3 7-9 S-3		DUP TP-3		
SAMPLING DATE				2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		
LAB SAMPLE ID				L1904860-01		L1904860-02		L1904860-03		L1904860-04		L1904860-05		L1904860-06		L1904860-07		L1904860-08		
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																				
	IUSCO	RRSCO	UUSCO	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
<b>Total Metals</b>																				
Aluminum, Total				mg/kg	7900		11200		4980		7880		6250		4290		5710		7320	
Antimony, Total				mg/kg	10.9		33.1		2.36	J	13.9		1.33	J	3.95	J	1.4	J	1.65	J
Arsenic, Total	16	16	13	mg/kg	9.9		15.9		4.84		9.45		4.44		8.12		4.73		5	
Barium, Total	10000	400	350	mg/kg	101		229		45.5		106		46.4		62.2		32.9		40.6	
Beryllium, Total	2700	72	7.2	mg/kg	0.333	J	0.37	J	0.117	J	0.267	J	0.27	J	0.241	J	0.254	J	0.3	J
Cadmium, Total	60	4.3	2.5	mg/kg	0.285	J	3.61		0.838	U	0.46	J	0.844	U	0.893	U	0.818	U	0.856	U
Calcium, Total				mg/kg	16100		25500		128000		9360		1460		21800		2360		2500	
Chromium, Total	6800	180	30	mg/kg	83.7		155		32.4		81.2		7.82		11.8		8.17		10	
Cobalt, Total				mg/kg	9.47		15.6		5.82		12		6.31		5.47		5.19		6.46	
Copper, Total	10000	270	50	mg/kg	635		2410		212		814		18.7		127		22.4		33.6	
Iron, Total				mg/kg	49100		118000		16200		63600		15500		15900		14800		17700	
Lead, Total	3900	400	63	mg/kg	549		1380		88.3		671		12		319		14.5		35.3	
Magnesium, Total				mg/kg	4360		4250		6830		2080		3080		2580		2750		3560	
Manganese, Total	10000	2000	1600	mg/kg	606		1280		292		508		666		197		336		577	
Mercury, Total	5.7	0.81	0.18	mg/kg	0.917		1.86		0.182		2.44		0.056	J	0.419		0.067	U	0.099	
Nickel, Total	10000	310	30	mg/kg	79.2		165		23.4		68.3		12.9		19.5		10.7		13.7	
Potassium, Total				mg/kg	485		555		399		408		270		441		215		297	
Selenium, Total	6800	180	3.9	mg/kg	1.93		3.84		0.704	J	2.65	J	0.658	J	1.44	J	0.72	J	1.04	J
Silver, Total	6800	180	2	mg/kg	0.846	J	1.36		0.838	U	0.303	J	0.844	U	0.893	U	0.818	U	0.856	U
Sodium, Total				mg/kg	18.1	J	181	J	53.8	J	86.5	J	169	U	171	J	32.8	J	36.9	J
Thallium, Total				mg/kg	1.9	U	0.37	J	1.68	U	0.313	J	1.69	U	1.79	U	1.64	U	1.71	U
Vanadium, Total				mg/kg	24.9		38.5		22.8		26.7		11.3		16		11.6		12.6	
Zinc, Total	10000	10000	109	mg/kg	830		2520		181		847		42.7		242		43.5		65.6	

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Site Code #401033  
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LOCATION					TP-1 0-1' S-1		TP-1 3-4' S-2		TP-2 0-1 S-1		TP-2 5-7' S-2		TP-3 0-2 S-1		TP-3 5-7 S-2		TP-3 7-9 S-3		DUP TP-3		
SAMPLING DATE					2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		
LAB SAMPLE ID					L1904860-01		L1904860-02		L1904860-03		L1904860-04		L1904860-05		L1904860-06		L1904860-07		L1904860-08		
SAMPLE TYPE					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																					
	IUSCO	RRSCO	UUSCO	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	
Volatile Organics by GC/MS																					
Methylene chloride	1000	100	0.05	mg/kg	0.0055	U	0.0048	U	0.0042	U	0.0056	U	0.0039	U	0.0051	U	0.0038	U	0.0049	U	
1,1-Dichloroethane	480	26	0.27	mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
Chloroform	700	49	0.37	mg/kg	0.00016	J	0.00014	J	0.0012	U	0.0017	U	0.0012	U	0.0015	U	0.0011	U	0.0015	U	
Carbon tetrachloride	44	2.4	0.76	mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
1,2-Dichloropropane				mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
Dibromochloromethane				mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
1,1,2-Trichloroethane				mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
Tetrachloroethene	300	19	1.3	mg/kg	0.0005	J	0.00078	J	0.00042	U	0.0011	U	0.00039	U	0.00025	J	0.00038	U	0.00049	U	
Chlorobenzene	1000	100	1.1	mg/kg	0.00055	U	0.00048	U	0.00042	U	0.00056	U	0.00039	U	0.00051	U	0.00038	U	0.00049	U	
Trichlorofluoromethane				mg/kg	0.0044	U	0.0038	U	0.0034	U	0.0045	U	0.0032	U	0.004	U	0.003	U	0.0039	U	
1,2-Dichloroethane	60	3.1	0.02	mg/kg	0.058	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
1,1,1-Trichloroethane	1000	100	0.68	mg/kg	0.00055	U	0.00048	U	0.00042	U	0.00056	U	0.00039	U	0.00051	U	0.00038	U	0.00049	U	
Bromodichloromethane				mg/kg	0.00055	U	0.00048	U	0.00042	U	0.00056	U	0.00039	U	0.00051	U	0.00038	U	0.00049	U	
trans-1,3-Dichloropropene				mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
cis-1,3-Dichloropropene				mg/kg	0.00055	U	0.00048	U	0.00042	U	0.00056	U	0.00039	U	0.00051	U	0.00038	U	0.00049	U	
Bromoform				mg/kg	0.0044	U	0.0038	U	0.0034	U	0.0045	U	0.0032	U	0.004	U	0.003	U	0.0039	U	
1,1,2,2-Tetrachloroethane				mg/kg	0.00055	U	0.00048	U	0.00042	U	0.00056	U	0.00039	U	0.00051	U	0.00038	U	0.00049	U	
Benzene	89	4.8	0.06	mg/kg	0.00055	U	0.00048	U	0.00042	U	0.00065	U	0.00039	U	0.00017	J	0.00038	U	0.00049	U	
Toluene	1000	100	0.7	mg/kg	0.00072	J	0.0006	J	0.00071	J	0.0026	J	0.00043	J	0.0012	J	0.00062	J	0.00098	U	
Ethylbenzene	780	41	1	mg/kg	0.019	U	0.00096	U	0.00084	U	0.0029	U	0.00079	U	0.0004	J	0.00076	U	0.00098	U	
Chloromethane				mg/kg	0.0044	U	0.0038	U	0.0034	U	0.0045	U	0.0032	U	0.004	U	0.003	U	0.0039	U	
Bromomethane				mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
Vinyl chloride	27	0.9	0.02	mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
Chloroethane				mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
1,1-Dichloroethene	1000	100	0.33	mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
trans-1,2-Dichloroethene	1000	100	0.19	mg/kg	0.0016	U	0.0014	U	0.0012	U	0.0017	U	0.0012	U	0.0015	U	0.0011	U	0.0015	U	
Trichloroethene	400	21	0.47	mg/kg	0.00055	U	0.00048	U	0.00042	U	0.0003	J	0.00039	U	0.00051	U	0.00038	U	0.00049	U	
1,2-Dichlorobenzene	1000	100	1.1	mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
1,3-Dichlorobenzene	560	49	2.4	mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
1,4-Dichlorobenzene	250	13	1.8	mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
Methyl tert butyl ether	1000	100	0.93	mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
p/m-Xylene				mg/kg	0.043	J	0.0019	U	0.0017	U	0.005	J	0.0016	U	0.002	U	0.0015	U	0.002	U	
o-Xylene				mg/kg	0.0011	U	0.00096	U	0.00084	U	0.00079	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
cis-1,2-Dichloroethene	1000	100	0.25	mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
Styrene				mg/kg	0.13		0.00096	U	0.00084	U	0.00098	J	0.00079	U	0.001	U	0.00076	U	0.00098	U	
Dichlorodifluoromethane				mg/kg	0.011	U	0.0096	U	0.0084	U	0.011	U	0.0079	U	0.01	U	0.0076	U	0.0098	U	
Acetone	1000	100	0.05	mg/kg	0.086		0.06		0.0089	U	0.17		0.0048	J	0.025		0.012		0.0054	J	
Carbon disulfide				mg/kg	0.011	U	0.0096	U	0.0084	U	0.0058	J	0.0079	U	0.01	U	0.0076	U	0.0098	U	
2-Butanone	1000	100	0.12	mg/kg	2.3	E	0.0031	J	0.0084	U	0.027		0.0079	U	0.01	U	0.0076	U	0.0098	U	
4-Methyl-2-pentanone				mg/kg	0.011	U	0.0096	U	0.0084	U	0.011	U	0.0079	U	0.01	U	0.0076	U	0.0098	U	
2-Hexanone				mg/kg	0.011	U	0.0096	U	0.0084	U	0.011	U	0.0079	U	0.01	U	0.0076	U	0.0098	U	
Bromochloromethane				mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
1,2-Dibromoethane				mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0011	U	0.00079	U	0.001	U	0.00076	U	0.00098	U	
1,2-Dibromo-3-chloropropane				mg/kg	0.0029	U	0.0029	U	0.0025	U	0.0034	U	0.0024	U	0.003	U	0.0023	U	0.0029	U	
Isopropylbenzene				mg/kg	0.0011	U	0.00096	U	0.00084	U	0.0034	U	0.00079	U	0.00017	J	0.00076	U	0.00098	U	
1,2,3-Trichlorobenzene				mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
1,2,4-Trichlorobenzene				mg/kg	0.0022	U	0.0019	U	0.0017	U	0.0022	U	0.0016	U	0.002	U	0.0015	U	0.002	U	
Methyl Acetate				mg/kg	1.1		0.0038	U	0.0034	U	0.0045	U	0.0032	U	0.004	U	0.003	U	0.0039	U	
Cyclohexane				mg/kg	0.011	U	0.0096	U	0.0084	U	0.002	J	0.0079	U	0.01	U	0.0076	U	0.0098	U	
1,4-Dioxane	250	13	0.1	mg/kg	0.11	U	0.096	U	0.084	U	0.11	U	0.079	U	0.1	U	0.076	U	0.098	U	
Freon-113				mg/kg	0.0044	U	0.0038	U	0.0034	U	0.0045	U	0.0032	U	0.004	U	0.003	U	0.0039	U	
Methyl cyclohexane				mg/kg	0.0044	U	0.0038	U	0.0034	U	0.004	J	0.0032	U	0.004	U	0.003	U	0.0039	U	
Total TIC Compounds				mg/kg	2.3	J	0.18	J	0.013	J	0.397	J	0.0244	J	0.0458	J	0.0521	J	0.0659	J	

Notes:  
mg/Kg = milligrams per kilogram  
U = not found at or above concentration shown  
J = Compound at a concentration below the reporting limit  
IP = Quality assurance exceedance

TABLE 6  
Soil Sample Results from Mound Area  
R. Freeman Son  
Site Code #401033  
Green Island, New York

LOCATION				TP-1 0-1' S-1		TP-1 3-4' S-2		TP-2 0-1 S-1		TP-2 5-7' S-2		TP-3 0-2 S-1		TP-3 5-7 S-2		TP-3 7-9 S-3		DUP TP-3		
SAMPLING DATE				2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		2/6/2019		
LAB SAMPLE ID				L1904860-01		L1904860-02		L1904860-03		L1904860-04		L1904860-05		L1904860-06		L1904860-07		L1904860-08		
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
SAMPLE DEPTH (ft.)																				
	IUSCO	RRSCO	USCO	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual		
<b>Volatile Organics by GC/MS-TIC</b>																				
Dimethyl sulfide				mg/kg	2.3	NJ	0.0588	NJ	-	-	-	-	-	-	-	-	-	-	-	
Unknown				mg/kg	-	-	0.0041	J	-	-	-	-	-	-	-	-	0.00289	J	-	
Unknown				mg/kg	-	-	0.00223	J	0.00174	J	-	-	0.0457	J	0.0152	J	0.0026	J	0.0253	J
Cyclotrisiloxane, Hexamethyl-				mg/kg	-	-	0.0124	NJ	0.00208	NJ	0.00188	NJ	-	-	0.00271	NJ	-	-	0.00238	NJ
Cyclopentane				mg/kg	-	-	-	-	0.00413	NJ	0.00398	NJ	-	-	-	-	-	-	-	-
Unknown Alkane				mg/kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unknown Benzene				mg/kg	-	-	-	-	-	-	-	-	0.0285	J	-	-	0.00729	J	-	
Unknown Aromatic				mg/kg	-	-	-	-	-	-	-	-	0.0348	J	-	-	0.00479	J	-	
Unknown Naphthalene				mg/kg	-	-	-	-	-	-	-	-	0.0564	J	-	-	-	-	-	
Unknown Aromatic				mg/kg	-	-	-	-	-	-	-	-	0.032	J	-	-	-	-	-	
Unknown Naphthalene				mg/kg	-	-	-	-	-	-	-	-	0.0324	J	-	-	-	-	-	
1-Pentene				mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.00251	NJ	-	-	
Unknown				mg/kg	-	-	-	-	-	-	-	-	-	-	-	0.0035	J	-	-	
Unknown Aromatic				mg/kg	-	-	-	-	-	-	-	-	0.0453	J	-	-	0.00427	J	-	
Unknown				mg/kg	-	-	0.0048	J	0.00449	J	-	-	0.0357	J	0.00392	J	0.0124	J	0.0223	J
Ethane, 1,1-Difluoro-				mg/kg	-	-	-	-	-	-	-	-	-	-	0.00261	NJ	-	-	-	
Tridecane				mg/kg	-	-	-	-	-	-	-	-	0.0442	NJ	-	-	-	-	-	
Unknown				mg/kg	-	-	0.0315	J	-	-	-	-	-	-	-	0.00258	J	-	-	
Unknown				mg/kg	0.169	J	-	-	0.00679	J	-	-	-	-	-	-	-	-	-	

Notes:  
mg/Kg = milligrams per kilogram  
U = not found at or above concentration shown  
J = Compound at a concentration below the reporting limit  
IP = Quality assurance exceedance







**TABLE 8**  
**Groundwater Sample Results From Monitoring Wells**  
**Former Freedman and Son**  
**Site Code # 401033**  
**Green Island, New York**

ANALYTE	SAMPLE ID:	MW-1	MW-1 020317	MW-2	MW-2 020617	MW-2 DUP 020617	MW-3	MW-3 020217	MW-4	MW-4 020617	MW-5	MW-5 020217	MW-6	MW-6 020117	MW-7						
	COLLECTION DATE:	2/6/2019	2/3/2017	2/6/2019	2/6/2017	2/6/2017	2/6/2019	2/2/2017	2/6/2019	2/6/2017	2/7/2019	2/2/2017	2/6/2019	2/1/2017	2/6/2019						
(ug/l)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q					
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																					
Bis(2-chloroethyl)ether	1	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
2,6-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
4-Chlorophenyl phenyl ether	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
4-Bromophenyl phenyl ether	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
Bis(2-chloroisopropyl)ether	5	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
Bis(2-chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
Hexachlorocyclopentadiene	5	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20					
Isophorone	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
Nitrobenzene	0.4	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2					
NDPA/DPA	50	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2					
n-Nitrosodi-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
Bis(2-ethylhexyl)phthalate	5	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3					
Butyl benzyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
Di-n-butylphthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
Di-n-octylphthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
Diethyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
Dimethyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
Biphenyl	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
2-Nitroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
3-Nitroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
4-Nitroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
Dibenzofuran	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
1,2,4,5-Tetrachlorobenzene	5	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10					
Acetophenone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
p-Chloro-m-cresol	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
2-Chlorophenol	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
2,4-Dichlorophenol	1	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
2,4-Dimethylphenol	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
2-Nitrophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U					
4-Nitrophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U					
2,4-Dinitrophenol	10	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20					
4,6-Dinitro-o-cresol	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U					
Phenol	1	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5					
3-Methylphenol/4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
2,4,5-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
Carbazole	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U					
Atrazine	7.5	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10					
Benzaldehyde	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
Caprolactam	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U					
2,3,4,6-Tetrachlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U					
Total SVOCs	-	-	-	-	-	-	10.57	-	15.64	-	-	5.07	-	175.49	-	58.79	1.5	-	39.4	-	-

Notes  
 ug/L = Micrograms per liter  
 U = Compound not found > the value shown  
 J = Compound found at a concentration below the lab reporting limit



**TABLE 8**  
**Groundwater Sample Results From Monitoring Wells**  
**Former Freedman and Son**  
**Site Code # 401033**  
**Green Island, New York**

	SAMPLE ID:	MW-1	MW-1 020317	MW-2	MW-2 020617	MW-2 DUP 020617	MW-3	MW-3 020217	MW-4	MW-4 020617	MW-5	MW-5 020217	MW-6	MW-6 020117	MW-7
	COLLECTION DATE:	2/6/2019	2/3/2017	2/6/2019	2/6/2017	2/6/2017	2/6/2019	2/2/2017	2/6/2019	2/6/2017	2/7/2019	2/2/2017	2/6/2019	2/1/2017	2/6/2019
ANALYTE	(ug/l)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>															
Aluminum, Total		64.9		131		32.3		625		672		241		79.4	
Antimony, Total	3	4.33		4	U	4.36		2.52	J	0.82		1.41	J	4	U
Arsenic, Total	25	4.62		4.09		3.68		5.19		5.53		12		9.8	
Barium, Total	1000	104.9		170.1		115.2		137.1		137.6		182.5		230.2	
Beryllium, Total	3	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cadmium, Total	5	0.31		0.26		0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Calcium, Total		118000		83800		71300		82700		89900		110000		109000	
Chromium, Total	50	0.21	J	0.63	J	0.22	J	1.69		1.49		0.64	J	1.23	1
Cobalt, Total		4.62		4.55		0.16	J	0.65		0.75		0.51		0.26	J
Copper, Total	200	1.14		2.45		1	U	1.38		1.41		2.87		0.47	J
Iron, Total	300	5790		4290		2020		3600		3780		14800		11800	
Lead, Total	25	0.42	J	1.02		1	U	1		1.37		1.04		0.39	J
Magnesium, Total	35000	14900		9490		12600		15700		16700		16100		17500	
Manganese, Total	300	6262		4670		2004		2137		2243		1248		1275	
Mercury, Total	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Nickel, Total	100	6.69		6.45		0.8	J	3.07		3.03		1.7	J	2.01	
Potassium, Total		8820		10300		9820		13100		14000		11900		12200	
Selenium, Total	10	5	U	5	U	5	U	2.83	J	2.43	J	5	U	5	U
Silver, Total	50	0.4	U	0.4	U	0.36	J	0.4	U	0.4	U	0.4	U	0.4	U
Sodium, Total	20000	45800		33700		60000		115000		119000		61400		120000	
Thallium, Total	0.5	0.28	J	0.5	U	0.37	J	0.5	U	0.5	U	0.5	U	0.5	U
Vanadium, Total		5	U	5	U	5	U	5	U	5	U	5	U	5	U
Zinc, Total	2000	4.37	J	6.6	J	10	U	11.92		4.25	J	10	U	10	U
<b>GENERAL CHEMISTRY</b>															
Cyanide, Total	200	5	U	5	U	5	U	3	J	2	J	5	U	5	U
<b>1,4 DIOXANE BY 8270D-SIM</b>															
1,4-Dioxane		0.142	U	NA		0.142	U	NA		NA		NA		NA	
<b>PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION</b>															
Perfluorobutanoic Acid (PFBA)		0.129		NA		0.0281		NA		NA		NA		NA	0.0273
Perfluoropentanoic Acid (PFPeA)		0.413		NA		0.0889		NA		NA		NA		NA	0.0576
Perfluorobutanesulfonic Acid (PFBS)		0.0209		NA		0.0356		NA		NA		NA		NA	0.062
Perfluorohexanoic Acid (PFHxA)		0.168		NA		0.0545		NA		NA		NA		NA	0.0366
Perfluoroheptanoic Acid (PFHpA)		0.0712		NA		0.0347		NA		NA		NA		NA	0.0243
Perfluorohexanesulfonic Acid (PFHxS)		0.0248		NA		0.0273		NA		NA		NA		NA	0.0234
Perfluorooctanoic Acid (PFOA)		0.134		NA		0.102		NA		NA		NA		NA	0.064
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)		0.00672		NA		0.0258		NA		NA		NA		NA	0.016
Perfluoroheptanesulfonic Acid (PFHpS)		0.000996	J	NA		0.00236		NA		NA		NA		NA	0.00169
Perfluorononanoic Acid (PFNA)		0.0202		NA		0.0103		NA		NA		NA		NA	0.00347
Perfluorooctanesulfonic Acid (PFOS)		0.0429		NA		0.136		NA		NA		NA		NA	0.0768
Perfluorodecanoic Acid (PFDA)		0.00191		NA		0.00312		NA		NA		NA		NA	0.00121
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)		0.000386	J	NA		0.00337		NA		NA		NA		NA	0.00185
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)		0.00177	U	NA		0.00328		NA		NA		NA		NA	0.000744
Perfluoroundecanoic Acid (PFUnA)		0.00177	U	NA		0.000448	J	NA		NA		NA		NA	0.00185
Perfluorodecanesulfonic Acid (PFDS)		0.00177	U	NA		0.00179	U	NA		NA		NA		NA	0.00185
Perfluorooctanesulfonamide (FOSA)		0.00177	U	NA		0.00131	J	NA		NA		NA		NA	0.00185
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)		0.00044	J	NA		0.00207		NA		NA		NA		NA	0.0005
Perfluorododecanoic Acid (PFDoA)		0.00177	U	NA		0.00179	U	NA		NA		NA		NA	0.00185
Perfluorotridecanoic Acid (PFTrDA)		0.00177	U	NA		0.00179	U	NA		NA		NA		NA	0.00185
Perfluorotetradecanoic Acid (PFTDA)		0.00177	U	NA		0.00179	U	NA		NA		NA		NA	0.00185
PFOA/PFOS, Total		0.177		NA		0.238		NA		NA		NA		NA	0.141
PFAS, Total (5)		0.293		NA		0.31		NA		NA		NA		NA	0.192

Notes  
ug/L = Micrograms per liter  
U = Compound not found > the the value shown  
J = Compound found at a concentration below the lab reporting limit

**TABLE 8**  
**Groundwater Sample Results From Monitoring Wells**  
**Former Freedman and Son**  
**Site Code # 401033**  
**Green Island, New York**

ANALYTE	SAMPLE ID:	MW-7 020117	MW-8 020217	PES-2	PES-2 020217	DUP	FIELD BLANK	TRIP BLANK	EQUIP. BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK									
	COLLECTION DATE:	2/1/2017	2/2/2017	2/7/2019	2/2/2017	2/6/2019	2/6/2019	2/6/2019	2/3/2017	2/1/2017	2/2/2017	2/3/2017									
(ug/l)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	
VOLATILE ORGANICS BY GC/MS	NY-AWQS	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Methylene chloride	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloroform	7	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Carbon tetrachloride	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	1	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Tetrachloroethene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trichlorofluoromethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	0.6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	50	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	1	0.5	U	0.54	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Ethylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloromethane		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromomethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Vinyl chloride	2	1	U	0.46	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	5	2.5	U	0.8	J	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Trichloroethene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	3	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	3	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	3	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl tert butyl ether	10	2.5	U	2.5	U	2.5	U	2.5	U	4.8	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p/m-Xylene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Xylene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Styrene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Dichlorodifluoromethane	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon disulfide	60	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Butanone	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromoethane	0.0006	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2-Dibromo-3-chloropropane	0.04	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,3-Trichlorobenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,4-Trichlorobenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl Acetate		2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cyclohexane		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,4-Dioxane		250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U	250	U
Freon-113	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl cyclohexane		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Total VOCs					-	-		4.8	-	-	-	-	-								
Total TIC Compounds		4.62	J	25.5	J	-	-	-	-	1.56	J	-	-	12.6	J	-	-	1.54	J	-	-

Notes  
ug/L = Micrograms per liter  
U = Compound not found > the the value shown  
J = Compound found at a concentration below the lab reporting limit

**TABLE 8**  
**Groundwater Sample Results From Monitoring Wells**  
**Former Freedman and Son**  
**Site Code # 401033**  
**Green Island, New York**

ANALYTE	SAMPLE ID:	MW-7 020117		MW-8 020217		PES-2		PES-2 020217		DUP		FIELD BLANK		TRIP BLANK		EQUIP. BLANK		TRIP BLANK		TRIP BLANK		TRIP BLANK						
	COLLECTION DATE:	2/1/2017		2/2/2017		2/7/2019		2/2/2017		2/6/2019		2/6/2019		2/6/2019		2/3/2017		2/1/2017		2/2/2017		2/3/2017						
(ug/l)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q				
<b>SEMIVOLATILE ORGANICS BY GC/MS</b>																												
Bis(2-chloroethyl)ether	1	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2			
3,3'-Dichlorobenzidine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5			
2,4-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5			
2,6-Dinitrotoluene	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5			
4-Chlorophenyl phenyl ether	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2			
4-Bromophenyl phenyl ether	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2			
Bis(2-chloroisopropyl)ether	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5			
Bis(2-chloroethoxy)methane	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5			
Hexachlorocyclopentadiene	5	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20		
Isophorone	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
Nitrobenzene	0.4	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2		
NDPA/DPA	50	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2		
n-Nitrosodi-n-propylamine	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5			
Bis(2-ethylhexyl)phthalate	5	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3		
Butyl benzyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
Di-n-butylphthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
Di-n-octylphthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
Diethyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
Dimethyl phthalate	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
Biphenyl	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	
4-Chloroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
2-Nitroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
3-Nitroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
4-Nitroaniline	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
Dibenzofuran	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	
1,2,4,5-Tetrachlorobenzene	5	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10		
Acetophenone	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
2,4,6-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
p-Chloro-m-cresol	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	
2-Chlorophenol	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	
2,4-Dichlorophenol	1	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
2,4-Dimethylphenol	50	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
2-Nitrophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	
4-Nitrophenol	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	
2,4-Dinitrophenol	10	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20	U	20
4,6-Dinitro-o-cresol	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	
Phenol	1	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5		
3-Methylphenol/4-Methylphenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
2,4,5-Trichlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
Carbazole	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	
Atrazine	7.5	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10		
Benzaldehyde	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
Caprolactam	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	
2,3,4,6-Tetrachlorophenol	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	
Total SVOCs		21.63		38.3		-		-		-		-		-		-		-		-		-		-		-		

Notes  
ug/L = Micrograms per liter  
U = Compound not found > the value shown  
J = Compound found at a concentration below the lab reporting limit

**TABLE 8**  
**Groundwater Sample Results From Monitoring Wells**  
**Former Freedman and Son**  
**Site Code # 401033**  
**Green Island, New York**

ANALYTE	SAMPLE ID: MW-7 020117		MW-8 020217		PES-2		PES-2 020217		DUP		FIELD BLANK		TRIP BLANK		EQUIP. BLANK		TRIP BLANK		TRIP BLANK		TRIP BLANK	
	COLLECTION DATE:		2/1/2017	2/2/2017	2/7/2019		2/2/2017		2/6/2019		2/6/2019		2/6/2019		2/3/2017		2/1/2017		2/2/2017		2/3/2017	
(ug/l)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>SEMIVOLATILE ORGANICS BY GC/MS-SIM</b>																						
Acenaphthene	20	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	-	0.1	U	-	-	-	-	-	-
2-Chloronaphthalene	10	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-	0.2	U	-	-	-	-	-	-
Fluoranthene	50	0.2	U	0.13	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-	0.5	U	-	-	-	-	-	-
Naphthalene	10	0.11	J	0.2	U	0.1	U	0.35	U	0.1	U	0.1	U	-	0.06	J	-	-	-	-	-	-
Benzo(a)anthracene	0.002	0.2	U	0.1	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Benzo(a)pyrene	0	0.2	U	0.11	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Benzo(b)fluoranthene	0.002	0.2	U	0.18	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Benzo(k)fluoranthene	0.002	0.2	U	0.07	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Chrysene	0.002	0.2	U	0.13	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Acenaphthylene		0.2	U	0.2	U	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Anthracene	50	0.2	U	0.2	U	0.1	U	0.2	U	0.04	J	0.1	U	-	0.2	U	-	-	-	-	-	-
Benzo(ghi)perylene		0.2	U	0.08	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Fluorene	50	0.2	U	0.2	U	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Phenanthrene	50	0.04	J	0.04	J	0.1	U	0.2	U	0.03	J	0.1	U	-	0.2	U	-	-	-	-	-	-
Dibenzo(a,h)anthracene		0.2	U	0.2	U	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	0.002	0.2	U	0.09	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Pyrene	50	0.2	U	0.12	J	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
2-Methylnaphthalene		0.05	J	0.2	U	0.1	U	0.2	U	0.1	U	0.1	U	-	0.2	U	-	-	-	-	-	-
Pentachlorophenol	1	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	0.8	U	-	-	-	-	-	-
Hexachlorobenzene	0.04	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	0.8	U	-	-	-	-	-	-
Hexachloroethane	5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	-	0.8	U	-	-	-	-	-	-
Total SVOCs						-	-		0.07	-	-	-	-									
Total TIC Compounds		21.63		38.3		26.9	J	-		44.9	J	52.8	J	-								
<b>CHLORINATED HERBICIDES BY GC</b>																						
2,4-D	50	10	U	10	U	10	U	10	U	10	U	10	U	-	10	U	-	-	-	-	-	-
2,4,5-T	35	2	U	2	U	2	U	2	U	2	U	2	U	-	2	U	-	-	-	-	-	-
2,4,5-TP (Silvex)		2	U	2	U	2	U	2	U	2	U	2	U	-	2	U	-	-	-	-	-	-
<b>ORGANOCHLORINE PESTICIDES BY GC</b>																						
Delta-BHC	0.04	0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Lindane	0.05	0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Alpha-BHC	0.01	0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Beta-BHC	0.04	0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Heptachlor	0.04	0.02	U	0.021	U	0.003	JIP	0.021	U	0.014	U	0.002	J	-	0.02	U	-	-	-	-	-	-
Aldrin	0	0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Heptachlor epoxide	0.03	0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Endrin	0	0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
Endrin aldehyde	5	0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
Endrin ketone	5	0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
Dieldrin	0.004	0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
4,4'-DDE	0.2	0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
4,4'-DDD	0.3	0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
4,4'-DDT	0.2	0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
Endosulfan I		0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Endosulfan II		0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
Endosulfan sulfate		0.04	U	0.043	U	0.029	U	0.042	U	0.029	U	0.029	U	-	0.04	U	-	-	-	-	-	-
Methoxychlor	35	0.2	U	0.213	U	0.143	U	0.208	U	0.143	U	0.143	U	-	0.2	U	-	-	-	-	-	-
Toxaphene	0.06	0.2	U	0.213	U	0.143	U	0.208	U	0.143	U	0.143	U	-	0.2	U	-	-	-	-	-	-
cis-Chlordane		0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
trans-Chlordane		0.02	U	0.021	U	0.014	U	0.021	U	0.014	U	0.014	U	-	0.02	U	-	-	-	-	-	-
Chlordane	0.05	0.2	U	0.213	U	0.143	U	0.208	U	0.143	U	0.143	U	-	0.2	U	-	-	-	-	-	-
<b>POLYCHLORINATED BIPHENYLS BY GC</b>																						
Aroclor 1016	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
Aroclor 1221	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
Aroclor 1232	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
Aroclor 1242	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
Aroclor 1248	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
Aroclor 1254	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
Aroclor 1260	0.09	0.083	U	0.083	U	0.032	JP	0.083	U	0.082	U	0.04	J	-	0.083	U	-	-	-	-	-	-
Aroclor 1262	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
Aroclor 1268	0.09	0.083	U	0.083	U	0.082	U	0.083	U	0.082	U	0.082	U	-	0.083	U	-	-	-	-	-	-
PCBs, Total		0.083	U	0.083	U	0.032	J	0.083	U	0.082	U	0.04	J	-	0.083	U	-	-	-	-	-	-

Notes  
ug/L = Micrograms per liter  
U = Compound not found > the value shown  
J = Compound found at a concentration below the lab reporting limit

**TABLE 8**  
**Groundwater Sample Results From Monitoring Wells**  
**Former Freedman and Son**  
**Site Code # 401033**  
**Green Island, New York**

ANALYTE	SAMPLE ID:	MW-7 020117		MW-8 020217		PES-2		PES-2 020217		DUP		FIELD BLANK		TRIP BLANK		EQUIP. BLANK		TRIP BLANK		TRIP BLANK		TRIP BLANK		
		COLLECTION DATE:	2/1/2017		2/2/2017		2/7/2019		2/2/2017		2/6/2019		2/6/2019		2/6/2019		2/3/2017		2/1/2017		2/2/2017		2/3/2017	
(ug/l)	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q	Conc	Q
<b>TOTAL METALS</b>																								
Aluminum, Total		2560		12.7		13.9		39.9		18.9		10	U	-		10	U	-						
Antimony, Total	3	0.84	J	4	U	4	U	4	U	0.67	J	0.77	J	-		0.48	J	-						
Arsenic, Total	25	6.74		0.63		0.2	J	0.34	J	4		0.5	U	-		0.5	U	-						
Barium, Total	1000	370.7		133		44.97		52.62		112.5		0.5	U	-		0.5	U	-						
Beryllium, Total	3	0.17	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-		0.5	U	-						
Cadmium, Total	5	0.18	J	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-		0.2	U	-						
Calcium, Total		73800		84400		45300		56500		74100		100	U	-		100	U	-						
Chromium, Total	50	3.97		0.44	J	0.21	J	1.7		0.3	J	1	U	-		0.21	J	-						
Cobalt, Total		3.67		0.5	U	0.42	J	0.76		0.17	J	0.5	U	-		0.5	U	-						
Copper, Total	200	19.04		0.47	J	0.44	J	0.84	J	1	U	1	U	-		1	U	-						
Iron, Total	300	10500		567		126		289		2070		37.5	J	-		50	U	-						
Lead, Total	25	11.34		1	U	1	U	1	U	1	U	1	U	-		1	U	-						
Magnesium, Total	35000	13100		14500		6810		7990		13200		70	U	-		70	U	-						
Manganese, Total	300	1204		2637		354.5		1825		2041		2.86		-		1	U	-						
Mercury, Total	0.7	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	-		0.2	U	-						
Nickel, Total	100	8.91		0.92	J	0.91	J	3.51		0.65	J	2	U	-		2	U	-						
Potassium, Total		5130		12000		4130		4690		10200		46.4	J	-		100	U	-						
Selenium, Total	10	5	U	5	U	5	U	5	U	5	U	5	U	-		5	U	-						
Silver, Total	50	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	-		0.4	U	-						
Sodium, Total	20000	64700		32000		33500		40000		62700		63.3	J	-		100	U	-						
Thallium, Total	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	-		0.5	U	-						
Vanadium, Total		4.7	J	5	U	5	U	5	U	5	U	5	U	-		5	U	-						
Zinc, Total	2000	37.19		4.5	J	10	U	3.51	J	10	U	10	U	-		10	U	-						
<b>GENERAL CHEMISTRY</b>																								
Cyanide, Total	200	5	U	3	J	5	U	5	U	5	U	5	U	-		5	U	-						
<b>1,4 DIOXANE BY 8270D-SIM</b>																								
1,4-Dioxane		NA		NA		NA		NA		0.139	U	0.144	U	-		-		-						
<b>PERFLUORINATED ALKYL ACIDS BY ISOTOPE DILUTION</b>																								
Perfluorobutanoic Acid (PFBA)		NA		NA		NA		NA		0.0305		0.00188	U	-		-		-						
Perfluoropentanoic Acid (PFPeA)		NA		NA		NA		NA		0.101		0.00188	U	-		-		-						
Perfluorobutanesulfonic Acid (PFBS)		NA		NA		NA		NA		0.0359		0.00188	U	-		-		-						
Perfluorohexanoic Acid (PFHxA)		NA		NA		NA		NA		0.0604		0.00188	U	-		-		-						
Perfluoroheptanoic Acid (PFHpA)		NA		NA		NA		NA		0.0414		0.00188	U	-		-		-						
Perfluorohexanesulfonic Acid (PFHxS)		NA		NA		NA		NA		0.0313		0.00188	U	-		-		-						
Perfluorooctanoic Acid (PFOA)		NA		NA		NA		NA		0.109		0.00188	U	-		-		-						
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)		NA		NA		NA		NA		0.0225		0.00188	U	-		-		-						
Perfluoroheptanesulfonic Acid (PFHpS)		NA		NA		NA		NA		0.00298		0.00188	U	-		-		-						
Perfluorononanoic Acid (PFNA)		NA		NA		NA		NA		0.0106		0.00188	U	-		-		-						
Perfluorooctanesulfonic Acid (PFOS)		NA		NA		NA		NA		0.132		0.00188	U	-		-		-						
Perfluorodecanoic Acid (PFDA)		NA		NA		NA		NA		0.0032		0.00188	U	-		-		-						
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)		NA		NA		NA		NA		0.00358		0.00188	U	-		-		-						
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)		NA		NA		NA		NA		0.0028		0.000395	J	-		-		-						
Perfluoroundecanoic Acid (PFUnA)		NA		NA		NA		NA		0.000404	J	0.00188	U	-		-		-						
Perfluorodecanesulfonic Acid (PFDS)		NA		NA		NA		NA		0.00178	U	0.00188	U	-		-		-						
Perfluorooctanesulfonamide (FOSA)		NA		NA		NA		NA		0.001	J	0.00188	U	-		-		-						
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)		NA		NA		NA		NA		0.00115	J	0.000451	J	-		-		-						
Perfluorododecanoic Acid (PFDoA)		NA		NA		NA		NA		0.00178	U	0.00188	U	-		-		-						
Perfluorotridecanoic Acid (PFTrDA)		NA		NA		NA		NA		0.00178	U	0.00188	U	-		-		-						
Perfluorotetradecanoic Acid (PFTa)		NA		NA		NA		NA		0.00178	U	0.00188	U	-		-		-						
PFOA/PFOS, Total		NA		NA		NA		NA		0.241		0.00188	U	-		-		-						
PFAS, Total (5)		NA		NA		NA		NA		0.324		0.00188	U	-		-		-						

Notes  
ug/L = Micrograms per liter  
U = Compound not found > the the value shown  
J = Compound found at a concentration below the lab reporting limit

**TABLE 9**  
**Groundwater Elevations and Field Parameter Results**  
**Freedman and Son**  
**Site Code #401033**  
**Green Island, New York**

Well #	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4	MW-5	MW-5	MW-6	MW-6	MW-7	MW-7	MW-8	MW-8	PES-2
Date	2/1/2017	2/6/2019	2/1/2017	2/6/2019	2/1/2017	2/6/2019	2/1/2017	2/6/2019	2/1/2017	2/6/2019	2/1/2017	2/6/2019	2/1/2017	2/6/2019	2/1/2017	2/6/2019	2/1/2017
Elevation of Cap/Casing N.A.D. 1988	31.426	31.426	29.904	29.904	30.776	30.776	30.331	30.331	30.467	30.467	26.941	26.941	28.032	28.032	28.591	28.591	26.988
Elv. Ground Surface N.A.D. 1988	28.617	28.617	27.269	27.269	27.975	27.975	27.423	27.423	27.338	27.338	26.188	26.188	27.752	27.752	28.919	28.919	27.274
Depth of Monitoring Well in feet	17.8	17.8	17.75	17.75	18.1	18.1	14.8	14.8	13	13	12.5	12.5	14.6	14.6	16	16	11.7
Depth to Groundwater in feet	13.64	13.5	7.35	7.1	13.08	13	7.9	7.95	7.64	7.3	7.61	7.5	4.86	5	5.05	NS	7.05
Groundwater Elv. From Cap/Casing	17.786	17.926	22.554	22.804	17.696	17.776	22.431	22.381	22.827	23.167	19.331	19.441	23.172	23.032	23.541	NS	19.938



**TABLE 10**  
**Soil Vapor Sample Results**  
**R. Freedman and Son**  
**Site Code #401033**  
**Green Island, New York**

	SAMPLE ID:	AMBIENT AIR			VAPOR POINT-1			VAPOR POINT-2			VAPOR POINT-3			VAPOR POINT-3		
	LAB ID:	L1702748-01			L1702748-04			L1702748-03			L1702748-02			L1702748-02 R1		
	COLLECTION DATE:	1/26/2017			1/26/2017			1/26/2017			1/26/2017			1/26/2017		
	SAMPLE DEPTH:															
	SAMPLE MATRIX:			AIR			AIR			AIR			AIR			AIR
	AIR-UGM3															
ANALYTE	(ug/m3)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
<b>VOLATILE ORGANICS IN AIR</b>														-	-	-
Dichlorodifluoromethane	0.25	2.17		0.989	81.6		1.98	114		4.94	51.4		19.7	-	-	-
Chloromethane	0.25	1.18		0.413	ND		0.826	ND		2.07	ND		8.22	-	-	-
Freon-114	0.25	ND		1.4	ND		2.8	ND		6.99	ND		27.8	-	-	-
Vinyl chloride	0.25	ND		0.511	ND		1.02	ND		2.56	153		10.2	-	-	-
1,3-Butadiene	0.25	ND		0.442	1.42		0.885	ND		2.21	ND		8.8	-	-	-
Bromomethane	0.25	ND		0.777	ND		1.55	ND		3.88	ND		15.5	-	-	-
Chloroethane	0.25	ND		0.528	ND		1.06	ND		2.64	ND		10.5	-	-	-
Ethanol	0.25	26.6		9.42	25.6		18.8	ND		47.1	ND		187	-	-	-
Vinyl bromide	0.25	ND		0.874	ND		1.75	ND		4.37	ND		17.4	-	-	-
Acetone	0.25	17.1		2.38	299		4.75	394		11.9	ND		47.3	-	-	-
Trichlorofluoromethane	0.25	1.52		1.12	635		2.25	43.8		5.62	ND		22.4	-	-	-
Isopropanol	0.25	2.26		1.23	ND		2.46	ND		6.15	ND		24.5	-	-	-
1,1-Dichloroethene	0.25	ND		0.793	ND		1.59	ND		3.96	ND		15.8	-	-	-
Tertiary butyl Alcohol	NA	ND		1.52	3.79		3.03	ND		7.58	ND		30.2	-	-	-
Methylene chloride	0.25	ND		1.74	ND		3.47	ND		8.69	ND		34.6	-	-	-
3-Chloropropene	0.25	ND		0.626	ND		1.25	ND		3.13	ND		12.5	-	-	-
Carbon disulfide	0.25	ND		0.623	17.2		1.25	11		3.11	ND		12.4	-	-	-
Freon-113	0.25	ND		1.53	ND		3.07	ND		7.66	ND		30.5	-	-	-
trans-1,2-Dichloroethene	0.25	ND		0.793	ND		1.59	ND		3.96	ND		15.8	-	-	-
1,1-Dichloroethane	0.25	ND		0.809	ND		1.62	ND		4.05	ND		16.1	-	-	-
Methyl tert butyl ether	0.25	ND		0.721	ND		1.44	ND		3.61	ND		14.3	-	-	-
2-Butanone	0.25	ND		1.47	84.6		2.95	96.1		7.37	64.6		29.3	-	-	-
cis-1,2-Dichloroethene	0.25	ND		0.793	ND		1.59	ND		3.96	ND		15.8	-	-	-
Ethyl Acetate	0.25	ND		1.8	ND		3.6	ND		9.01	ND		35.9	-	-	-
Chloroform	0.25	ND		0.977	ND		1.95	ND		4.88	ND		19.4	-	-	-
Tetrahydrofuran	0.25	ND		1.47	3.75		2.95	ND		7.37	ND		29.3	-	-	-
1,2-Dichloroethane	0.25	ND		0.809	ND		1.62	ND		4.05	ND		16.1	-	-	-
n-Hexane	0.25	0.997		0.705	5.6		1.41	7.05		3.52	101		14	-	-	-
1,1,1-Trichloroethane	0.25	ND		1.09	ND		2.18	ND		5.46	ND		21.7	-	-	-
Benzene	0.25	1.01		0.639	8.79		1.28	ND		3.19	18.6		12.7	-	-	-
Carbon tetrachloride	0.25	ND		1.26	ND		2.52	ND		6.29	ND		25	-	-	-
Cyclohexane	0.25	ND		0.688	13		1.38	12.5		3.44	157		13.7	-	-	-
1,2-Dichloropropane	0.25	ND		0.924	ND		1.85	ND		4.62	ND		18.4	-	-	-
Bromodichloromethane	0.25	ND		1.34	ND		2.68	ND		6.7	ND		26.7	-	-	-
1,4-Dioxane	0.25	ND		0.721	ND		1.44	ND		3.6	ND		14.3	-	-	-
Trichloroethene	0.25	ND		1.07	ND		2.15	ND		5.37	ND		21.4	-	-	-

Notes

ND = Not detected above method detection limit

RL = Laboratory reporting limit

Q = Qualifier

**TABLE 10**  
**Soil Vapor Sample Results**  
**R. Freedman and Son**  
**Site Code #401033**  
**Green Island, New York**

	SAMPLE ID:	AMBIENT AIR			VAPOR POINT-1			VAPOR POINT-2			VAPOR POINT-3			VAPOR POINT-3		
	LAB ID:	L1702748-01			L1702748-04			L1702748-03			L1702748-02			L1702748-02 R1		
	COLLECTION DATE:	1/26/2017			1/26/2017			1/26/2017			1/26/2017			1/26/2017		
	SAMPLE DEPTH:															
	SAMPLE MATRIX:			AIR			AIR			AIR			AIR			AIR
	AIR-UGM3															
ANALYTE	(ug/m3)	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
2,2,4-Trimethylpentane	0.25	ND		0.934	ND		1.87	359		4.67	13300	E	18.6	11200		46.6
Heptane	0.25	ND		0.82	4.14		1.64	4.88		4.1	31.5		16.3	-	-	-
cis-1,3-Dichloropropene	0.25	ND		0.908	ND		1.82	ND		4.54	ND		18.1	-		-
4-Methyl-2-pentanone	0.25	ND		2.05	ND		4.1	ND		10.2	ND		40.8	-		-
trans-1,3-Dichloropropene	0.25	ND		0.908	ND		1.82	ND		4.54	ND		18.1	-		-
1,1,2-Trichloroethane	0.25	ND		1.09	ND		2.18	ND		5.46	ND		21.7	-		-
Toluene	0.25	1.49		0.754	10.9		1.51	8.52		3.77	15.8		15	-	-	-
2-Hexanone	0.25	ND		0.82	16.8		1.64	16.3		4.1	ND		16.3	-		-
Dibromochloromethane	0.25	ND		1.7	ND		3.41	ND		8.52	ND		33.9	-		-
1,2-Dibromoethane	0.25	ND		1.54	ND		3.07	ND		7.69	ND		30.6	-		-
Tetrachloroethene	0.25	ND		1.36	ND		2.71	ND		6.78	ND		27	-		-
Chlorobenzene	0.25	ND		0.921	ND		1.84	ND		4.61	ND		18.3	-		-
Ethylbenzene	0.25	ND		0.869	2.28		1.74	ND		4.34	ND		17.3	-		-
p/m-Xylene	0.25	ND		1.74	8.99		3.47	ND		8.69	ND		34.6	-		-
Bromoform	0.25	ND		2.07	ND		4.14	ND		10.3	ND		41.2	-		-
Styrene	0.25	ND		0.852	ND		1.7	ND		4.26	ND		16.9	-		-
1,1,2,2-Tetrachloroethane	0.25	ND		1.37	ND		2.75	ND		6.87	ND		27.3	-		-
o-Xylene	0.25	ND		0.869	3.99		1.74	ND		4.34	ND		17.3	-		-
4-Ethyltoluene	0.25	ND		0.983	ND		1.97	ND		4.92	ND		19.6	-		-
1,3,5-Trimethylbenzene	0.25	ND		0.983	ND		1.97	ND		4.92	ND		19.6	-		-
1,2,4-Trimethylbenzene	0.25	ND		0.983	5.31		1.97	ND		4.92	ND		19.6	-		-
Benzyl chloride	0.25	ND		1.04	ND		2.07	ND		5.18	ND		20.6	-		-
1,3-Dichlorobenzene	0.25	ND		1.2	ND		2.4	ND		6.01	ND		23.9	-		-
1,4-Dichlorobenzene	0.25	ND		1.2	ND		2.4	ND		6.01	ND		23.9	-		-
1,2-Dichlorobenzene	0.25	ND		1.2	ND		2.4	ND		6.01	ND		23.9	-		-
1,2,4-Trichlorobenzene	0.25	ND		1.48	ND		2.97	ND		7.42	ND		29.5	-		-
Hexachlorobutadiene	0.25	ND		2.13	ND		4.27	ND		10.7	ND		42.5	-		-

Notes  
 ND = Not detected above method detection limit  
 RL = Laboratory reporting limit  
 Q = Qualifier

**TABLE 23**  
**Potential Human Health Risk Analysis for Current Condition**  
**R. Freedman and Son**  
**Site Code #401033**  
**Green Island, New York**  
**Site # C851027**

Source of Contamination	Surface Soil			Subsurface Soil/Fill			Groundwater		
Exposure Pathway	Direct Contact	Inhalation	Ingestion	Direct Contact	Inhalation	Ingestion	Direct Contact	Inhalation	Ingestion
<b>Receptor On-Site</b>									
<b>Employees</b>									
Visitors									
Utility Workers				X	X	X	X	X	
<b>Off-Site</b>									
Residents			X						
Visitors			X						
Utility Workers	X		X	X		X			
<b>Notes:</b>									
X = Exposure possible.									

**TABLE 24**  
**Potential Human Health Risk Analysis for Post Remediation**  
**R. Freedman and Son**  
**Site Code #401033**  
**Green Island, New York**

Source of Contamination	Surface Soil			Subsurface Soil/Fill			Groundwater		
Exposure Pathway	Direct Contact	Inhalation	Ingestion	Direct Contact	Inhalation	Ingestion	Direct Contact	Inhalation	Ingestion
<b>Receptor On-Site</b>									
<b>Employees</b>									
Visitors									
Utility Workers				X	X	X	X	X	
<b>Off-Site</b>									
Residents			X						
Visitors			X						
Utility Workers	X		X	X		X			
<b>Notes:</b>									
X = Exposure possible.									