Interim Remedial Measure Work Plan

For

148-28 Hillside Avenue

QUEENS, NEW YORK

Block 9694, Lot 417

NYSDEC BCP No. C241199

Prepared for:

Chung Lam

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FEBRUARY 2023

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CERTIFICATION

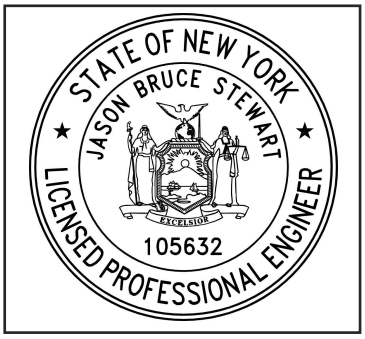
I, Jason Stewart of Jason B Stewart Engineering, P.C(JBS). certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Interim Remedial Measure Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Dated: February 03, 2023

Jason Stewart

By: Jason B Stewart, P.E.

NYS PE License Number: 105632



1.0 INTRODUCTION

JBS and Advanced Cleanup Technologies Inc. (ACT) have prepared the following Interim Remedial Measure Work Plan for the Brownfield Program Clean-up Site located at 148-28 Hillside Ave in Jamaica, New York. This plan is to be implemented to address Chlorinated Volatile Organic Compound (CVOC) soil contamination. The proposed scope of work is based upon the findings of the New York State Department of Environment Conservation(NYSDEC) Brownfields Cleanup Program(BCP) Remedial Investigation performed in October 2022, New York City Office of Environmental Remediation (NYCOER) Remedial Investigation Report (OER RIR) prepared in October 2016, and NYCOER Remedial Action Work Plan (OER RAWP) prepared June 2017.

1.1 Site Background

The Site is located at 148-28 Hillside Avenue in the central portion of the borough of Queens in New York City and is identified as Block 9694 and Lot 17 on the New York City Tax Map. The Site is 17,450 square feet in area. The Site was recently operated as an auto repair facility in a former 1,920 square foot building. Currently the site is vacant. The redevelopment plans for the property propose a 9-story mixed-use building with 51 parking spaces.

Subsurface investigations were performed by ACT in June and November 2015, which culminated in the OER RIR that was submitted to NYCOER in October 2016. A PCE Delineation Investigation was also performed in the vicinity of a hot spot of shallow Tetrachloroethene (PCE) soil contamination pursuant to NYCOER protocols in February and April 2017.

The Applicant signed an Order on Consent with the NYSDEC to conduct an additional site characterization on April 24, 2020 and was subsequently enrolled in the New York State Brownfield Cleanup Program (NYSDEC BCP) on June 10, 2022. A Remedial Investigation pursuant to the NYSDEC BCP was performed in October 2022 and the results were submitted to the NYSDEC on November 15, 2022.

The proposed future redevelopment of the Site consists of a 9-story mixed-use building. A one-story cellar will accommodate 37 parking spaces, utility rooms, a refuse room and two elevators in the northern portion of the building. The first floor will contain two commercial units, 14 parking spaces at grade and a ramp to access the 37 parking spaces in the cellar. Floors 2

through 9 will consist of 52 one-bedroom, 24 two-bedroom and 4 two-bedroom duplex units. The proposed building will consist of a full build out of the lot, which will be approximately 17,450 square feet in the cellar. The excavation depth at the property will be approximately 13 feet below ground surface with additional excavation along the northern and eastern property boundaries for the building foundation to depths of approximately 22 and 18 feet below ground surface respectively. The excavation depths are shown in the Figure 1 and the SOE shoring plan is attached as Appendix C.

During the BCP Remedial Investigation groundwater at the site was encountered in three onsite monitoring wells at a depth of approximately 47 feet below ground surface. As such, groundwater is not expected to be encountered and dewatering activities are not anticipated.

1.2 Previous Investigations

1.2.1 Phase I Environmental Site Assessment

ACT completed a Phase I Environmental Site Assessment (ESA) dated July 14, 2015. The assessment revealed the following recognized environmental conditions:

- Historical industrial use of the subject property
- A vapor encroachment condition at the subject property

1.2.2 NYCOER Remedial Investigation Report

In October 2016, ACT issued a RIR to the NYCOER, which indicated that the Site was formerly occupied by a filling station and auto repair shop. The Remedial Investigation included a site inspection, geophysical investigation, and the installation, screening, and sampling of 10 soil borings, 3 groundwater monitoring wells, and 7 soil vapor probes throughout the Site. A Sampling Diagram is attached as Figure 2.

The results of the Remedial Investigation indicated the following:

Soil:

- PCE was detected above its Unrestricted Use Soil Cleanup Objectives (UUSCOs) in one shallow soil sample (SB-9, 11 mg/Kg at 0-2 ft) beneath the eastern portion of the former building. A soil sample collected from SB-9 at the 10-12 foot depth did not contain PCE

above its laboratory method detection limit. No other VOCs except Acetone were detected in soil above their UUSCOs during the Remedial Investigation;

- Shallow soil also contained two SVOCs (Benzo(a)anthracene at 1.55 mg/kg and Chrysene at 1.56 mg/kg), one pesticide (4,4'-DDT at 5.06 mg/kg), and four metals (Lead at max. 1,100 mg/Kg, Selenium at max. 7.18 mg/Kg, Chromium at max. 31.2 mg/Kg, and Mercury at max. 0.217 mg/Kg) above SCOs;

- Except for PCE, shallow soil chemistry beneath the Site is consistent with historical urban fill material in New York City.

Groundwater:

- One VOC, Chloroform was detected in two groundwater samples (max. 14 µg/L) above its GQS of 7 µg/L;
- One SVOC, Bis(2-ethylhexyl)phthalate was detected in one groundwater sample (11 µg/L) above its GQS of 5 µg/L. PCBs were detected in the three groundwater samples (max. 0.135 µg/L) above its GQS of 0.09 µg/L.

Soil Vapor:

- PCE was detected in all six soil vapor samples with a maximum concentration of 2,700 µg/m3 in SS-3 beneath the eastern portion of the Site. Trichloroethylene was also detected with a maximum concentration of 55 µg/m3 in SS-3.

1.2.3 NYCOER PCE Delineation Investigation

In February and April 2017, ACT conducted a PCE Delineation Investigation at the Site, which included the installation, screening, and sampling of a total of 4 step-out soil borings spaced 5 feet from soil boring SB-9 in each cardinal direction. Two soil samples (4-6ft and 6-8ft) were collected from each soil boring. Only soil boring SB-4 contained PCE (0.0093 mg/Kg at 4-6ft) well below its UUSCO of 1.3 mg/Kg. None of the remaining seven soil samples contained PCE above its laboratory method detection limit. A diagram of CVOCs detected in subsurface soil during the Remedial Investigation and Delineation Investigation is included in Figure 3.

1.2.4 NYSDEC BCP Remedial Investigation

In October 2022, ACT performed a BCP Remedial Investigation, which included a site inspection, geophysical investigation, and the installation, screening, and sampling of 16 soil borings, 6 groundwater monitoring wells, and 5 soil vapor probes throughout the Site. Sampling Diagrams are attached as Figures 4 and 5. Soil, groundwater, and soil vapor exceedance diagrams are attached as Figures 6 through 8. Laboratory tables are attached as tables 1 through 11.

Soil:

- Shallow onsite soil quality is generally indicative of urban fill to approximately 5 ft bgs. Shallow soil contained exceedances of Restricted Residential Soil Cleanup Objectives (RRSCOs) for SVOCs (Benz(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, and Indeno(1,2,3-cd)pyrene) and metals (mercury, arsenic, and lead). Soil deeper than 5ft bgs is generally indicative of native soil with no exceedances of RRSCOs.
- During the remedial investigation, two onsite hotspots were identified in the vicinity of soil borings RISB-8 and RISB-16. Soil contamination identified in the vicinity of RISB-8 is indicative of gasoline contamination related to the historically abandoned gasoline USTs. There were exceedances of RRSCOs for BTEX compounds to a depth of approximately 22ft bgs. No liquid petroleum product was found in the soil boring. No exceedances of TOGS were identified for any BTEX compounds in any of the onsite monitoring wells.
- During the installation of an onsite test pit, a spill was identified along the western property boundary (NYSDEC Spill No. 22-03747). During the remedial investigation, a supplemental soil sample was collected from saturated source material at the base of a test pit(RISB-16). The test pit had been excavated to a depth of 6ft bgs and the soil sample was collected from 6-7ft bgs. The soil sample contained contamination indicative of automotive waste from a floor drain inside the historic onsite auto shop. The source area appears to be very small in size and limited to only to a shallow depth. The soil boring RISB-5 and monitoring well RIMW-5 were installed directly adjacent to the spill. RISB-5 had no soil exceedances above RRSCOs.

- The soil from the source material at the base of the hotspot contained compounds above commercial soil cleanup objectives including:
    - arsenic at 42.7 mg/kg
    - cadmium at 11 mg/kg
    - lead at 5,700 mg/kg
    - PCB-1260 at 13 mg/kg
    - cis-1,2-Dichloroethene at 3,200 mg/kg
    - Tetrachloroethene at 7,800 mg/kg
    - Trichloroethene at 430 mg/kg
    - Vinyl chloride at 45 mg/kg
    - SVOC Benzo(a)pyrene at 2.1 mg/kg

Groundwater:

- Onsite groundwater quality is not indicative of an onsite source of groundwater contamination.
- Groundwater contained low levels of metals manganese and sodium above TOGS.
- PFOA was found above NYSDEC PFAS guidance values in all monitoring wells onsite between 18.6 and 26.5 ng/L. No soil contamination of PFOA above protection of groundwater soil cleanup objectives was found onsite.
- In RISB/RIMW-5, SVOCS Benz(a)anthracene at 0.03 mg/L and Chrysene at 0.02 mg/L were identified above TOGS.

Soil Vapor:

- Soil vapor quality contained the CVOCs Tetrachloroethylene and Trichloroethene above NYSDOH indoor air guidelines. Tetrachloroethylene was identified above NYSDOH indoor air guidelines throughout the site, with the highest level found in the front of the property in SV-2 at 1,760 ug/m3. Trichloroethene was identified above NYSDOH indoor air guidelines in soil vapor samples SV-4 and SV-5, with the highest level found in the center of the site in SV-5 at 11 ug/m3

2.0 DESCRIPTION OF REMEDIAL ACTION

Based on the findings of the previous subsurface investigations, Metal, VOC, and SVOC, impacted soils are present beneath the site. ACT recommends that soil impacts be addressed by an IRM consisting of:

- Remediation of impacted soils in the vicinity of the former auto repair facility.

2.1 Remediation of VOC Impacted Soil

Prior investigations identified Metals, VOCs, and SVOCs, impacting subsurface soil beneath the historic building slab. Impacted soils from this portion of the site will be excavated, removed from the site, and properly disposed of.

2.1.1 Waste Characterization Sampling

Prior to implementation of the Interim Remedial Measure, waste characterization samples will be collected from the site. The specific sample depths, sample frequency, and laboratory analyses will be determined based upon the requirements of the selected disposal facilities. Waste characterization sample results will be used to obtain a waste approval from a properly permitted disposal facility prior to the start of excavation activities. A copy of the waste disposal facility permits, and waste approvals will be provided to NYSDEC prior to wastes being transported off-site.

2.1.2 Soil Excavation and Disposal

To meet a track 2 remedy for the site, the top 2 feet of soil, which is indicative of urban fill with exceedances of restricted residential soil cleanup objectives, will be excavated and disposed offsite. In addition, soil in the two localized hot spot will be excavated until clean endpoints are reached or 15 feet below ground surface, whichever is shallower. Horizontal delineation of the hotspots will be determined based upon the requirements of the selected disposal facilities. The total quantity of soil expected to be excavated and disposed off-site for the remedial excavation to meet a track 2 cleanup is approximately 3,060 tons. The excavation depths to meet a track 2 remedy are shown Figure 1A

The extent of additional soil excavation for the development is planned to accommodate a fully built out cellar to approximately 13 feet bgs. with additional excavation along the northern and eastern property boundaries for the building foundation to depths of approximately 22 and 18 feet below ground surface respectively. Following installation of the foundation, the areas with additional excavation will be backfilled to 13 feet bgs in accordance with Section 3.1.5. The excavation depths are shown in the Figure 1B, and the SOE shoring plan is attached as Appendix C. The total quantity of soil/fill expected to be excavated and disposed off-Site is approximately 15,000 tons.

To allow for an excavation of this depth adjacent to the property boundary, without undercutting the neighboring grade, a sheeting/shoring plan has been prepared by the redevelopment team (see Section 3.1.2).

Soils will be excavated from the proposed excavation area utilizing a back-hoe, excavator, or equivalent. Soils will be screened during excavation and stockpiled on the eastern portion of the site. Soils will be screened utilizing a photoionization detector (PID) capable of detecting the presence of VOCs. Soils exhibiting significantly elevated PID responses or odors may be segregated and stockpiled from other soils being excavated. Soil stockpile will be constructed and maintained in accordance with Section 3.1.3. The final limit of the excavation will be determined in the field based upon soil screening, analytical results from the remedial investigation sampling, end point sampling results, and in consultation with NYSDEC. Additional source material identified on-site beyond the final limit of the excavation will be remediated as part of the remedial action work plan (RAWP). The IRM will not interfere with the future removal of source material.

UST's that are encountered during soil removal actions will be removed by a licensed contractor. Registration of tanks and reporting of any petroleum spills associated closure of these petroleum spills will be done in compliance with applicable local, state, and federal laws and regulations.

3.0 ENGINEERING SPECIFICATIONS AND CONTROLS

3.1 Engineering Specifications

3.1.1 Mobilization, Site Security

Mobilization will include the delivery of construction equipment and materials to the site. Site workers will receive site orientation and training in accordance with the site-specific Health and Safety Plan (HASP), Community Air Monitoring Plan (CAMP) and established policies and procedures to be followed during the implementation of the IRM. The remediation contractor and all associated subcontractors will each receive a copy of the IRM Work Plan, HASP and CAMP and will be briefed on their contents.

Site security will be maintained by utilizing and maintaining the existing eight-foot-high plywood construction fence surrounding the property. The fence will be maintained throughout the project and the vehicle access gate on the north side leading to Hillside Avenue will be kept closed during daily operations and closed and locked at all other times.

3.1.2 Sheeting/Shoring Plan

Sheeting/shoring will be installed and maintained in accordance with the site-specific sheeting plan. Piles will be installed along the northern property boundary to a depth of approximately 40 feet and south-western property boundary to a depth of 24 feet. The piles will be installed through the process of drilled piles, which employs the strategy of drilling the caissons (round metal tubing) directly into the soil to the prescribed depth, while water is constantly mixed in to reduce friction and minimize disturbance of soil. The proposed showing plan is attached in Appendix C. Modifications or additions to the sheeting/shoring plan will be made by a professional engineer and approved by NYC DOB and NYSDEC.

3.1.3 Soil Stockpile Area Construction and Maintenance

Excavated soils stockpiled on-site prior to disposal will be confined to within the fence line. If necessary to segregate soils for multiple disposal facilities, stockpile areas will be lined with 20-mil polyethylene sheeting to prevent cross contamination. Stockpiled material will be covered with 20-mil polyethylene sheeting, secured, and maintained until removed from the site.

3.1.4 Soil Disposal

Excavated soil stockpiles will be sampled in accordance with the procedures described under Section 4.3 of this document to meet the waste acceptance criteria of the disposal facility.

Impacted soil to be removed from the site will be loaded into roll-off containers and/or dump trucks provided by a licensed waste transport company.

Loading will be performed with a back-hoe, excavator, or equivalent. Loaded containers and/or trucks will be covered with a tarp. As necessary, waste disposal will be coordinated with NYSDEC Division of Solid and Hazardous Materials and USEPA, to allow for wastes to be disposed of as hazardous or non-hazardous waste based upon their characteristic qualities. Non-hazardous waste streams will be approved by NYSDEC in advance through the "Request to Import/Reuse Fill or Soil" form attached in appendix D.

3.1.5 Backfill and Site Restoration

Following removal of impacted soils, excavated areas will be partially backfilled with clean fill for future construction needs. Clean fill, as defined by 6NYCRR Part 360, may be brought in from off-site to backfill the excavations and will be in compliance with Section 5.4(e) of the Division of Environmental Remediation's Draft DER-10 – Technical Guidance for Site investigation and Remediation (December 2002). The NYSDEC will be consulted, and must approve in advance, the return of excavated soil and the use of off-site fill.

3.1.6 Truck Inspection & Wash Station:

An outbound-truck inspection and wash station will be set up on the northeastern corner of the Site along Hillside Avenue and close to the Site exit. The truck inspection and wash station will consist of a portable Ultimate Containment Berm with a capacity of 5,610 gallons, manufactured by UltraTech International, Inc., or a station that is similar. Before exiting the Site, trucks will be required to stop at the truck inspection and wash station and will be examined for evidence of contaminated soil on the undercarriage, body, and wheels. Soil and debris will be removed. Brooms, shovels and clean water will be utilized for the removal of soil from vehicles and equipment, as necessary. All equipment used for cleanup work will be inspected and washed, if needed, before it leaves the Site. Accumulated wash water will be pumped out of the containment berm into a temporary storage tank and later disposed of in accordance with applicable laws and regulations.

Loaded trucks leaving the Site will be covered in compliance with applicable laws and regulations to prevent dust and odor. Trucks will be properly recorded in logs and records and

placarded in compliance with applicable City, State and Federal laws, including those of the New York State Department of Transportation. If loads contain wet material that can leak, truck liners will be used. All transport of materials will be performed by licensed truckers and in compliance with applicable laws and regulations.

3.1.7 Demobilization

Following the completion of interim remedial activities at the site, equipment and remedial structures will be dismantled and removed from the site. Solid wastes generated during IRM activities (i.e., polyethylene sheeting) will be properly disposed of.

4.0 MONITORING AND MAINTENANCE

4.1 Construction Phase Monitoring

Monitoring during soil excavation will be performed to protect the health of site workers and the surrounding community. A Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) have been developed for this project. These plans specify the monitoring procedures, action levels, and contingency measures that are required to protect public health and site workers. Air monitoring will include real-time measurement of volatile emissions and dust levels.

4.2 Post-Excavation Monitoring and Verification

As specified in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, verification sampling will consist of collecting endpoint soil samples from within each excavation area. Samples will be collected from the base of the remedial excavation at the locations and depths specified in figure 9. As the excavation will extend to the site boundary, sidewall samples will only be collected in areas of over-excavation.

Verification soil samples will be submitted to a NYSDOH ELAP certified laboratory (specific laboratory to be determined).

Samples will be analyzed for:

- Volatile Organic Compounds by EPA Method 8260;

- Semi-volatile organic compounds by EPA Method 8270;
- 1,4-Dioxane by EPA Method 8270 in "selective ion monitoring" (SIM) mode;
- Pesticides/PCBs by EPA Method 8081/8082;
- Target Analyte List metals and cyanide by EPA Method 6010/7473;
- PFAS by EPA Method 1633

Sample analytical results will be compared to NYSDEC soil cleanup objectives.

Soil sampling and equipment decontamination will be performed in accordance with USEPA SOP # 2001 General Field Sampling Guidelines, SOP# 2012 Soil Sampling, and SOP# 2006 Sampling Equipment decontamination.

4.3 Reporting and Record Keeping

4.3.1 Daily reports

Daily reports providing a general summary of activities for each day of active remedial work will be emailed to the NYSDEC Project Manager by noon of the following business day. Those reports will include:

- Project number and statement of the activities and an update of progress made and locations of excavation and other remedial work performed;
- Quantities of material imported and exported from the Site;
- Status of on-Site soil/fill stockpiles;
- A summary of all citizen complaints, with relevant details (basis of complaint; actions taken; etc.);
- A summary of CAMP results noting all excursions. CAMP data may be reported;
- Photograph of notable Site conditions and activities.

The frequency of the reporting period may be revised in consultation with NYSDEC project manager based on planned project tasks. Daily email reports are not intended to be the primary mode of communication for notification to NYSDEC of emergencies (accidents, spills), requests

for changes to the IRMWP or other sensitive or time critical information. However, such information will be included in the daily reports. Emergency conditions and changes to the IRMWP will be communicated directly to the NYSDEC project manager by personal communication. Daily reports will be included as an Appendix in the IRM Construction Completion Report(IRM CCR).

4.3.2 Record Keeping and Photo Documentation

Job-site record keeping for all remedial work will be performed. These records will be maintained on-Site during the project and will be available for inspection by NYSDEC staff. Representative photographs will be taken of the Site prior to any remedial activities and during major remedial activities to illustrate remedial program elements and contaminant source areas. Photographs will be submitted at the completion of the project in the IRM CCR in digital format (i.e. jpeg files).

4.4 Complaint Management

All complaints from citizens will be promptly reported to NYSDEC. Complaints will be addressed, and outcomes will also be reported to NYSDEC in daily reports. Notices to NYSDEC will include the nature of the complaint, the party providing the complaint, and the actions taken to resolve any problems.

4.5 Deviations From the Interim Remedial Measure Work Plan

All changes to the IRMWP will be reported to, and approved by, the NYSDEC Project Manager and will be documented in daily reports and reported in the IRM CCR. The process to be followed if there are any deviations from the IRMWP will include a request for approval for the change from NYSDEC noting the following:

- Reasons for deviating from the approved IRMWP;
- Effect of the deviations on overall remedy; and
- Determination with basis that the remedial action with the deviation(s) is protective of public health and the environment.

5.0 INTERIM REMEDIAL MEASURE CONSTRUCTION COMPLETION REPORT

An IRM Construction Completion Report(IRM CCR) will incorporate the details and findings of the IRM activities performed as outlined in this work plan. The report will detail analytical data, soil disposal volumes, and manifests, site restoration details, and results of CAMP monitoring.

Electronic copies of the IRM CCR will be submitted to the NYSDEC. Analytical results of the investigation will be submitted in the electronic data delivery (EDD) format through the Departments environmental information management system (EIMS).

6.0 QUALITY ASSURANCE/QUALITY CONTROL

6.1 Quality Assurance/Quality Control Procedures

QA/QC procedures will be used to provide performance information with regard to accuracy, precision, sensitivity, representation, completeness, and comparability associated with the sampling and analysis for this investigation. Field QA/QC procedures will be used (1) to document that samples are representative of actual conditions at the Site and (2) identify possible cross-contamination from field activities or sample transit. Laboratory QA/QC procedures and analyses will be used to demonstrate whether analytical results have been biased either by interfering compounds in the sample matrix, or by laboratory techniques that may have introduced systematic or random errors to the analytical process. A summary of the field and laboratory QA/QC procedures is provided below.

6.1.1 Field QA/QC

Field QA/QC will include the following procedures:

- Calibration of field equipment, including PID, on a daily basis;
- Analysis of trip blank (VOCs only) and duplicate samples;
- Use of dedicated and/or disposable field sampling equipment;
- Proper sample handling and preservation;
- Proper sample chain of custody documentation; and
- Completion of report logs.

The above procedures will be executed as follows:

- Disposable sampling equipment, including acetate sleeves, latex gloves, and disposable bailers (or sample tubing), will be used to minimize cross-contamination between samples;
- For each of the parameters analyzed, a sufficient sample volume will be collected to adhere to the specific analytical protocol, and provide sufficient sample for reanalysis if necessary;
- Because plasticizers and other organic compounds inherent in plastic containers may contaminate samples requiring organic analysis, samples will be collected in glass containers, with the exception of the nitrate-preserved groundwater sample for metals analysis;
- Appropriate sample preservation techniques, including cold temperature storage at 4º C, will be utilized to ensure that the analytical parameters concentrations do not change between the time of sample collection and analysis; and
- Samples will be analyzed prior to the expiration of the respective holding time for each analytical parameter to ensure the integrity of the analytical results.

6.1.2 Sample Custody

Sample handling in the field will conform to appropriate sample custody procedures. Field custody procedures include proper sample identification, chain-of-custody forms, and packaging and shipping procedures. Sample labels will be attached to all sampling bottles before field activities begin to ensure proper sample identification. Each label will identify the site and sample location. Styrofoam or bubble wrap will be used to absorb shock and prevent breakage of sample containers. Ice or ice packs will be placed in between the plastic bags for sample preservation purposes.

After each sample is collected and appropriately identified, the following information will be entered into the chain-of-custody form:

- Site name;
- Sampler(s)' name(s) and signature(s);

- Names and signatures of persons involved in the chain of possession of samples;
- Sample number;
- Number of containers;
- Sample location;
- Date and time of collection;
- Type of sample, sample matrix and analyses requested;
- Preservation used (if any); and
- Any pertinent field data collected (pH, temperature, conductivity, DO).

The sampler will sign and date the "Relinquished" blank space prior to removing one copy of the custody form and sealing the remaining copies of the form in a Ziploc plastic bag taped to the underside of the sample cooler lid. The sample cooler will be sealed with tape prior to delivery or shipment to the laboratory.

6.1.3 Report Logs

Field logs and borings logs will be completed during the course of this investigation. A field log will be completed on a daily basis which will describe all field activities including:

- Project number, name, manager, and address;
- The date and time;
- The weather conditions;
- On-site personnel and associated affiliations;
- Description of field activities; and
- Pertinent sample collection information including sample identification numbers, description of samples, location of sampling points, number of samples taken, method of sample collection and any factors that may affect its quality, time of sample collection, name of collector, and field screening results.

A boring log will be completed for each boring and will include the following information:

- Project number, name, manager, and location;
- The date and time;
- Drilling company and method used;
- Boring number;
- Total boring depth and water table depths; and
- Pertinent soil sample information including sample number, interval, depth, amount recovered, color, composition, percent moisture, visual and olfactory observations of contamination, and PID readings.

6.1.4 Laboratory QA/QC

An ELAP-certified laboratory will be used for all sample analyses. The laboratory will follow the following QA/QC protocols. All samples will be delivered to the laboratory within 24 hours of sample collection. Samples will be received by laboratory personnel, who will inspect the sample cooler(s) to check the integrity of the custody seals. The cooler(s) will then be opened, the samples unpackaged, and the information on the chain-of-custody form examined. If the shipped samples match those described on the chain-of-custody form, the laboratory sample custodian will sign and date the form on the next "Received" blank and assume responsibility for the samples. If problems are noted with the sample shipment, the laboratory custodian will sign the form and record problems in the "Remarks" box. The custodian will then immediately notify the Project Manager so appropriate follow-up steps can be implemented on a timely basis.

A record of the information detailing the handling of a particular sample through each stage of analysis will be maintained by the laboratory. The record will include:

- Job reference, sample matrix, sample number, and date sampled;
- Date and time received by laboratory, holding conditions, and analytical parameters;
- Extraction date, time and extractor's initials (if applicable), analysis date, time, and analyst's initials; and
- QA batch number, date reviewed, and reviewer's initials.

7.0 CONSTRUCTION HEALTH AND SAFETY PLAN

The Construction HASP is included in Appendix A. The Site Safety Coordinator will be Yisong Yang. Remedial work performed under this RAWP will be in full compliance with applicable health and safety laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements. Confined space entry, if any, will comply with OSHA requirements and industry standards and will address potential risks. The parties performing the remedial construction work will ensure that performance of work is in compliance with the HASP and applicable laws and regulations. The HASP pertains to remedial and invasive work performed at the Site until the issuance of the Notice of Completion.

All field personnel involved in remedial activities will participate in training required under 29 CFR 1910.120, such as 40-hour hazardous waste operator training and annual 8-hour refresher training. Site Safety Officer will be responsible for maintaining workers training records.

Personnel entering any exclusion zone will be trained in the provisions of the HASP and will comply with all requirements of 29 CFR 1910.120. Site-specific training will be provided to field personnel. Additional safety training may be added depending on the tasks performed. Emergency telephone numbers will be posted at the site location before any remedial work begins. A safety meeting will be conducted before each shift begins. Topics to be discussed include task hazards and protective measures (physical, chemical, environmental); emergency procedures; PPE levels and other relevant safety topics. Meetings will be documented in a logbook or specific form.

An emergency contact sheet with names and phone numbers is included in the CHASP. That document will define the specific project contacts for use in case of emergency.

8.0 COMMUNITY AIR MONITORING PLAN

A site-specific CAMP developed for the remedial work plan is included in Appendix B. The CAMP has been designed to prevent public access to the Site during and after work hours and to identify appropriate measures that will be taken to prevent the off-site migration of dust and/or soil, if necessary. Real-time air monitoring for volatile organic compounds (VOCs) and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous

monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, and the installation of soil borings or monitoring wells. Exceedences of action levels observed during performance of the Community Air Monitoring Plan (CAMP) will be reported to the NYSDEC Project Manager and included in the Daily Report.

Table 1
Volatile Organic Compounds in Soil (mg/Kg)
EPA Method: 8260
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID / Phenoix ID / Sampling Date / Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-1 (0-1) CM61842 10/7/22 SOIL		RISB-1 (1-2) CM61843 10/7/22 SOIL		RISB-1 (30-35) CM61844 10/7/22 SOIL		RISB-1 (40-42) CM61845 10/7/22 SOIL		RISB-2 (0-1) CM61836 10/7/22 SOIL		RISB-2 (1-2) CM61837 10/7/22 SOIL		RISB-2 (35-40) CM61838 10/7/22 SOIL	
Compound	**CAS Number**				**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles -8260					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																		
1,1,1,2-Tetrachloroethane	630-20-6	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,1,1-Trichloroethane	71-55-6	0.68	100	500	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,1,2,2-Tetrachloroethane	79-34-5	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,1,2-Trichloroethane	79-00-5	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,1-Dichloroethane	75-34-3	0.27	26	240	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,1-Dichloroethene	75-35-4	0.33	100	500	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,1-Dichloropropene	563-58-6	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,2,3-Trichlorobenzene	87-61-6	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,2,3-Trichloropropane	96-18-4	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,2,4-Trimethylbenzene	95-63-6	3.6	52	190	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,2-Dibromo-3-chloropropane	96-12-8	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,2-Dibromoethane	106-93-4	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,2-Dichloroethane	107-06-2	0.02	3.1	30	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,2-Dichloropropane	78-87-5	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,3,5-Trimethylbenzene	108-67-8	8.4	52	190	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
1,3-Dichloropropane	142-28-9	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
2,2-Dichloropropane	594-20-7	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
2-Chlorotoluene	95-49-8	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
2-Hexanone	591-78-6	~	~	~	<0.023	0.023	<0.025	0.025	<0.022	0.022	<0.024	0.024	<0.022	0.022	<0.027	0.027	<0.023	0.023
2-Isopropyltoluene	527-84-4	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
4-Chlorotoluene	106-43-4	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
4-Methyl-2-pentanone	108-10-1	~	~	~	<0.023	0.023	<0.025	0.025	<0.022	0.022	<0.024	0.024	<0.022	0.022	<0.027	0.027	<0.023	0.023
Acetone	67-64-1	0.05	100	500	<0.023	0.023	<0.025	0.025	<0.022	0.022	<0.024	0.024	<0.022	0.022	<0.027	0.027	<0.023	0.023
Acrylonitrile	107-13-1	~	~	~	<0.0093	0.0093	<0.01	0.01	<0.0089	0.0089	<0.0098	0.0098	<0.0087	0.0087	<0.011	0.011	<0.009	0.009
Benzene	71-43-2	0.06	4.8	44	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Bromobenzene	108-86-1	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
Bromochloromethane	74-97-5	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Bromodichloromethane	75-27-4	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Bromoform	75-25-2	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Bromomethane	74-83-9	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Carbon Disulfide	75-15-0	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Carbon tetrachloride	56-23-5	0.76	2.4	22	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Chlorobenzene	108-90-7	1.1	100	500	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Chloroethane	75-00-3	~	~		<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Chloroform	67-66-3	0.37	49	350	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Chloromethane	74-87-3	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
cis-1,2-Dichloroethene	156-59-2	0.25	100	500	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
cis-1,3-Dichloropropene	10061-01-5	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Dibromochloromethane	124-48-1	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Dibromomethane	74-95-3	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Dichlorodifluoromethane	75-71-8	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Ethylbenzene	100-41-4	1	41	390	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Hexachlorobutadiene	87-68-3	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
Isopropylbenzene	98-82-8	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
m&p-Xylene	179601-23-1	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Methyl Ethyl Ketone	78-93-3	0.12	100	500	<0.023	0.023	<0.025	0.025	<0.022	0.022	<0.024	0.024	<0.022	0.022	<0.027	0.027	<0.023	0.023
Methyl t-butyl ether (MTBE)	1634-04-4	0.93	100	500	<0.0093	0.0093	<0.01	0.01	<0.0089	0.0089	<0.0098	0.0098	<0.0087	0.0087	<0.011	0.011	<0.009	0.009
Methylene chloride	75-09-2	0.05	3	500	<0.0093	0.0093	<0.01	0.01	<0.0089	0.0089	<0.0098	0.0098	<0.0087	0.0087	<0.011	0.011	<0.009	0.009
Naphthalene	91-20-3	12	100	500	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	**0.44**	0.27	<0.0045	0.0045
n-Butylbenzene	104-51-8	12	100	500	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
n-Propylbenzene	103-65-1	3.9	100	500	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
o-Xylene	95-47-6	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
p-Isopropyltoluene	99-87-6	~	~	~	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
sec-Butylbenzene	135-98-8	11	100	500	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
Styrene	100-42-5	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
tert-Butylbenzene	98-06-6	5.9	100	500	<0.0046	0.0046	<0.38	0.38	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.27	0.27	<0.0045	0.0045
Tetrachloroethene	127-18-4	1.3	19	150	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Tetrahydrofuran (THF)	109-99-9	~	~	~	<0.0093	0.0093	<0.01	0.01	<0.0089	0.0089	<0.0098	0.0098	<0.0087	0.0087	<0.011	0.011	<0.009	0.009
Toluene	108-88-3	0.7	100	500	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Total Xylenes	1330-20-7	1.6	100	500	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
trans-1,2-Dichloroethene	156-60-5	0.19	100	500	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
trans-1,3-Dichloropropene	10061-02-6	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
trans-1,4-dichloro-2-butene	110-57-6	~	~	~	<0.0093	0.0093	<0.76	0.76	<0.0089	0.0089	<0.0098	0.0098	<0.0087	0.0087	<0.54	0.54	<0.009	0.009
Trichloroethene	79-01-6	0.47	21	200	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Trichlorofluoromethane	75-69-4	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Trichlorotrifluoroethane	76-13-1	~	~	~	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045
Vinyl chloride	75-01-4	0.02	0.9	13	<0.0046	0.0046	<0.005	0.005	<0.0044	0.0044	<0.0049	0.0049	<0.0044	0.0044	<0.0053	0.0053	<0.0045	0.0045

Sample ID / Phenoix ID / Sampling Date / Client Matrix	RISB-3 (0-1) CM52568 10/5/2022 SOIL		RISB-3 (2-4) CM52569 10/5/2022 SOIL		RISB-3 (43-45) CM52570 10/5/2022		RISB-4 (1-2) CM49176 10/03/2022 SOIL		RISB-4 (2-3) CM49177 10/03/2022 SOIL		RISB-4 (40-42) CM49178 10/03/2022 SOIL		RISB-5 (0-1) CM48193 09/30/2022 SOIL	
Compound	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles -8260	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor														
1,1,1,2-Tetrachloroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,1,1-Trichloroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,1,2,2-Tetrachloroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,1,2-Trichloroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,1-Dichloroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,1-Dichloroethene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,1-Dichloropropene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2,3-Trichlorobenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2,3-Trichloropropane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2,4-Trichlorobenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2,4-Trimethylbenzene	**0.037**	0.27	<0.0048	0.0048	<0.0046	0.0046	**0.5**	0.22	**2.4**	0.33	**0.0063**	0.0058	<0.0047	0.0047
1,2-Dibromo-3-chloropropane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2-Dibromoethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2-Dichlorobenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2-Dichloroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,2-Dichloropropane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,3,5-Trimethylbenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	**0.28**	0.22	**1.1**	0.33	**0.0028**	0.0058	<0.0047	0.0047
1,3-Dichlorobenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,3-Dichloropropane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
1,4-Dichlorobenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
2,2-Dichloropropane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
2-Chlorotoluene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
2-Hexanone	<0.023	0.023	<0.024	0.024	<0.023	0.023	<0.023	0.023	<0.022	0.022	<0.029	0.029	<0.023	0.023
2-Isopropyltoluene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
4-Chlorotoluene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
4-Methyl-2-pentanone	<0.023	0.023	<0.024	0.024	<0.023	0.023	<0.023	0.023	<0.022	0.022	<0.029	0.029	<0.023	0.023
Acetone	**0.033**	0.023	**0.0069**	0.024	<0.023	0.023	<0.023	0.023	**0.026**	0.022	**0.0069**	0.029	<0.023	0.023
Acrylonitrile	<0.0093	0.0093	<0.0096	0.0096	<0.0092	0.0092	<0.0091	0.0091	<0.009	0.009	<0.012	0.012	<0.0093	0.0093
Benzene	**0.0012**	0.0047	<0.0048	0.0048	<0.0046	0.0046	**0.44**	0.22	**3.1**	0.33	**0.0054**	0.0058	<0.0047	0.0047
Bromobenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Bromochloromethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Bromodichloromethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Bromoform	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Bromomethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Carbon Disulfide	<0.0047	0.0047	<0.0048	0.0048	**0.0013**	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Carbon tetrachloride	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Chlorobenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Chloroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Chloroform	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	**0.0033**	0.0058	<0.0047	0.0047
Chloromethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
cis-1,2-Dichloroethene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
cis-1,3-Dichloropropene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Dibromochloromethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Dibromomethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Dichlorodifluoromethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Ethylbenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	**0.17**	0.16	**1.4**	0.33	**0.0027**	0.0058	<0.0047	0.0047
Hexachlorobutadiene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Isopropylbenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
m&p-Xylene	**0.00096**	0.0047	<0.0048	0.0048	<0.0046	0.0046	**1.5**	0.22	**8.6**	0.33	**0.01**	0.0058	<0.0047	0.0047
Methyl Ethyl Ketone	**0.0081**	0.023	<0.024	0.024	<0.023	0.023	<0.023	0.023	<0.022	0.022	<0.029	0.029	<0.023	0.023
Methyl t-butyl ether (MTBE)	<0.0093	0.0093	<0.0096	0.0096	<0.0092	0.0092	<0.0091	0.0091	<0.009	0.009	<0.012	0.012	<0.0093	0.0093
Methylene chloride	<0.0093	0.0093	<0.0096	0.0096	<0.0092	0.0092	<0.0091	0.0091	<0.009	0.009	<0.012	0.012	<0.0093	0.0093
Naphthalene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	**0.13**	0.11	**0.53**	0.33	**0.0015**	0.0058	<0.0047	0.0047
n-Butylbenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
n-Propylbenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	**0.23**	0.2	<0.0058	0.0058	<0.0047	0.0047
o-Xylene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	**0.43**	0.22	**2.5**	0.33	**0.0045**	0.0058	<0.0047	0.0047
p-Isopropyltoluene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	**0.00068**	0.0058	<0.0047	0.0047
sec-Butylbenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Styrene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
tert-Butylbenzene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Tetrachloroethene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	**0.26**	0.22	**0.46**	0.33	<0.0058	0.0058	<0.0047	0.0047
Tetrahydrofuran (THF)	<0.0093	0.0093	<0.0096	0.0096	<0.0092	0.0092	<0.0091	0.0091	<0.009	0.009	<0.012	0.012	<0.0093	0.0093
Toluene	**0.0015**	0.0047	<0.0048	0.0048	<0.0046	0.0046	**1.1**	0.22	**6.9**	0.33	**0.0094**	0.0058	<0.0047	0.0047
Total Xylenes	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	**1.93**	0.22	**11.1**	0.33	**0.0145**	0.0058	<0.0047	0.0047
trans-1,2-Dichloroethene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
trans-1,3-Dichloropropene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
trans-1,4-dichloro-2-butene	<0.0093	0.0093	<0.0096	0.0096	<0.0092	0.0092	<0.0091	0.0091	<0.009	0.009	<0.012	0.012	<0.0093	0.0093
Trichloroethene	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Trichlorofluoromethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Trichlorotrifluoroethane	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047
Vinyl chloride	<0.0047	0.0047	<0.0048	0.0048	<0.0046	0.0046	<0.0045	0.0045	<0.0045	0.0045	<0.0058	0.0058	<0.0047	0.0047

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 1

Volatile Organic Compounds in Soil (mg/Kg)

EPA Method: 8260

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Commercial	RISB-5 (1-2) CM48194 09/30/2022 SOIL		RISB-5 (40-43) CM48195 09/30/2022 SOIL		RISB-5 (43-45) CM48196 09/30/2022 SOIL		RISB-5 DUPLICATE CM48197 09/30/2022 SOIL		RISB-6 (0-1) CM48185 09/29/2022 SOIL		RISB-6 (1-2) CM48186 09/29/2022 SOIL	
Compound	**CAS Number**				**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles -8260					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																
1,1,1,2-Tetrachloroethane	630-20-6	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,1,1-Trichloroethane	71-55-6	0.68	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,1,2,2-Tetrachloroethane	79-34-5	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,1,2-Trichloroethane	79-00-5	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,1-Dichloroethane	75-34-3	0.27	26	240	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,1-Dichloroethene	75-35-4	0.33	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,1-Dichloropropene	563-58-6	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,2,3-Trichlorobenzene	87-61-6	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,2,3-Trichloropropane	96-18-4	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,2,4-Trimethylbenzene	95-63-6	3.6	52	190	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,2-Dibromo-3-chloropropane	96-12-8	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,2-Dibromoethane	106-93-4	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,2-Dichloroethane	107-06-2	0.02	3.1	30	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,2-Dichloropropane	78-87-5	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,3,5-Trimethylbenzene	108-67-8	8.4	52	190	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
1,3-Dichloropropane	142-28-9	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
2,2-Dichloropropane	594-20-7	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
2-Chlorotoluene	95-49-8	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
2-Hexanone	591-78-6	~	~	~	<0.026	0.026	<0.024	0.024	<0.026	0.026	<0.025	0.025	<0.024	0.024	<0.026	0.026
2-Isopropyltoluene	527-84-4	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
4-Chlorotoluene	106-43-4	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
4-Methyl-2-pentanone	108-10-1	~	~	~	<0.026	0.026	<0.024	0.024	<0.026	0.026	<0.025	0.025	<0.024	0.024	<0.026	0.026
Acetone	67-64-1	0.05	100	500	<0.026	0.026	<0.024	0.024	<0.026	0.026	<0.025	0.025	**0.056**	0.024	**0.042**	0.026
Acrylonitrile	107-13-1	~	~	~	<0.01	0.01	<0.0096	0.0096	<0.01	0.01	<0.01	0.01	<0.0097	0.0097	<0.01	0.01
Benzene	71-43-2	0.06	4.8	44	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Bromobenzene	108-86-1	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
Bromochloromethane	74-97-5	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Bromodichloromethane	75-27-4	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Bromoform	75-25-2	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Bromomethane	74-83-9	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Carbon Disulfide	75-15-0	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Carbon tetrachloride	56-23-5	0.76	2.4	22	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Chlorobenzene	108-90-7	1.1	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Chloroethane	75-00-3	~	~		<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Chloroform	67-66-3	0.37	49	350	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Chloromethane	74-87-3	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
cis-1,2-Dichloroethene	156-59-2	0.25	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
cis-1,3-Dichloropropene	10061-01-5	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Dibromochloromethane	124-48-1	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Dibromomethane	74-95-3	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Dichlorodifluoromethane	75-71-8	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Ethylbenzene	100-41-4	1	41	390	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Hexachlorobutadiene	87-68-3	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
Isopropylbenzene	98-82-8	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
m&p-Xylene	179601-23-1	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Methyl Ethyl Ketone	78-93-3	0.12	100	500	<0.026	0.026	<0.024	0.024	<0.026	0.026	<0.025	0.025	<0.024	0.024	<0.026	0.026
Methyl t-butyl ether (MTBE)	1634-04-4	0.93	100	500	<0.01	0.01	<0.0096	0.0096	<0.01	0.01	<0.01	0.01	<0.0097	0.0097	<0.01	0.01
Methylene chloride	75-09-2	0.05	3	500	<0.01	0.01	<0.0096	0.0096	<0.01	0.01	<0.01	0.01	<0.0097	0.0097	<0.01	0.01
Naphthalene	91-20-3	12	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
n-Butylbenzene	104-51-8	12	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
n-Propylbenzene	103-65-1	3.9	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
o-Xylene	95-47-6	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
p-Isopropyltoluene	99-87-6	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
sec-Butylbenzene	135-98-8	11	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
Styrene	100-42-5	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
tert-Butylbenzene	98-06-6	5.9	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.48	0.48
Tetrachloroethene	127-18-4	1.3	19	150	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	**0.67**	0.28	**0.96**	0.48
Tetrahydrofuran (THF)	109-99-9	~	~	~	<0.01	0.01	<0.0096	0.0096	<0.01	0.01	<0.01	0.01	<0.0097	0.0097	<0.01	0.01
Toluene	108-88-3	0.7	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Total Xylenes	1330-20-7	1.6	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
trans-1,2-Dichloroethene	156-60-5	0.19	100	500	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
trans-1,3-Dichloropropene	10061-02-6	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
trans-1,4-dichloro-2-butene	110-57-6	~	~	~	<0.01	0.01	<0.0096	0.0096	<0.01	0.01	<0.01	0.01	<0.0097	0.0097	<0.96	0.96
Trichloroethene	79-01-6	0.47	21	200	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Trichlorofluoromethane	75-69-4	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Trichlorotrifluoroethane	76-13-1	~	~	~	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051
Vinyl chloride	75-01-4	0.02	0.9	13	<0.0051	0.0051	<0.0048	0.0048	<0.0052	0.0052	<0.005	0.005	<0.0048	0.0048	<0.0051	0.0051

Sample ID Phenoix ID Sampling Date Client Matrix	RISB-6 (15-17) CM48187 09/29/2022 SOIL		RISB-6 (37-38) CM48188 09/29/2022 SOIL		RISB-6 (38-40) CM48189 09/29/2022 SOIL		RISB-6 (50-52) CM48190 09/29/2022 SOIL		RISB-7 (0-1) CM49173 10/03/2022 SOIL		RISB-7 (1-2) CM49174 10/03/2022 SOIL		RISB-7 (38-40) CM49175 10/03/2022 SOIL		RISB-8 (0-3) CM50474 10/4/22 SOIL	
Compound	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles -8260	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																
1,1,1,2-Tetrachloroethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,1,1-Trichloroethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,1,2,2-Tetrachloroethane	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,1,2-Trichloroethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,1-Dichloroethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,1-Dichloroethene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,1-Dichloropropene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2,3-Trichlorobenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2,3-Trichloropropane	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2,4-Trichlorobenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2,4-Trimethylbenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	**0.17**	0.11	<0.0046	0.0046	**0.76**	0.23
1,2-Dibromo-3-chloropropane	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2-Dibromoethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2-Dichlorobenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2-Dichloroethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,2-Dichloropropane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,3,5-Trimethylbenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	**0.12**	0.11	<0.0046	0.0046	**0.31**	0.23
1,3-Dichlorobenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,3-Dichloropropane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
1,4-Dichlorobenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
2,2-Dichloropropane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
2-Chlorotoluene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
2-Hexanone	<0.026	0.026	<0.024	0.024	**0.042**	0.028	<0.025	0.025	<0.021	0.021	<1.4	1.4	<0.023	0.023	<0.017	0.017
2-Isopropyltoluene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
4-Chlorotoluene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
4-Methyl-2-pentanone	<0.026	0.026	<0.024	0.024	<0.028	0.028	<0.025	0.025	<0.021	0.021	<1.4	1.4	<0.023	0.023	<0.017	0.017
Acetone	<1.2	1.2	**0.13**	0.024	**0.15**	0.028	<0.025	0.025	<0.021	0.021	<1.4	1.4	<0.023	0.023	**0.02**	0.017
Acrylonitrile	<0.01	0.01	<0.0098	0.0098	<0.011	0.011	<0.01	0.01	<0.0083	0.0083	<0.55	0.55	<0.0093	0.0093	<0.0068	0.0068
Benzene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.0084**	0.0034
Bromobenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Bromochloromethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Bromodichloromethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Bromoform	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Bromomethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Carbon Disulfide	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Carbon tetrachloride	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Chlorobenzene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Chloroethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Chloroform	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Chloromethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
cis-1,2-Dichloroethene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
cis-1,3-Dichloropropene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Dibromochloromethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Dibromomethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Dichlorodifluoromethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Ethylbenzene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.13**	0.12
Hexachlorobutadiene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Isopropylbenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.024**	0.23
m&p-Xylene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	**0.3**	0.27	<0.0046	0.0046	**0.44**	0.23
Methyl Ethyl Ketone	**0.073**	0.026	**0.034**	0.024	**0.045**	0.028	<0.025	0.025	<0.021	0.021	<1.4	1.4	<0.023	0.023	<0.017	0.017
Methyl t-butyl ether (MTBE)	<0.01	0.01	<0.0098	0.0098	<0.011	0.011	<0.01	0.01	<0.0083	0.0083	<0.55	0.55	<0.0093	0.0093	0.37	0.37
Methylene chloride	<0.01	0.01	<0.0098	0.0098	<0.011	0.011	<0.01	0.01	<0.0083	0.0083	<0.55	0.55	<0.0093	0.0093	<0.0068	0.0068
Naphthalene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	**0.13**	0.11	<0.0046	0.0046	**0.19**	0.19
n-Butylbenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.0017**	0.0034
n-Propylbenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.1**	0.093
o-Xylene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	**0.11**	0.11	<0.0046	0.0046	**0.31**	0.23
p-Isopropyltoluene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.00063**	0.0034
sec-Butylbenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.00098**	0.0034
Styrene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
tert-Butylbenzene	<0.25	0.25	<0.0049	0.0049	<0.28	0.28	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Tetrachloroethene	**0.013**	0.0051	<0.0049	0.0049	**0.0093**	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	**0.0053**	0.0034
Tetrahydrofuran (THF)	<0.01	0.01	<0.0098	0.0098	<0.011	0.011	<0.01	0.01	<0.0083	0.0083	<0.55	0.55	<0.0093	0.0093	<0.0068	0.0068
Toluene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	**0.19**	0.16	<0.0046	0.0046	**0.23**	0.21
Total Xylenes	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	**0.41**	0.11	<0.0046	0.0046	**0.75**	0.23
trans-1,2-Dichloroethene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
trans-1,3-Dichloropropene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
trans-1,4-dichloro-2-butene	<0.5	0.5	<0.0098	0.0098	<0.56	0.56	<0.01	0.01	<0.0083	0.0083	<0.55	0.55	<0.0093	0.0093	<0.0068	0.0068
Trichloroethene	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Trichlorofluoromethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Trichlorotrifluoroethane	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034
Vinyl chloride	<0.0051	0.0051	<0.0049	0.0049	<0.0055	0.0055	<0.005	0.005	<0.0042	0.0042	<0.27	0.27	<0.0046	0.0046	<0.0034	0.0034

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 1

Volatile Organic Compounds in Soil (mg/Kg)

EPA Method: 8260

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Commercial	RISB-8 (3-5)		RISB-8 (5-7)		RISB-8 (9-10)		RISB-8 (10-12)		RISB-8 (12-15)		RISB-8 (20-22)		RISB-8 (22-25)	
Phenoix ID					CM50475		CM50476		CM50477		CM50478		CM50479		CM50480		CM50481	
Sampling Date					10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22	
Client Matrix					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles -8260					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																		
1,1,1,2-Tetrachloroethane	630-20-6	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,1,1-Trichloroethane	71-55-6	0.68	100	500	<0.0051	0.0051	<0.68	0.68	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,1,2,2-Tetrachloroethane	79-34-5	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,1,2-Trichloroethane	79-00-5	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,1-Dichloroethane	75-34-3	0.27	26	240	<0.0051	0.0051	<0.27	0.27	<0.0045	0.0045	<0.27	0.27	<0.0056	0.0056	<0.27	0.27	<0.0051	0.0051
1,1-Dichloroethene	75-35-4	0.33	100	500	<0.0051	0.0051	<0.33	0.33	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.33	0.33	<0.0051	0.0051
1,1-Dichloropropene	563-58-6	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,2,3-Trichlorobenzene	87-61-6	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,2,3-Trichloropropane	96-18-4	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,2,4-Trimethylbenzene	95-63-6	3.6	52	190	**0.37**	0.27	**8.5**	0.71	**0.0023**	0.0045	61	2.9	**0.035**	0.0056	**29**	4	**0.0012**	0.0051
1,2-Dibromo-3-chloropropane	96-12-8	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,2-Dibromoethane	106-93-4	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,2-Dichloroethane	107-06-2	0.02	3.1	30	<0.0051	0.0051	<0.071	0.071	<0.0045	0.0045	<0.029	0.029	<0.0056	0.0056	<0.04	0.04	<0.0051	0.0051
1,2-Dichloropropane	78-87-5	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,3,5-Trimethylbenzene	108-67-8	8.4	52	190	**0.16**	0.13	**2.7**	0.71	**0.00075**	0.0045	**19**	2.9	**0.012**	0.0056	**9.2**	0.4	<0.0051	0.0051
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,3-Dichloropropane	142-28-9	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
2,2-Dichloropropane	594-20-7	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
2-Chlorotoluene	95-49-8	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
2-Hexanone	591-78-6	~	~	~	<0.026	0.026	<3.5	3.5	<0.023	0.023	<1.5	1.5	<0.028	0.028	<2	2	<0.026	0.026
2-Isopropyltoluene	527-84-4	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	**0.16**	0.29	<0.0056	0.0056	**0.09**	0.4	<0.0051	0.0051
4-Chlorotoluene	106-43-4	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
4-Methyl-2-pentanone	108-10-1	~	~	~	<0.026	0.026	<3.5	3.5	<0.023	0.023	<1.5	1.5	<0.028	0.028	<2	2	<0.026	0.026
Acetone	67-64-1	0.05	100	500	**0.0066**	0.026	<0.71	0.71	<0.023	0.023	<0.29	0.29	<0.028	0.028	<0.4	0.4	<0.026	0.026
Acrylonitrile	107-13-1	~	~	~	<0.01	0.01	<1.4	1.4	<0.0091	0.0091	<0.58	0.58	<0.011	0.011	<0.81	0.81	<0.01	0.01
Benzene	71-43-2	0.06	4.8	44	**0.011**	0.0051	**0.96**	0.71	**0.0024**	0.0045	**7.7**	2.9	**0.00065**	0.0056	**5.5**	0.4	**0.15**	0.06
Bromobenzene	108-86-1	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Bromochloromethane	74-97-5	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Bromodichloromethane	75-27-4	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Bromoform	75-25-2	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Bromomethane	74-83-9	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Carbon Disulfide	75-15-0	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Carbon tetrachloride	56-23-5	0.76	2.4	22	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Chlorobenzene	108-90-7	1.1	100	500	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Chloroethane	75-00-3	~	~		<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Chloroform	67-66-3	0.37	49	350	<0.0051	0.0051	<0.37	0.37	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.37	0.37	<0.0051	0.0051
Chloromethane	74-87-3	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
cis-1,2-Dichloroethene	156-59-2	0.25	100	500	<0.0051	0.0051	<0.25	0.25	<0.0045	0.0045	<0.25	0.25	<0.0056	0.0056	<0.25	0.25	<0.0051	0.0051
cis-1,3-Dichloropropene	10061-01-5	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Dibromochloromethane	124-48-1	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Dibromomethane	74-95-3	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Dichlorodifluoromethane	75-71-8	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Ethylbenzene	100-41-4	1	41	390	**0.021**	0.0051	**3.1**	0.71	**0.0016**	0.0045	**21**	2.9	**0.011**	0.0056	**9.4**	0.4	**0.093**	0.52
Hexachlorobutadiene	87-68-3	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Isopropylbenzene	98-82-8	~	~	~	**0.0032**	0.0051	**0.36**	0.71	<0.0045	0.0045	**2.7**	0.29	**0.0016**	0.0056	**1.2**	0.4	<0.0051	0.0051
m&p-Xylene	179601-23-1	~	~	~	**0.33**	0.27	**12**	0.71	**0.0061**	0.0045	**85**	2.9	**0.045**	0.0056	**35**	4	**0.34**	0.31
Methyl Ethyl Ketone	78-93-3	0.12	100	500	<0.026	0.026	<0.28	0.28	<0.023	0.023	<0.12	0.12	<0.028	0.028	<0.16	0.16	<0.026	0.026
Methyl t-butyl ether (MTBE)	1634-04-4	0.93	100	500	0.2	0.19	**14**	1.4	**1.1**	0.73	**94**	5.8	**0.0031**	0.011	**65**	8.1	**0.011**	0.01
Methylene chloride	75-09-2	0.05	3	500	<0.01	0.01	<0.28	0.28	<0.0091	0.0091	<0.12	0.12	<0.011	0.011	<0.16	0.16	<0.01	0.01
Naphthalene	91-20-3	12	100	500	**0.011**	0.0051	**2.1**	0.71	**0.00099**	0.0045	**14**	2.9	**0.0056**	0.0056	**8.1**	0.4	<0.0051	0.0051
n-Butylbenzene	104-51-8	12	100	500	<0.0051	0.0051	**0.46**	0.71	<0.0045	0.0045	**2.9**	0.29	**0.0014**	0.0056	**1.7**	0.4	<0.0051	0.0051
n-Propylbenzene	103-65-1	3.9	100	500	**0.0098**	0.0051	**1.3**	0.71	<0.0045	0.0045	**8.7**	2.9	**0.0056**	0.0056	**4**	0.4	<0.0051	0.0051
o-Xylene	95-47-6	~	~	~	**0.2**	0.19	**4.4**	0.71	**0.0029**	0.0045	**33**	2.9	**0.016**	0.0056	**15**	0.4	<0.0051	0.0051
p-Isopropyltoluene	99-87-6	~	~	~	**0.00085**	0.0051	**0.091**	0.71	<0.0045	0.0045	**0.56**	0.29	<0.0056	0.0056	**0.27**	0.4	<0.0051	0.0051
sec-Butylbenzene	135-98-8	11	100	500	**0.0014**	0.0051	**0.14**	0.71	<0.0045	0.0045	**1**	0.29	**0.00076**	0.0056	**0.51**	0.4	<0.0051	0.0051
Styrene	100-42-5	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	**0.23**	0.29	<0.0056	0.0056	**0.1**	0.4	<0.0051	0.0051
tert-Butylbenzene	98-06-6	5.9	100	500	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	**0.066**	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Tetrachloroethene	127-18-4	1.3	19	150	**0.16**	0.13	<0.71	0.71	<0.0045	0.0045	**0.14**	0.29	<0.0056	0.0056	**0.12**	0.4	<0.0051	0.0051
Tetrahydrofuran (THF)	109-99-9	~	~	~	<0.01	0.01	<1.4	1.4	<0.0091	0.0091	<0.58	0.58	<0.011	0.011	<0.81	0.81	<0.01	0.01
Toluene	108-88-3	0.7	100	500	**0.23**	0.22	**7.2**	0.71	**0.0094**	0.0045	**57**	2.9	**0.014**	0.0056	**26**	4	**0.66**	0.52
Total Xylenes	1330-20-7	1.6	100	500	**0.53**	0.19	**16.4**	0.71	**0.009**	0.0045	**118**	2.9	**0.061**	0.0056	**50**	0.4	**0.34**	0.0051
trans-1,2-Dichloroethene	156-60-5	0.19	100	500	<0.0051	0.0051	<0.19	0.19	<0.0045	0.0045	<0.19	0.19	<0.0056	0.0056	<0.19	0.19	<0.0051	0.0051
trans-1,3-Dichloropropene	10061-02-6	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
trans-1,4-dichloro-2-butene	110-57-6	~	~	~	<0.01	0.01	<1.4	1.4	<0.0091	0.0091	<0.58	0.58	<0.011	0.011	<0.81	0.81	<0.01	0.01
Trichloroethene	79-01-6	0.47	21	200	<0.0051	0.0051	<0.47	0.47	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Trichlorofluoromethane	75-69-4	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Trichlorotrifluoroethane	76-13-1	~	~	~	<0.0051	0.0051	<0.71	0.71	<0.0045	0.0045	<0.29	0.29	<0.0056	0.0056	<0.4	0.4	<0.0051	0.0051
Vinyl chloride	75-01-4	0.02	0.9	13	<0.0051	0.0051	<0.071	0.071	<0.0045	0.0045	<0.029	0.029	<0.0056	0.0056	<0.04	0.04	<0.0051	0.0051

Sample ID	RISB-8 (25-28)		RISB-8 (28-30)		RISB-8 (30-33)		RISB-8 (33-35)		RISB-8 (40-43)		RISB-8 DUPLICATE		RISB-9 (0-1)	
Phenoix ID	CM50482		CM50483		CM50484		CM50485		CM50486		CM50487		CM52571	
Sampling Date	10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/5/22	
Client Matrix	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles -8260	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor														
1,1,1,2-Tetrachloroethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,1,1-Trichloroethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,1,2,2-Tetrachloroethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,1,2-Trichloroethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,1-Dichloroethane	<0.27	0.27	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,1-Dichloroethene	<0.33	0.33	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,1-Dichloropropene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2,3-Trichlorobenzene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2,3-Trichloropropane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2,4-Trichlorobenzene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2,4-Trimethylbenzene	**1**	0.36	<0.0058	0.0058	**1.3**	0.25	**0.057**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2-Dibromo-3-chloropropane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2-Dibromoethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2-Dichlorobenzene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2-Dichloroethane	<0.036	0.036	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,2-Dichloropropane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,3,5-Trimethylbenzene	**0.33**	0.32	<0.0058	0.0058	**0.39**	0.25	**0.018**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,3-Dichlorobenzene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,3-Dichloropropane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
1,4-Dichlorobenzene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
2,2-Dichloropropane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
2-Chlorotoluene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
2-Hexanone	<1.8	1.8	<0.029	0.029	<0.024	0.024	<0.024	0.024	<0.028	0.028	<0.025	0.025	<0.021	0.021
2-Isopropyltoluene	<0.36	0.36	<0.0058	0.0058	**0.0012**	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
4-Chlorotoluene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
4-Methyl-2-pentanone	<1.8	1.8	<0.029	0.029	<0.024	0.024	<0.024	0.024	<0.028	0.028	<0.025	0.025	<0.021	0.021
Acetone	<0.36	0.36	<0.029	0.029	**0.16**	0.024	**0.045**	0.024	<0.028	0.028	<0.025	0.025	**0.037**	0.021
Acrylonitrile	<0.72	0.72	<0.012	0.012	<0.0097	0.0097	<0.0096	0.0096	<0.011	0.011	<0.01	0.01	<0.0083	0.0083
Benzene	**0.45**	0.36	<0.0058	0.0058	**0.1**	0.06	**0.0027**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Bromobenzene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Bromochloromethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Bromodichloromethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Bromoform	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Bromomethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Carbon Disulfide	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Carbon tetrachloride	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Chlorobenzene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Chloroethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Chloroform	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Chloromethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
cis-1,2-Dichloroethene	<0.25	0.25	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
cis-1,3-Dichloropropene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Dibromochloromethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Dibromomethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Dichlorodifluoromethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Ethylbenzene	**0.64**	0.36	<0.0058	0.0058	**0.33**	0.25	**0.011**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Hexachlorobutadiene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Isopropylbenzene	**0.055**	0.36	<0.0058	0.0058	**0.026**	0.0048	**0.002**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
m&p-Xylene	**2.4**	0.36	**0.0017**	0.0058	**1.4**	0.25	**0.051**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Methyl Ethyl Ketone	<0.14	0.14	<0.029	0.029	<0.024	0.024	<0.024	0.024	<0.028	0.028	<0.025	0.025	**0.0065**	0.021
Methyl t-butyl ether (MTBE)	**4.3**	0.72	**0.014**	0.012	**8.1**	0.5	**0.77**	0.49	**0.0011**	0.011	<0.01	0.01	<0.0083	0.0083
Methylene chloride	<0.14	0.14	<0.012	0.012	<0.0097	0.0097	<0.0096	0.0096	<0.011	0.011	<0.01	0.01	<0.0083	0.0083
Naphthalene	**0.23**	0.22	<0.0058	0.0058	**0.4**	0.25	**0.019**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
n-Butylbenzene	**0.047**	0.36	<0.0058	0.0058	**0.017**	0.0048	**0.0028**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
n-Propylbenzene	**0.17**	0.14	<0.0058	0.0058	**0.16**	0.15	**0.0074**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
o-Xylene	**0.83**	0.36	<0.0058	0.0058	**0.57**	0.25	**0.022**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
p-Isopropyltoluene	<0.36	0.36	<0.0058	0.0058	**0.0041**	0.0048	**0.00067**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
sec-Butylbenzene	<0.36	0.36	<0.0058	0.0058	**0.0085**	0.0048	**0.0011**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Styrene	<0.36	0.36	<0.0058	0.0058	**0.0022**	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
tert-Butylbenzene	<0.36	0.36	<0.0058	0.0058	**0.00062**	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Tetrachloroethene	<0.36	0.36	<0.0058	0.0058	**0.0015**	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	**0.0018**	0.0041
Tetrahydrofuran (THF)	<0.72	0.72	<0.012	0.012	<0.0097	0.0097	<0.0096	0.0096	<0.011	0.011	<0.01	0.01	<0.0083	0.0083
Toluene	**2.4**	0.36	**0.0022**	0.0058	**0.8**	0.25	**0.018**	0.0048	<0.0055	0.0055	<0.005	0.005	**0.00073**	0.0041
Total Xylenes	**3.23**	0.36	<0.0058	0.0058	**1.97**	0.25	**0.073**	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
trans-1,2-Dichloroethene	<0.19	0.19	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
trans-1,3-Dichloropropene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
trans-1,4-dichloro-2-butene	<0.72	0.72	<0.012	0.012	<0.0097	0.0097	<0.0096	0.0096	<0.011	0.011	<0.01	0.01	<0.0083	0.0083
Trichloroethene	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Trichlorofluoromethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Trichlorotrifluoroethane	<0.36	0.36	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041
Vinyl chloride	<0.036	0.036	<0.0058	0.0058	<0.0048	0.0048	<0.0048	0.0048	<0.0055	0.0055	<0.005	0.005	<0.0041	0.0041

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 1

Volatile Organic Compounds in Soil (mg/Kg)

EPA Method: 8260

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Commercial	RISB-9 (1-2) CM52572 10/5/22 SOIL		RISB-9 (33-35) CM52573 10/5/22 SOIL		RISB-9 (48-50) CM52574 10/5/22 SOIL		RISB-10 (0-1) CM52565 10/5/22 SOIL		RISB-10 (1-2) CM52566 10/5/22 SOIL		RISB-10 (40-43) CM52567 10/5/22 SOIL		RISB-11 (2-3) CM48201 09/30/2022 SOIL		RISB-11 (3-4) CM48202 09/30/2022 SOIL		RISB-11 (48-50) CM48203 09/30/2022 SOIL		RISB-12 (0-1) CM48180 09/29/2022 SOIL		RISB-12 (1-2) CM48181 09/29/2022 SOIL		RISB-12 (31-33) CM48182 09/29/2022 SOIL		RISB-12 (33-35) CM48183 09/29/2022 SOIL		RISB-12 (50-52) CM48184 09/29/2022 SOIL	
Compound	**CAS Number**				**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Volatiles -8260					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
1,1,1,2-Tetrachloroethane	630-20-6	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,1,1-Trichloroethane	71-55-6	0.68	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,1,2,2-Tetrachloroethane	79-34-5	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,1,2-Trichloroethane	79-00-5	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,1-Dichloroethane	75-34-3	0.27	26	240	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,1-Dichloroethene	75-35-4	0.33	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,1-Dichloropropene	563-58-6	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2,3-Trichlorobenzene	87-61-6	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2,3-Trichloropropane	96-18-4	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2,4-Trimethylbenzene	95-63-6	3.6	52	190	<0.0042	0.0042	<0.0045	0.0045	**0.0014**	0.0041	**0.024**	0.17	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2-Dibromo-3-chloropropane	96-12-8	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2-Dibromoethane	106-93-4	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2-Dichloroethane	107-06-2	0.02	3.1	30	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,2-Dichloropropane	78-87-5	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,3,5-Trimethylbenzene	108-67-8	8.4	52	190	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,3-Dichloropropane	142-28-9	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
2,2-Dichloropropane	594-20-7	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
2-Chlorotoluene	95-49-8	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
2-Hexanone	591-78-6	~	~	~	<0.021	0.021	<0.022	0.022	<0.061	0.061	<0.022	0.022	<0.022	0.022	<0.03	0.03	<0.025	0.025	<0.02	0.02	<0.024	0.024	<0.027	0.027	<0.026	0.026	<0.022	0.022	<0.022	0.022	<0.025	0.025
2-Isopropyltoluene	527-84-4	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
4-Chlorotoluene	106-43-4	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
4-Methyl-2-pentanone	108-10-1	~	~	~	<0.021	0.021	<0.022	0.022	<0.02	0.02	<0.022	0.022	<0.022	0.022	<0.03	0.03	<0.025	0.025	<0.02	0.02	<0.024	0.024	<0.027	0.027	<0.026	0.026	<0.022	0.022	<0.022	0.022	<0.025	0.025
Acetone	67-64-1	0.05	100	500	<0.021	0.021	<0.022	0.022	<0.02	0.02	<0.022	0.022	<0.022	0.022	<0.03	0.03	<0.025	0.025	<0.02	0.02	<0.024	0.024	<0.027	0.027	<0.026	0.026	**0.033**	0.022	**0.044**	0.022	<0.025	0.025
Acrylonitrile	107-13-1	~	~	~	<0.0083	0.0083	<0.009	0.009	<0.0082	0.0082	<0.0089	0.0089	<0.0086	0.0086	<0.012	0.012	<0.01	0.01	<0.0081	0.0081	<0.0097	0.0097	<0.011	0.011	<0.01	0.01	<0.009	0.009	<0.0089	0.0089	<0.0099	0.0099
Benzene	71-43-2	0.06	4.8	44	**0.035**	0.06	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Bromobenzene	108-86-1	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Bromochloromethane	74-97-5	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Bromodichloromethane	75-27-4	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Bromoform	75-25-2	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Bromomethane	74-83-9	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Carbon Disulfide	75-15-0	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Carbon tetrachloride	56-23-5	0.76	2.4	22	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Chlorobenzene	108-90-7	1.1	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Chloroethane	75-00-3	~	~		<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Chloroform	67-66-3	0.37	49	350	<0.0042	0.0042	<0.0045	0.0045	**0.0026**	0.0041	<0.0045	0.0045	<0.0043	0.0043	**0.00098**	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Chloromethane	74-87-3	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
cis-1,2-Dichloroethene	156-59-2	0.25	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
cis-1,3-Dichloropropene	10061-01-5	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Dibromochloromethane	124-48-1	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Dibromomethane	74-95-3	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Dichlorodifluoromethane	75-71-8	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Ethylbenzene	100-41-4	1	41	390	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Hexachlorobutadiene	87-68-3	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Isopropylbenzene	98-82-8	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
m&p-Xylene	179601-23-1	~	~	~	**0.092**	0.33	<0.0045	0.0045	**0.00098**	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Methyl Ethyl Ketone	78-93-3	0.12	100	500	<0.021	0.021	<0.022	0.022	<0.02	0.02	<0.022	0.022	<0.022	0.022	<0.03	0.03	<0.025	0.025	<0.02	0.02	<0.024	0.024	<0.027	0.027	<0.026	0.026	<0.022	0.022	<0.022	0.022	<0.025	0.025
Methyl t-butyl ether (MTBE)	1634-04-4	0.93	100	500	<0.0083	0.0083	<0.009	0.009	<0.0082	0.0082	<0.0089	0.0089	<0.0086	0.0086	<0.012	0.012	<0.01	0.01	<0.0081	0.0081	<0.0097	0.0097	<0.011	0.011	<0.01	0.01	<0.009	0.009	<0.0089	0.0089	<0.0099	0.0099
Methylene chloride	75-09-2	0.05	3	500	<0.0083	0.0083	<0.009	0.009	<0.0082	0.0082	<0.0089	0.0089	<0.0086	0.0086	<0.012	0.012	<0.01	0.01	<0.0081	0.0081	<0.0097	0.0097	<0.011	0.011	<0.01	0.01	<0.009	0.009	<0.0089	0.0089	<0.0099	0.0099
Naphthalene	91-20-3	12	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	**0.066**	0.17	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
n-Butylbenzene	104-51-8	12	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
n-Propylbenzene	103-65-1	3.9	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
o-Xylene	95-47-6	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
p-Isopropyltoluene	99-87-6	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	**0.0048**	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
sec-Butylbenzene	135-98-8	11	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Styrene	100-42-5	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
tert-Butylbenzene	98-06-6	5.9	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Tetrachloroethene	127-18-4	1.3	19	150	**0.18**	0.17	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	**0.0036**	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Tetrahydrofuran (THF)	109-99-9	~	~	~	<0.0083	0.0083	<0.009	0.009	<0.0082	0.0082	<0.0089	0.0089	<0.0086	0.0086	<0.012	0.012	<0.01	0.01	<0.0081	0.0081	<0.0097	0.0097	<0.011	0.011	<0.01	0.01	<0.009	0.009	<0.0089	0.0089	<0.0099	0.0099
Toluene	108-88-3	0.7	100	500	**0.19**	0.17	<0.0045	0.0045	**0.0013**	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Total Xylenes	1330-20-7	1.6	100	500	**0.092**	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
trans-1,2-Dichloroethene	156-60-5	0.19	100	500	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
trans-1,3-Dichloropropene	10061-02-6	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
trans-1,4-dichloro-2-butene	110-57-6	~	~	~	<0.0083	0.0083	<0.009	0.009	<0.0082	0.0082	<0.0089	0.0089	<0.0086	0.0086	<0.012	0.012	<0.01	0.01	<0.0081	0.0081	<0.0097	0.0097	<0.011	0.011	<0.01	0.01	<0.009	0.009	<0.0089	0.0089	<0.0099	0.0099
Trichloroethene	79-01-6	0.47	21	200	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Trichlorofluoromethane	75-69-4	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Trichlorotrifluoroethane	76-13-1	~	~	~	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049
Vinyl chloride	75-01-4	0.02	0.9	13	<0.0042	0.0042	<0.0045	0.0045	<0.0041	0.0041	<0.0045	0.0045	<0.0043	0.0043	<0.0059	0.0059	<0.0051	0.0051	<0.0041	0.0041	<0.0048	0.0048	<0.0054	0.0054	<0.0052	0.0052	<0.0045	0.0045	<0.0044	0.0044	<0.0049	0.0049

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 1

Volatile Organic Compounds in Soil (mg/Kg)

EPA Method: 8260

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	RISB-13 (0-1) CM48198		RISB-13 (1-2) CM48199		RISB-13 (48-50) CM48200		RISB-14 (0-1) CM61839		RISB-14 (1-2) CM61840		RISB-14 (40-42) CM61841		RISB-15 (0-1) CM48176		RISB-15 (1-2) CM48177		RISB-15 (44-45) CM48178		RISB-15 (50-52) CM48179		SB-16 (6-7') CM77059	
Phenoix ID					09/30/2022		09/30/2022		09/30/2022		10/7/22		10/7/22		10/7/22		09/29/2022		09/29/2022		09/29/2022		09/29/2022		11/2/22	
Sampling Date					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Client Matrix																										
Compound	CAS Number	Objectives	Residential	Commercial	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles -8260					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																										
1,1,1,2-Tetrachloroethane	630-20-6	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,1,1-Trichloroethane	71-55-6	0.68	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<0.68	0.68
1,1,2,2-Tetrachloroethane	79-34-5	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,1,2-Trichloroethane	79-00-5	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,1-Dichloroethane	75-34-3	0.27	26	240	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<0.27	0.27
1,1-Dichloroethene	75-35-4	0.33	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	9	1.1
1,1-Dichloropropene	563-58-6	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,2,3-Trichlorobenzene	87-61-6	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,2,3-Trichloropropane	96-18-4	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,2,4-Trimethylbenzene	95-63-6	3.6	52	190	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	85	11
1,2-Dibromo-3-chloropropane	96-12-8	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,2-Dibromoethane	106-93-4	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,2-Dichloroethane	107-06-2	0.02	3.1	30	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<0.02	0.02
1,2-Dichloropropane	78-87-5	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,3,5-Trimethylbenzene	108-67-8	8.4	52	190	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	39	1.1
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,3-Dichloropropane	142-28-9	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
2,2-Dichloropropane	594-20-7	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
2-Chlorotoluene	95-49-8	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
2-Hexanone	591-78-6	~	~	~	<0.024	0.024	<0.021	0.021	<0.024	0.024	<0.028	0.028	<0.027	0.027	<0.025	0.025	<0.024	0.024	<0.024	0.024	**0.051**	0.025	<0.027	0.027	<5.5	5.5
2-isopropyltoluene	527-84-4	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	**0.91**	0.87
4-Chlorotoluene	106-43-4	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
4-Methyl-2-pentanone	108-10-1	~	~	~	<0.024	0.024	<0.021	0.021	<0.024	0.024	<0.028	0.028	<0.027	0.027	<0.025	0.025	<0.024	0.024	<0.024	0.024	<0.025	0.025	<0.027	0.027	<5.5	5.5
Acetone	67-64-1	0.05	100	500	<0.024	0.024	<0.021	0.021	<0.024	0.024	<0.028	0.028	<0.027	0.027	<0.025	0.025	**0.042**	0.024	<0.024	0.024	**0.059**	0.025	<0.027	0.027	<0.05	0.05
Acrylonitrile	107-13-1	~	~	~	<0.0096	0.0096	<0.0083	0.0083	<0.0096	0.0096	<0.011	0.011	<0.011	0.011	<0.01	0.01	<0.0094	0.0094	<0.0096	0.0096	<0.0099	0.0099	<0.011	0.011	<2.2	2.2
Benzene	71-43-2	0.06	4.8	44	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	5.8	1.1
Bromobenzene	108-86-1	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Bromochloromethane	74-97-5	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Bromodichloromethane	75-27-4	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Bromoform	75-25-2	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Bromomethane	74-83-9	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Carbon Disulfide	75-15-0	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Carbon tetrachloride	56-23-5	0.76	2.4	22	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<0.76	0.76
Chlorobenzene	108-90-7	1.1	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Chloroethane	75-00-3	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Chloroform	67-66-3	0.37	49	350	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<0.37	0.37
Chloromethane	74-87-3	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
cis-1,2-Dichloroethene	156-59-2	0.25	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	3,200	110
cis-1,3-Dichloropropene	10061-01-5	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Dibromochloromethane	124-48-1	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Dibromomethane	74-95-3	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Dichlorodifluoromethane	75-71-8	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Ethylbenzene	100-41-4	1	41	390	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	28	1.1
Hexachlorobutadiene	87-68-3	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Isopropylbenzene	98-82-8	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	**3.9**	1.1
m&p-Xylene	179601-23-1	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	**110**	11
Methyl Ethyl Ketone	78-93-3	0.12	100	500	<0.024	0.024	<0.021	0.021	<0.024	0.024	<0.028	0.028	<0.027	0.027	<0.025	0.025	<0.024	0.024	<0.024	0.024	**0.055**	0.025	<0.027	0.027	<0.1	0.1
Methyl t-butyl ether (MTBE)	1634-04-4	0.93	100	500	<0.0096	0.0096	<0.0083	0.0083	<0.0096	0.0096	<0.011	0.011	<0.011	0.011	<0.01	0.01	<0.0094	0.0094	<0.0096	0.0096	<0.0099	0.0099	<0.011	0.011	<0.93	0.93
Methylene chloride	75-09-2	0.05	3	500	<0.0096	0.0096	<0.0083	0.0083	<0.0096	0.0096	<0.011	0.011	<0.011	0.011	<0.01	0.01	<0.0094	0.0094	<0.0096	0.0096	<0.0099	0.0099	<0.011	0.011	<0.05	0.05
Naphthalene	91-20-3	12	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	32	1.1
n-Butylbenzene	104-51-8	12	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	**4.6**	1.1
n-Propylbenzene	103-65-1	3.9	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	13	1.1
o-Xylene	95-47-6	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	52	11
p-Isopropyltoluene	99-87-6	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	**2.1**	1.1
sec-Butylbenzene	135-98-8	11	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	**2.4**	1.1
Styrene	100-42-5	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
tert-Butylbenzene	98-06-6	5.9	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Tetrachloroethene	127-18-4	1.3	19	150	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	7,800	880
Tetrahydrofuran (THF)	109-99-9	~	~	~	<0.0096	0.0096	<0.0083	0.0083	<0.0096	0.0096	<0.011	0.011	<0.011	0.011	<0.01	0.01	<0.0094	0.0094	<0.0096	0.0096	<0.0099	0.0099	<0.011	0.011	<2.2	2.2
Toluene	108-88-3	0.7	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	130	11
Total Xylenes	1330-20-7	1.6	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	162	11
trans-1,2-Dichloroethene	156-60-5	0.19	100	500	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	**5.6**	1.1
trans-1,3-Dichloropropene	10061-02-6	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
trans-1,4-dichloro-2-butene	110-57-6	~	~	~	<0.0096	0.0096	<0.0083	0.0083	<0.0096	0.0096	<0.011	0.011	<0.011	0.011	<0.01	0.01	<0.0094	0.0094	<0.0096	0.0096	<0.0099	0.0099	<0.011	0.011	<2.2	2.2
Trichloroethene	79-01-6	0.47	21	200	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	430	110
Trichlorofluoromethane	75-69-4	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Trichlorotrifluoroethane	76-13-1	~	~	~	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	<1.1	1.1
Vinyl chloride	75-01-4	0.02	0.9	13	<0.0048	0.0048	<0.0041	0.0041	<0.0048	0.0048	<0.0055	0.0055	<0.0053	0.0053	<0.0051	0.0051	<0.0047	0.0047	<0.0048	0.0048	<0.0049	0.0049	<0.0053	0.0053	45	11

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 2

Semi-Volatile Organic Compounds in Soil (mg/Kg)

EPA Method: 8270

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Commercial	RISB-1 (0-1) CM61842 10/7/22 SOIL		RISB-1 (1-2) CM61843 10/7/22 SOIL		RISB-1 (30-35) CM61844 10/7/22 SOIL		RISB-1 (40-42) CM61845 10/7/22 SOIL		RISB-2 (0-1) CM61836 10/7/22 SOIL		RISB-2 (1-2) CM61837 10/7/22 SOIL		RISB-2 (35-40) CM61838 10/7/22 SOIL		RISB-3 (0-1) CM52568 10/5/2022 SOIL		RISB-3 (2-4) CM52569 10/5/2022 SOIL		RISB-3 (43-45) CM52570 10/5/2022		RISB-4 (1-2) CM49176 10/03/2022 SOIL		RISB-4 (2-3) CM49177 10/03/2022 SOIL		RISB-4 (40-42) CM49178 10/03/2022 SOIL		RISB-5 (0-1) CM48193 09/30/2022 SOIL		RISB-5 (1-2) CM48194 09/30/2022 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles 8270					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																		
1,2,4,5-Tetrachlorobenzene	95-94-3	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
1,2-Diphenylhydrazine	122-66-7	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2,2'-Oxybis(1-Chloropropane)	108-60-1	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2,4,5-Trichlorophenol	95-95-4	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2,4,6-Trichlorophenol	88-06-2	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2,4-Dichlorophenol	120-83-2	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2,4-Dimethylphenol	105-67-9	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2,4-Dinitrophenol	51-28-5	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
2,4-Dinitrotoluene	121-14-2	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2,6-Dinitrotoluene	606-20-2	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2-Chloronaphthalene	91-58-7	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2-Chlorophenol	95-57-8	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2-Methylnaphthalene	91-57-6	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	**0.42**	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2-Methylphenol (o-cresol)	95-48-7	0.33	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
2-Nitroaniline	88-74-4	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
2-Nitrophenol	88-75-5	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
3&4-Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
3,3'-Dichlorobenzidine	91-94-1	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
3-Nitroaniline	99-09-2	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
4,6-Dinitro-2-methylphenol	534-52-1	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
4-Bromophenyl phenyl ether	101-55-3	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
4-Chloro-3-methylphenol	59-50-7	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
4-Chloroaniline	106-47-8	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
4-Chlorophenyl phenyl ether	7005-72-3	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
4-Nitroaniline	100-01-6	~	~	~	<0.62	0.62	<0.62	0.62	<0.58	0.58	<0.57	0.57	<0.6	0.6	<0.6	0.6	<0.57	0.57	<0.6	0.6	<0.54	0.54	<0.54	0.54	<0.6	0.6	<0.6	0.6	<0.65	0.65	<0.58	0.58	<0.57	0.57
4-Nitrophenol	100-02-7	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Acenaphthene	83-32-9	98	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**0.55**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Acenaphthylene	208-96-8	107	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**0.31**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Acetophenone	98-86-2	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Aniline	62-53-3	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Anthracene	120-12-7	1000	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**1.2**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Benz(a)anthracene	56-55-3	1	1	5.6	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**4.1**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	**0.36**	0.25
Benzidine	92-87-5	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Benzo(a)pyrene	50-32-8	22	1	1	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**3.8**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	**0.38**	0.25
Benzo(b)fluoranthene	205-99-2	1.7	1	5.6	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**4.4**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	**0.34**	0.25
Benzo(ghi)perylene	191-24-2	1000	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**2.2**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Benzo(k)fluoranthene	207-08-9	1.7	3.9	56	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**2.6**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	0.3	0.25
Benzoic acid	65-85-0	~	~	~	<0.77	0.77	<0.78	0.78	<0.73	0.73	<0.72	0.72	<0.75	0.75	<0.75	0.75	<0.71	0.71	<0.75	0.75	<0.68	0.68	<0.68	0.68	<0.75	0.75	<0.76	0.76	<0.81	0.81	<0.73	0.73	<0.72	0.72
Benzyl butyl phthalate	85-68-7	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	**0.38**	0.25
Bis(2-chloroethoxy)methane	111-91-1	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Bis(2-chloroethyl)ether	111-44-4	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Bis(2-ethylhexyl)phthalate	117-81-7	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Carbazole	86-74-8	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	**0.75**	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Chrysene	218-01-9	1	3.9	56	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**4.5**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	**0.38**	0.25
Di-n-butylphthalate	84-74-2	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Di-n-octylphthalate	117-84-0	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Dibenz(a,h)anthracene	53-70-3	1000	0.33	0.56	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**0.69**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Dibenzofuran	132-64-9	210	59	350	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**0.35**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Diethyl phthalate	84-66-2	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Dimethylphthalate	131-11-3	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Fluoranthene	206-44-0	1000	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**7.4**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	**0.33**	0.26	**0.98**	0.25
Fluorene	86-73-7	386	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**0.59**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Hexachlorobenzene	118-74-1	3.2	1.2	6	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Hexachlorobutadiene	87-68-3	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Hexachlorocyclopentadiene	77-47-4	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Hexachloroethane	67-72-1	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Indeno(1,2,3-cd)pyrene	193-39-5	8.2	0.5	5.6	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**2.8**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	**0.28**	0.25
Isophorone	78-59-1	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
N-Nitrosodi-n-propylamine	621-64-7	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
N-Nitrosodimethylamine	62-75-9	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
N-Nitrosodiphenylamine	86-30-6	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Naphthalene	91-20-3	12	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**0.5**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	**0.35**	0.26	**0.64**	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Nitrobenzene	98-95-3	~	~	~	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Pentachloronitrobenzene	82-68-8	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Pentachlorophenol	87-86-5	0.8	6.7	6.7	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
Phenanthrene	85-01-8	1000	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**6.2**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	**0.58**	0.25
Phenol	108-95-2	0.33	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.26	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.25	0.25
Pyrene	129-00-0	1000	100	500	<0.27	0.27	<0.27	0.27	<0.25	0.25	<0.25	0.25	<0.26	0.26	**6.1**	0.26	<0.25	0.25	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.28	0.28	**0.29**	0.26	**0.87**	0.25
Pyridine	110-86-1	~	~	~	<0.39	0.39	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.37	0.37	<0.37	0.37	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.38	0.38	<0.38	0.38	<0.41	0.41	<0.37	0.37	<0.36	0.36
1,4-Dioxane - SW8270D (SIM)					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
1,4-dioxane	123-91-1	0.1	13	130	<0.078	0.078	<0.077	0.077			<0.072	0.072	<0.076	0.076	<0.073	0.073	<0.071	0.071			<0.068	0.068	<0.069	0.069	<0.074	0.074	<0.074	0.074	<0.082	0.082	<0.074	0.074	<0.073	0.073

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 2

Semi-Volatile Organic Compounds in Soil (mg/Kg)
EPA Method: 8270
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Commercial	RISB-5 (40-43) CM48195 09/30/2022 SOIL		RISB-5 (43-45) CM48196 09/30/2022 SOIL		RISB-5 DUPLICATE CM48197 09/30/2022 SOIL		RISB-6 (0-1) CM48185 09/29/2022 SOIL		RISB-6 (1-2) CM48186 09/29/2022 SOIL		RISB-6 (15-17) CM48187 09/29/2022 SOIL		RISB-6 (37-38) CM48188 09/29/2022 SOIL		RISB-6 (38-40) CM48189 09/29/2022 SOIL		RISB-6 (50-52) CM48190 09/29/2022 SOIL		SB-7 (0-2) CM63265 10/13/2022 SOIL		RISB-7 (0-1) CM49173 10/03/2022 SOIL		RISB-7 (1-2) CM49174 10/03/2022 SOIL		RISB-7 (38-40) CM49175 10/03/2022 SOIL		RISB-8 (0-3) CM50474 10/4/22 SOIL		RISB-8 (3-5) CM50475 10/4/22 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles 8270					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																		
1,2,4,5-Tetrachlorobenzene	95-94-3	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
1,2-Diphenylhydrazine	122-66-7	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2,2'-Oxybis(1-Chloropropane)	108-60-1	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2,4,5-Trichlorophenol	95-95-4	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.1	0.1	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2,4,6-Trichlorophenol	88-06-2	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2,4-Dichlorophenol	120-83-2	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2,4-Dimethylphenol	105-67-9	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2,4-Dinitrophenol	51-28-5	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
2,4-Dinitrotoluene	121-14-2	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2,6-Dinitrotoluene	606-20-2	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2-Chloronaphthalene	91-58-7	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2-Chlorophenol	95-57-8	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2-Methylnaphthalene	91-57-6	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	**0.31**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	**0.45**	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2-Methylphenol (o-cresol)	95-48-7	0.33	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.1	0.1	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
2-Nitroaniline	88-74-4	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
2-Nitrophenol	88-75-5	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
3&4-Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
3,3'-Dichlorobenzidine	91-94-1	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
3-Nitroaniline	99-09-2	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
4,6-Dinitro-2-methylphenol	534-52-1	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
4-Bromophenyl phenyl ether	101-55-3	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
4-Chloro-3-methylphenol	59-50-7	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
4-Chloroaniline	106-47-8	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.22	0.22	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
4-Chlorophenyl phenyl ether	7005-72-3	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
4-Nitroaniline	100-01-6	~	~	~	<0.57	0.57	<0.58	0.58	<0.58	0.58	<0.56	0.56	<0.56	0.56	<0.54	0.54	<0.55	0.55	<0.54	0.54	<0.58	0.58	<0.54	0.54	<0.58	0.58	<0.56	0.56	<0.54	0.54	<0.6	0.6	<0.6	0.6
4-Nitrophenol	100-02-7	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.1	0.1	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Acenaphthene	83-32-9	98	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Acenaphthylene	208-96-8	107	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**3.6**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Acetophenone	98-86-2	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Aniline	62-53-3	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.1	0.1	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
Anthracene	120-12-7	1000	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**1.9**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Benz(a)anthracene	56-55-3	1	1	5.6	<0.25	0.25	<0.25	0.25	<0.25	0.25	**5.6**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.22	0.22	**0.17**	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Benzidine	92-87-5	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Benzo(a)pyrene	50-32-8	22	1	1	<0.25	0.25	<0.25	0.25	<0.25	0.25	**8.9**	2.5	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.19**	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Benzo(b)fluoranthene	205-99-2	1.7	1	5.6	<0.25	0.25	<0.25	0.25	<0.25	0.25	**5.6**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.17**	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Benzo(ghi)perylene	191-24-2	1000	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**4.6**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Benzo(k)fluoranthene	207-08-9	1.7	3.9	56	<0.25	0.25	<0.25	0.25	<0.25	0.25	**5**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.16**	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Benzoic acid	65-85-0	~	~	~	<0.71	0.71	<0.72	0.72	<0.72	0.72	<0.7	0.7	<0.7	0.7	<0.67	0.67	<0.69	0.69	<0.67	0.67	<0.73	0.73	<0.68	0.68	<0.73	0.73	<0.7	0.7	<0.67	0.67	<0.75	0.75	<0.75	0.75
Benzyl butyl phthalate	85-68-7	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Bis(2-chloroethoxy)methane	111-91-1	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Bis(2-chloroethyl)ether	111-44-4	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
Bis(2-ethylhexyl)phthalate	117-81-7	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.33	0.33	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
Carbazole	86-74-8	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	**0.36**	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
Chrysene	218-01-9	1	3.9	56	<0.25	0.25	<0.25	0.25	<0.25	0.25	**8.8**	2.5	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.18**	0.25	**0.25**	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Di-n-butylphthalate	84-74-2	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.26	0.26	<0.26	0.26
Di-n-octylphthalate	117-84-0	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Dibenz(a,h)anthracene	53-70-3	1000	0.33	0.56	<0.25	0.25	<0.25	0.25	<0.25	0.25	**1.3**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Dibenzofuran	132-64-9	210	59	350	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Diethyl phthalate	84-66-2	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.38	0.38	<0.38	0.38
Dimethylphthalate	131-11-3	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Fluoranthene	206-44-0	1000	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**10**	2.5	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.33**	0.35	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Fluorene	86-73-7	386	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**1**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Hexachlorobenzene	118-74-1	3.2	1.2	6	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Hexachlorobutadiene	87-68-3	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Hexachlorocyclopentadiene	77-47-4	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Hexachloroethane	67-72-1	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Indeno(1,2,3-cd)pyrene	193-39-5	8.2	0.5	5.6	<0.25	0.25	<0.25	0.25	<0.25	0.25	**5**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.13**	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Isophorone	78-59-1	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
N-Nitrosodi-n-propylamine	621-64-7	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
N-Nitrosodimethylamine	62-75-9	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.26	0.26	<0.26	0.26
N-Nitrosodiphenylamine	86-30-6	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
Naphthalene	91-20-3	12	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**0.38**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	**0.29**	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Nitrobenzene	98-95-3	~	~	~	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.2	0.2	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.38	0.38	<0.38	0.38
Pentachloronitrobenzene	82-68-8	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
Pentachlorophenol	87-86-5	0.8	6.7	6.7	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
Phenanthrene	85-01-8	1000	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**5.9**	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.14**	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Phenol	108-95-2	0.33	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Pyrene	129-00-0	1000	100	500	<0.25	0.25	<0.25	0.25	<0.25	0.25	**12**	2.5	<0.24	0.24	<0.23	0.23	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.24	0.24	**0.29**	0.3	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.26	0.26
Pyridine	110-86-1	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.35	0.35	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.38	0.38
1,4-Dioxane - SW8270D (SIM)					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
1,4-dioxane	123-91-1	0.1	13	130	<0.071	0.071	<0.072	0.072	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.068	0.068	<0.067	0.067	<0.069	0.069	<0.074	0.074			<0.072	0.072	<0.072	0.072	<0.066	0.066			<0.076	0.076

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 2

Semi-Volatile Organic Compounds in Soil (mg/Kg)

EPA Method: 8270

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Commercial	RISB-8 (5-7)		RISB-8 (9-10)		RISB-8 (10-12)		RISB-8 (12-15)		RISB-8 (20-22)		RISB-8 (22-25)		RISB-8 (25-28)		RISB-8 (28-30)		RISB-8 (30-33)		RISB-8 (33-35)		RISB-8 (40-43)		RISB-8 DUPLICATE		RISB-9 (0-1)		RISB-9 (1-2)		RISB-9 (33-35)	
Phenoix ID					CM50476		CM50477		CM50478		CM50479		CM50480		CM50481		CM50482		CM50483		CM50484		CM50485		CM50486		CM50487		CM52571		CM52572		CM52573	
Sampling Date					10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/5/22		10/5/22		10/5/22	
Client Matrix					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	**CAS Number**				**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Semivolatiles 8270					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																		
1,2,4,5-Tetrachlorobenzene	95-94-3	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
1,2-Diphenylhydrazine	122-66-7	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2,2'-Oxybis(1-Chloropropane)	108-60-1	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2,4,5-Trichlorophenol	95-95-4	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2,4,6-Trichlorophenol	88-06-2	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2,4-Dichlorophenol	120-83-2	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2,4-Dimethylphenol	105-67-9	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2,4-Dinitrophenol	51-28-5	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
2,4-Dinitrotoluene	121-14-2	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2,6-Dinitrotoluene	606-20-2	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2-Chloronaphthalene	91-58-7	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2-Chlorophenol	95-57-8	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2-Methylnaphthalene	91-57-6	~	~	~	**2.8**	0.25	<0.24	0.24	**4.7**	0.26	<0.24	0.24	**1.9**	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	**0.15**	0.25	**0.12**	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2-Methylphenol (o-cresol)	95-48-7	0.33	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
2-Nitroaniline	88-74-4	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
2-Nitrophenol	88-75-5	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
3&4-Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	~	~	~	**0.24**	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
3,3'-Dichlorobenzidine	91-94-1	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
3-Nitroaniline	99-09-2	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
4,6-Dinitro-2-methylphenol	534-52-1	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
4-Bromophenyl phenyl ether	101-55-3	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
4-Chloro-3-methylphenol	59-50-7	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
4-Chloroaniline	106-47-8	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
4-Chlorophenyl phenyl ether	7005-72-3	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
4-Nitroaniline	100-01-6	~	~	~	<0.57	0.57	<0.56	0.56	<0.6	0.6	<0.55	0.55	<0.59	0.59	<0.54	0.54	<0.55	0.55	<0.54	0.54	<0.57	0.57	<0.55	0.55	<0.56	0.56	<0.57	0.57	<0.59	0.59	<0.58	0.58	<0.55	0.55
4-Nitrophenol	100-02-7	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Acenaphthene	83-32-9	98	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Acenaphthylene	208-96-8	107	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Acetophenone	98-86-2	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Aniline	62-53-3	~	~	~	**0.34**	0.36	<0.35	0.35	**0.29**	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
Anthracene	120-12-7	1000	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Benz(a)anthracene	56-55-3	1	1	5.6	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Benzidine	92-87-5	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Benzo(a)pyrene	50-32-8	22	1	1	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Benzo(b)fluoranthene	205-99-2	1.7	1	5.6	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Benzo(ghi)perylene	191-24-2	1000	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Benzo(k)fluoranthene	207-08-9	1.7	3.9	56	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Benzoic acid	65-85-0	~	~	~	<0.71	0.71	<0.69	0.69	<0.75	0.75	<0.68	0.68	<0.74	0.74	<0.67	0.67	<0.69	0.69	<0.68	0.68	<0.71	0.71	<0.69	0.69	<0.7	0.7	<0.71	0.71	<0.74	0.74	<0.73	0.73	<0.69	0.69
Benzyl butyl phthalate	85-68-7	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Bis(2-chloroethoxy)methane	111-91-1	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Bis(2-chloroethyl)ether	111-44-4	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
Bis(2-ethylhexyl)phthalate	117-81-7	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
Carbazole	86-74-8	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
Chrysene	218-01-9	1	3.9	56	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Di-n-butylphthalate	84-74-2	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.37	0.37	<0.36	0.36	<0.35	0.35
Di-n-octylphthalate	117-84-0	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Dibenz(a,h)anthracene	53-70-3	1000	0.33	0.56	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Dibenzofuran	132-64-9	210	59	350	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Diethyl phthalate	84-66-2	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.26	0.26	<0.25	0.25	<0.24	0.24
Dimethylphthalate	131-11-3	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Fluoranthene	206-44-0	1000	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Fluorene	86-73-7	386	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Hexachlorobenzene	118-74-1	3.2	1.2	6	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Hexachlorobutadiene	87-68-3	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Hexachlorocyclopentadiene	77-47-4	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Hexachloroethane	67-72-1	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Indeno(1,2,3-cd)pyrene	193-39-5	8.2	0.5	5.6	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Isophorone	78-59-1	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
N-Nitrosodi-n-propylamine	621-64-7	~	~	~	**2.3**	0.25	<0.24	0.24	**4.7**	0.26	<0.24	0.24	**1.8**	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	**0.13**	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
N-Nitrosodimethylamine	62-75-9	~	~	~	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.37	0.37	<0.36	0.36	<0.35	0.35
N-Nitrosodiphenylamine	86-30-6	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
Naphthalene	91-20-3	12	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Nitrobenzene	98-95-3	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.26	0.26	<0.25	0.25	<0.24	0.24
Pentachloronitrobenzene	82-68-8	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
Pentachlorophenol	87-86-5	0.8	6.7	6.7	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
Phenanthrene	85-01-8	1000	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Phenol	108-95-2	0.33	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Pyrene	129-00-0	1000	100	500	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.26	0.26	<0.24	0.24	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.25	0.25	<0.26	0.26	<0.25	0.25	<0.24	0.24
Pyridine	110-86-1	~	~	~	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.34	0.34	<0.37	0.37	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.35	0.35	<0.35	0.35	<0.35	0.35	<0.36	0.36	<0.37	0.37	<0.36	0.36	<0.35	0.35
1,4-Dioxane - SW8270D (SIM)					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
1,4-dioxane	123-91-1	0.1	13	130	<0.072	0.072	<0.07	0.07	<0.075	0.075	<0.068	0.068	<0.073	0.073	<0.067	0.067	<0.068	0.068	<0.067	0.067	<0.072	0.072	<0.07	0.07	<0.07	0.07	<0.07	0.07	<0.075	0.075	<0.072	0.072	<0.068	0.068

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 2

Semi-Volatile Organic Compounds in Soil (mg/Kg)
EPA Method: 8270
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID / Phenoix ID / Sampling Date / Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-Commercial	RISB-9 (48-50) CM52574 10/5/22 SOIL		RISB-10 (0-1) CM52565 10/5/22 SOIL		RISB-10 (1-2) CM52566 10/5/22 SOIL		RISB-10 (40-43) CM52567 10/5/22 SOIL		RISB-11 (2-3) CM48201 09/30/2022 SOIL		RISB-11 (3-4) CM48202 09/30/2022 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles 8270					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																
1,2,4,5-Tetrachlorobenzene	95-94-3	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
1,2-Diphenylhydrazine	122-66-7	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2,2'-Oxybis(1-Chloropropane)	108-60-1	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2,4,5-Trichlorophenol	95-95-4	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2,4,6-Trichlorophenol	88-06-2	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2,4-Dichlorophenol	120-83-2	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2,4-Dimethylphenol	105-67-9	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2,4-Dinitrophenol	51-28-5	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
2,4-Dinitrotoluene	121-14-2	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2,6-Dinitrotoluene	606-20-2	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2-Chloronaphthalene	91-58-7	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2-Chlorophenol	95-57-8	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2-Methylnaphthalene	91-57-6	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2-Methylphenol (o-cresol)	95-48-7	0.33	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
2-Nitroaniline	88-74-4	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
2-Nitrophenol	88-75-5	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
3&4-Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
3,3'-Dichlorobenzidine	91-94-1	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
3-Nitroaniline	99-09-2	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
4,6-Dinitro-2-methylphenol	534-52-1	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
4-Bromophenyl phenyl ether	101-55-3	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
4-Chloro-3-methylphenol	59-50-7	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
4-Chloroaniline	106-47-8	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
4-Chlorophenyl phenyl ether	7005-72-3	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
4-Nitroaniline	100-01-6	~	~	~	<0.65	0.65	<0.58	0.58	<0.55	0.55	<0.6	0.6	<0.57	0.57	<0.59	0.59
4-Nitrophenol	100-02-7	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Acenaphthene	83-32-9	98	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Acenaphthylene	208-96-8	107	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Acetophenone	98-86-2	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Aniline	62-53-3	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Anthracene	120-12-7	1000	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Benz(a)anthracene	56-55-3	1	1	5.6	<0.28	0.28	<0.25	0.25	**0.24**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Benzidine	92-87-5	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Benzo(a)pyrene	50-32-8	22	1	1	<0.28	0.28	<0.25	0.25	**0.32**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Benzo(b)fluoranthene	205-99-2	1.7	1	5.6	<0.28	0.28	<0.25	0.25	**0.27**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Benzo(ghi)perylene	191-24-2	1000	100	500	<0.28	0.28	<0.25	0.25	**0.21**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Benzo(k)fluoranthene	207-08-9	1.7	3.9	56	<0.28	0.28	<0.25	0.25	**0.24**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Benzoic acid	65-85-0	~	~	~	<0.81	0.81	<0.72	0.72	<0.69	0.69	<0.75	0.75	<0.71	0.71	<0.74	0.74
Benzyl butyl phthalate	85-68-7	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Bis(2-chloroethoxy)methane	111-91-1	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Bis(2-chloroethyl)ether	111-44-4	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Bis(2-ethylhexyl)phthalate	117-81-7	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Carbazole	86-74-8	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Chrysene	218-01-9	1	3.9	56	<0.28	0.28	<0.25	0.25	**0.27**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Di-n-butylphthalate	84-74-2	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Di-n-octylphthalate	117-84-0	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Dibenz(a,h)anthracene	53-70-3	1000	0.33	0.56	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Dibenzofuran	132-64-9	210	59	350	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Diethyl phthalate	84-66-2	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Dimethylphthalate	131-11-3	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Fluoranthene	206-44-0	1000	100	500	<0.28	0.28	<0.25	0.25	**0.39**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Fluorene	86-73-7	386	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Hexachlorobenzene	118-74-1	3.2	1.2	6	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Hexachlorobutadiene	87-68-3	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Hexachlorocyclopentadiene	77-47-4	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Hexachloroethane	67-72-1	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Indeno(1,2,3-cd)pyrene	193-39-5	8.2	0.5	5.6	<0.28	0.28	<0.25	0.25	**0.21**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Isophorone	78-59-1	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
N-Nitrosodi-n-propylamine	621-64-7	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
N-Nitrosodimethylamine	62-75-9	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
N-Nitrosodiphenylamine	86-30-6	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Naphthalene	91-20-3	12	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Nitrobenzene	98-95-3	~	~	~	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Pentachloronitrobenzene	82-68-8	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Pentachlorophenol	87-86-5	0.8	6.7	6.7	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
Phenanthrene	85-01-8	1000	100	500	<0.28	0.28	<0.25	0.25	**0.18**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Phenol	108-95-2	0.33	100	500	<0.28	0.28	<0.25	0.25	<0.24	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Pyrene	129-00-0	1000	100	500	<0.28	0.28	<0.25	0.25	**0.37**	0.24	<0.26	0.26	<0.25	0.25	<0.26	0.26
Pyridine	110-86-1	~	~	~	<0.4	0.4	<0.36	0.36	<0.35	0.35	<0.37	0.37	<0.36	0.36	<0.37	0.37
1,4-Dioxane - SW8270D (SIM)					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
1,4-dioxane	123-91-1	0.1	13	130			<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.072	0.072	<0.073	0.073

Sample ID / Phenoix ID / Sampling Date / Client Matrix	RISB-11 (48-50) CM48203 09/30/2022 SOIL		RISB-12 (0-1) CM48180 09/29/2022 SOIL		RISB-12 (1-2) CM48181 09/29/2022 SOIL		RISB-12 (31-33) CM48182 09/29/2022 SOIL		RISB-12 (33-35) CM48183 09/29/2022 SOIL		RISB-12 (50-52) CM48184 09/29/2022 SOIL		RISB-13 (0-1) CM48198 09/30/2022 SOIL		RISB-13 (1-2) CM48199 09/30/2022 SOIL		RISB-13 (48-50) CM48200 09/30/2022 SOIL	
Compound	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles 8270	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																		
1,2,4,5-Tetrachlorobenzene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.25	0.25
1,2,4-Trichlorobenzene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.25	0.25
1,2-Dichlorobenzene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.25	0.25
1,2-Diphenylhydrazine	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.36	0.36
1,3-Dichlorobenzene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.25	0.25
1,4-Dichlorobenzene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.25	0.25
2,2'-Oxybis(1-Chloropropane)	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.26	0.25
2,4,5-Trichlorophenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.27	0.25
2,4,6-Trichlorophenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.28	0.25
2,4-Dichlorophenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.29	0.25
2,4-Dimethylphenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.30	0.25
2,4-Dinitrophenol	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.31	0.36
2,4-Dinitrotoluene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.32	0.25
2,6-Dinitrotoluene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.33	0.25
2-Chloronaphthalene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.34	0.25
2-Chlorophenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.35	0.25
2-Methylnaphthalene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.36	0.25
2-Methylphenol (o-cresol)	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.37	0.25
2-Nitroaniline	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.38	0.36
2-Nitrophenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.39	0.25
3&4-Methylphenol (m&p-cresol)	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.40	0.36
3,3'-Dichlorobenzidine	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.41	0.25
3-Nitroaniline	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.42	0.36
4,6-Dinitro-2-methylphenol	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.43	0.36
4-Bromophenyl phenyl ether	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.44	0.36
4-Chloro-3-methylphenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.45	0.25
4-Chloroaniline	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.46	0.25
4-Chlorophenyl phenyl ether	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.47	0.25
4-Nitroaniline	<0.54	0.54	<0.55	0.55	<0.57	0.57	<0.55	0.55	<0.55	0.55	<0.6	0.6	<0.58	0.58	<0.6	0.6	<0.48	0.58
4-Nitrophenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.49	0.25
Acenaphthene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.50	0.25
Acenaphthylene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.51	0.25
Acetophenone	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.52	0.25
Aniline	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.53	0.36
Anthracene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.54	0.25
Benz(a)anthracene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.55	0.25
Benzidine	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.56	0.25
Benzo(a)pyrene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.57	0.25
Benzo(b)fluoranthene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.58	0.25
Benzo(ghi)perylene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.59	0.25
Benzo(k)fluoranthene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.60	0.25
Benzoic acid	<0.67	0.67	<0.69	0.69	<0.72	0.72	<0.69	0.69	<0.69	0.69	<0.75	0.75	<0.73	0.73	<0.75	0.75	<0.61	0.72
Benzyl butyl phthalate	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.62	0.25
Bis(2-chloroethoxy)methane	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.63	0.25
Bis(2-chloroethyl)ether	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.64	0.36
Bis(2-ethylhexyl)phthalate	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.65	0.36
Carbazole	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.66	0.36
Chrysene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.67	0.25
Di-n-butylphthalate	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.68	0.36
Di-n-octylphthalate	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.69	0.25
Dibenz(a,h)anthracene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.70	0.25
Dibenzofuran	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.71	0.25
Diethyl phthalate	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.72	0.25
Dimethylphthalate	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.73	0.25
Fluoranthene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.74	0.25
Fluorene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.75	0.25
Hexachlorobenzene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.76	0.25
Hexachlorobutadiene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.77	0.25
Hexachlorocyclopentadiene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.78	0.25
Hexachloroethane	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.79	0.25
Indeno(1,2,3-cd)pyrene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.80	0.25
Isophorone	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.81	0.25
N-Nitrosodi-n-propylamine	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.82	0.25
N-Nitrosodimethylamine	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.83	0.36
N-Nitrosodiphenylamine	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.84	0.36
Naphthalene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.85	0.25
Nitrobenzene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.86	0.25
Pentachloronitrobenzene	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.87	0.36
Pentachlorophenol	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.88	0.36
Phenanthrene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.89	0.25
Phenol	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.90	0.25
Pyrene	<0.24	0.24	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.91	0.25
Pyridine	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.38	0.38	<0.37	0.37	<0.37	0.37	<0.92	0.36
1,4-Dioxane - SW8270D (SIM)	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		<0.93	
1,4-dioxane	<0.067	0.067					<0.069	0.069	<0.069	0.069	<0.077	0.077	<0.072	0.072	<0.074	0.074	<0.94	0.072

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 2

Semi-Volatile Organic Compounds in Soil (mg/Kg)

EPA Method: 8270

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-14 (0-1) CM61839 10/7/22 SOIL		RISB-14 (1-2) CM61840 10/7/22 SOIL		RISB-14 (40-42) CM61841 10/7/22 SOIL		RISB-15 (0-1) CM48176 09/29/2022 SOIL		RISB-15 (1-2) CM48177 09/29/2022 SOIL		RISB-15 (44-45) CM48178 09/29/2022 SOIL		RISB-15 (50-52) CM48179 09/29/2022 SOIL		SB-16 (6-7') CM77059 11/2/22 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles 8270					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg			
Dilution Factor																				
1,2,4,5-Tetrachlorobenzene	95-94-3	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
1,2,4-Trichlorobenzene	120-82-1	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
1,2-Dichlorobenzene	95-50-1	1.1	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<1	1
1,2-Diphenylhydrazine	122-66-7	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
1,3-Dichlorobenzene	541-73-1	2.4	49	280	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<2.4	2.4
1,4-Dichlorobenzene	106-46-7	1.8	13	130	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<1.8	1.8
2,2'-Oxybis(1-Chloropropane)	108-60-1	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2,4,5-Trichlorophenol	95-95-4	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2,4,6-Trichlorophenol	88-06-2	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2,4-Dichlorophenol	120-83-2	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2,4-Dimethylphenol	105-67-9	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2,4-Dinitrophenol	51-28-5	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
2,4-Dinitrotoluene	121-14-2	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2,6-Dinitrotoluene	606-20-2	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2-Chloronaphthalene	91-58-7	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2-Chlorophenol	95-57-8	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
2-Methylnaphthalene	91-57-6	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	**43**	8.8
2-Methylphenol (o-cresol)	95-48-7	0.33	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<0.33	0.33
2-Nitroaniline	88-74-4	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
2-Nitrophenol	88-75-5	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
3&4 Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
3,3'-Dichlorobenzidine	91-94-1	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
3-Nitroaniline	99-09-2	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
4,6-Dinitro-2-methylphenol	534-52-1	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
4-Bromophenyl phenyl ether	101-55-3	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
4-Chloro-3-methylphenol	59-50-7	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
4-Chloroaniline	106-47-8	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
4-Chlorophenyl phenyl ether	7005-72-3	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
4-Nitroaniline	100-01-6	~	~	~	<0.59	0.59	<0.63	0.63	<0.6	0.6	<0.59	0.59	<0.59	0.59	<0.53	0.53	<0.59	0.59	<20	20
4-Nitrophenol	100-02-7	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Acenaphthene	83-32-9	98	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Acenaphthylene	208-96-8	107	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Acetophenone	98-86-2	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Aniline	62-53-3	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
Anthracene	120-12-7	1000	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Benz[a]anthracene	56-55-3	1	1	5.6	<0.27	0.27	**0.35**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<1	1
Benzidine	92-87-5	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Benzo(a)pyrene	50-32-8	22	1	1	<0.26	0.26	**0.39**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	2.5	1
Benzo(b)fluoranthene	205-99-2	1.7	1	5.6	<0.26	0.26	**0.35**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<1	1
Benzo(ghi)perylene	191-24-2	1000	100	500	<0.26	0.26	**0.28**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Benzo(k)fluoranthene	207-08-9	1.7	3.9	56	<0.26	0.26	**0.31**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<0.8	0.8
Benzoic acid	65-85-0	~	~	~	<0.74	0.74	<0.79	0.79	<0.75	0.75	<0.74	0.74	<0.73	0.73	<0.66	0.66	<0.74	0.74	<25	25
Benzyl butyl phthalate	85-68-7	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Bis(2-chloroethoxy)methane	111-91-1	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Bis(2-chloroethyl)ether	111-44-4	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
Bis(2-ethylhexyl)phthalate	117-81-7	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
Carbazole	86-74-8	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
Chrysene	218-01-9	1	3.9	56	<0.26	0.26	**0.4**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	2.5	2.5
Di-n-butylphthalate	84-74-2	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
Di-n-octylphthalate	117-84-0	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Dibenz[a,h]anthracene	53-70-3	1000	0.33	0.56	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<0.33	0.33
Dibenzofuran	132-64-9	210	59	350	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<7	7
Diethyl phthalate	84-66-2	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Dimethylphthalate	131-11-3	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Fluoranthene	206-44-0	1000	100	500	<0.26	0.26	**0.75**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Fluorene	86-73-7	386	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Hexachlorobenzene	118-74-1	3.2	1.2	6	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<0.33	0.33
Hexachlorobutadiene	87-68-3	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Hexachlorocyclopentadiene	77-47-4	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Hexachloroethane	67-72-1	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Indeno(1,2,3-cd)pyrene	193-39-5	8.2	0.5	5.6	<0.26	0.26	**0.3**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<0.5	0.5
Isophorone	78-59-1	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
N-Nitrosodi-n-propylamine	621-64-7	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
N-Nitrosodimethylamine	62-75-9	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
N-Nitrosodiphenylamine	86-30-6	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
Naphthalene	91-20-3	12	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	**24**	8.8
Nitrobenzene	98-95-3	~	~	~	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Pentachloronitrobenzene	82-68-8	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
Pentachlorophenol	87-86-5	0.8	6.7	6.7	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<0.8	0.8
Phenanthrene	85-01-8	1000	100	500	<0.26	0.26	**0.37**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Phenol	108-95-2	0.33	100	500	<0.26	0.26	<0.28	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<0.33	0.33
Pyrene	129-00-0	1000	100	500	<0.26	0.26	**0.69**	0.28	<0.26	0.26	<0.26	0.26	<0.26	0.26	<0.23	0.23	<0.26	0.26	<8.8	8.8
Pyridine	110-86-1	~	~	~	<0.37	0.37	<0.39	0.39	<0.37	0.37	<0.37	0.37	<0.37	0.37	<0.33	0.33	<0.37	0.37	<13	13
1,4-Dioxane - SW8270D (SIM)					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg			
1,4-dioxane	123-91-1	0.1	13	130	<0.073	0.073	<0.079	0.079	<0.075	0.075	mg/Kg		mg/Kg		<0.067	0.067	<0.073	0.073	<0.1	0.1

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

"~" this indicates that no regulatory limit has been established for this analyte

Table 3

PCBs Pesticides in Soil (mg/Kg)

EPA Method: 8082 8081

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	RISB-1 (0-1)		RISB-1 (1-2)		RISB-1 (30-35)		RISB-1 (40-42)		RISB-2 (0-1)		RISB-2 (1-2)		RISB-2 (35-40)		RISB-3 (0-1)		RISB-3 (2-4)		RISB-3 (43-45)		RISB-4 (1-2)		RISB-4 (2-3)		RISB-4 (40-42)		RISB-5 (0-1)	
Phenoix ID					CM61842		CM61843		CM61844		CM61845		CM61836		CM61837		CM61838		CM52568		CM52569		CM52570		CM49176		CM49177		CM49178		CM48193	
Sampling Date					10/7/22		10/7/22		10/7/22		10/7/22		10/7/22		10/7/22		10/7/22		10/5/2022		10/5/2022		10/5/2022		10/03/2022		10/03/2022		10/03/2022		09/30/2022	
Client Matrix					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	CAS Number	Objectives	Residential	Commercial	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Polychlorinated Biphenyls 8082					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
PCB-1016	12674-11-2	~	~	1	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1221	11104-28-2	~	~	1	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1232	11141-16-5	~	~	1	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1242	53469-21-9	~	~	1	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1248	12672-29-6	~	~	1	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1254	11097-69-1	~	~	1	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1260	11096-82-5	~	~	1	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1262	37324-23-5	~	~	~	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
PCB-1268	11100-14-4	~	~	~	<0.079	0.079	<0.076	0.076	<0.073	0.073	<0.071	0.071	<0.076	0.076	<0.074	0.074	<0.069	0.069	<0.074	0.074	<0.067	0.067	<0.069	0.069	<0.37	0.37	<0.38	0.38	<0.41	0.41	<0.36	0.36
Pesticides - Soil - SW8081B					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
4,4' -DDD	72-54-8	14	13	92	<0.0024	0.0024	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0022	0.0022	<0.002	0.002	<0.0021	0.0021	<0.0022	0.0022	<0.0023	0.0023	<0.0025	0.0025	<0.0022	0.0022
4,4' -DDE	72-55-9	17	8.9	62	**0.0083**	0.0024	**0.0038**	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0022	0.0022	<0.002	0.002	<0.0021	0.0021	<0.0022	0.0022	<0.0023	0.0023	<0.0025	0.0025	<0.0022	0.0022
4,4' -DDT	50-29-3	136	7.9	47	**0.014**	0.0024	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0022	0.0022	<0.002	0.002	<0.0021	0.0021	<0.0022	0.0022	<0.0023	0.0023	<0.0025	0.0025	<0.0022	0.0022
a-BHC	319-84-6	0.02	0.48	3.4	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
a-Chlordane	5103-71-9	2.9	4.2	24	**0.024**	0.0039	<0.005	0.005	<0.0036	0.0036	<0.0036	0.0036	<0.0038	0.0038	<0.0037	0.0037	<0.0034	0.0034	<0.01	0.01	<0.0034	0.0034	<0.0035	0.0035	<0.0037	0.0037	<0.0038	0.0038	<0.0041	0.0041	**0.017**	0.0036
Aldrin	309-00-2	0.19	0.097	0.68	<0.0039	0.0039	<0.0038	0.0038	<0.0036	0.0036	<0.0036	0.0036	<0.0038	0.0038	<0.0037	0.0037	<0.0034	0.0034	<0.0037	0.0037	<0.0034	0.0034	<0.0035	0.0035	<0.0037	0.0037	<0.0038	0.0038	<0.0041	0.0041	<0.0036	0.0036
b-BHC	319-85-7	0.09	0.36	3	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.015	0.015	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Chlordane	57-74-9	~	~	~	**0.12**	0.039	<0.038	0.038	<0.036	0.036	<0.036	0.036	<0.038	0.038	<0.037	0.037	<0.034	0.034	<0.037	0.037	<0.034	0.034	<0.035	0.035	<0.037	0.037	<0.038	0.038	<0.041	0.041	**0.076**	0.036
d-BHC	319-86-8	0.25	100	500	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Dieldrin	60-57-1	0.1	0.2	1.4	**0.0062**	0.0039	<0.0038	0.0038	<0.0036	0.0036	<0.0036	0.0036	<0.0038	0.0038	<0.0037	0.0037	<0.0034	0.0034	<0.0037	0.0037	<0.0034	0.0034	<0.0035	0.0035	<0.0037	0.0037	<0.0038	0.0038	<0.0041	0.0041	<0.0036	0.0036
Endosulfan I	959-98-8	102	24	200	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Endosulfan II	33213-65-9	102	24	200	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Endosulfan sulfate	1031-07-8	1000	24	200	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Endrin	72-20-8	0.06	11	89	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Endrin aldehyde	7421-93-4	~	~	~	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Endrin ketone	53494-70-5	~	~	~	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
g-BHC	58-89-9	0.1	1.3	9.2	<0.0016	0.0016	<0.0015	0.0015	<0.0015	0.0015	<0.0014	0.0014	<0.0015	0.0015	<0.0015	0.0015	<0.0014	0.0014	<0.0015	0.0015	<0.0013	0.0013	<0.0014	0.0014	<0.0015	0.0015	<0.0015	0.0015	<0.0017	0.0017	<0.0014	0.0014
g-Chlordane	5103-74-2	~	~	~	**0.014**	0.0039	<0.005	0.005	<0.0036	0.0036	<0.0036	0.0036	<0.0038	0.0038	<0.0037	0.0037	<0.0034	0.0034	<0.01	0.01	<0.0034	0.0034	<0.0035	0.0035	<0.0037	0.0037	<0.0038	0.0038	<0.0041	0.0041	**0.0094**	0.0036
Heptachlor	76-44-8	0.38	2.1	15	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Heptachlor epoxide	1024-57-3	~	~	~	<0.0079	0.0079	<0.0076	0.0076	<0.0073	0.0073	<0.0071	0.0071	<0.0076	0.0076	<0.0074	0.0074	<0.0069	0.0069	<0.0074	0.0074	<0.0067	0.0067	<0.0069	0.0069	<0.0074	0.0074	<0.0076	0.0076	<0.0083	0.0083	<0.0072	0.0072
Methoxychlor	72-43-5	~	~	~	<0.039	0.039	<0.038	0.038	<0.036	0.036	<0.036	0.036	<0.038	0.038	<0.037	0.037	<0.034	0.034	<0.037	0.037	<0.034	0.034	<0.035	0.035	<0.037	0.037	<0.038	0.038	<0.041	0.041	<0.036	0.036
Toxaphene	8001-35-2	~	~	~	<0.16	0.16	<0.15	0.15	<0.15	0.15	<0.14	0.14	<0.15	0.15	<0.15	0.15	<0.14	0.14	<0.15	0.15	<0.13	0.13	<0.14	0.14	<0.15	0.15	<0.15	0.15	<0.17	0.17	<0.14	0.14

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 3

PCBs Pesticides in Soil (mg/Kg)

EPA Method: 8082 8081

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	RISB-5 (1-2)		RISB-5 (40-43)		RISB-5 (43-45)		RISB-5 DUPLICATE		RISB-6 (0-1)		RISB-6 (1-2)		RISB-6 (15-17)		RISB-6 (37-38)		RISB-6 (38-40)		RISB-6 (50-52)		RISB-7 (0-1)		RISB-7 (1-2)		RISB-7 (38-40)		RISB-8 (0-3)	
Phenoix ID					CM48194		CM48195		CM48196		CM48197		CM48185		CM48186		CM48187		CM48188		CM48189		CM48190		CM49173		CM49174		CM49175		CM50474	
Sampling Date					09/30/2022		09/30/2022		09/30/2022		09/30/2022		09/29/2022		09/29/2022		09/29/2022		09/29/2022		09/29/2022		09/29/2022		10/03/2022		10/03/2022		10/03/2022		10/4/22	
Client Matrix					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	CAS Number	Objectives	Residential	Commercial	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Polychlorinated Biphenyls 8082					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
PCB-1016	12674-11-2	~	~	1	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1221	11104-28-2	~	~	1	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1232	11141-16-5	~	~	1	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1242	53469-21-9	~	~	1	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1248	12672-29-6	~	~	1	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1254	11097-69-1	~	~	1	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1260	11096-82-5	~	~	1	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1262	37324-23-5	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
PCB-1268	11100-14-4	~	~	~	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.35	0.35	<0.34	0.34	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.34	0.34	<0.076	0.076
Pesticides - Soil - SW8081B					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
4,4' -DDD	72-54-8	14	13	92	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.002	0.002	**0.0036**	0.0021	<0.02	0.02	<0.0022	0.0022	<0.022	0.022	<0.0021	0.0021	<0.002	0.002	<0.0023	0.0023
4,4' -DDE	72-55-9	17	8.9	62	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.002	0.002	<0.0021	0.0021	<0.02	0.02	<0.0022	0.0022	<0.022	0.022	<0.0021	0.0021	<0.002	0.002	<0.0023	0.0023
4,4' -DDT	50-29-3	136	7.9	47	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.002	0.002	<0.006	0.006	<0.02	0.02	<0.0022	0.0022	<0.022	0.022	<0.0021	0.0021	<0.002	0.002	<0.0023	0.0023
a-BHC	319-84-6	0.02	0.48	3.4	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
a-Chlordane	5103-71-9	2.9	4.2	24	**0.014**	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0034	0.0034	<0.0035	0.0035	<0.034	0.034	<0.0037	0.0037	**0.58**	0.036	**0.04**	0.0035	<0.0034	0.0034	**0.024**	0.0038
Aldrin	309-00-2	0.19	0.097	0.68	<0.0036	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0034	0.0034	<0.0035	0.0035	<0.034	0.034	<0.0037	0.0037	<0.036	0.036	<0.0035	0.0035	<0.0034	0.0034	<0.0038	0.0038
b-BHC	319-85-7	0.09	0.36	3	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Chlordane	57-74-9	~	~	~	**0.062**	0.036	<0.036	0.036	<0.036	0.036	<0.036	0.036	<0.035	0.035	<0.035	0.035	<0.034	0.034	<0.035	0.035	<0.34	0.34	<0.037	0.037	**2.3**	0.36	**0.15**	0.035	<0.034	0.034	**0.1**	0.038
d-BHC	319-86-8	0.25	100	500	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Dieldrin	60-57-1	0.1	0.2	1.4	<0.0036	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0034	0.0034	<0.0035	0.0035	<0.034	0.034	<0.0037	0.0037	<0.036	0.036	<0.0035	0.0035	<0.0034	0.0034	<0.0038	0.0038
Endosulfan I	959-98-8	102	24	200	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Endosulfan II	33213-65-9	102	24	200	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Endosulfan sulfate	1031-07-8	1000	24	200	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Endrin	72-20-8	0.06	11	89	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Endrin aldehyde	7421-93-4	~	~	~	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Endrin ketone	53494-70-5	~	~	~	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
g-BHC	58-89-9	0.1	1.3	9.2	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.013	0.013	<0.0015	0.0015	<0.015	0.015	<0.0014	0.0014	<0.0014	0.0014	<0.0015	0.0015
g-Chlordane	5103-74-2	~	~	~	**0.0077**	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0034	0.0034	<0.0035	0.0035	<0.034	0.034	<0.0037	0.0037	**0.42**	0.036	**0.024**	0.0035	<0.0034	0.0034	**0.011**	0.0038
Heptachlor	76-44-8	0.38	2.1	15	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Heptachlor epoxide	1024-57-3	~	~	~	<0.0072	0.0072	<0.0071	0.0071	<0.0071	0.0071	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.0068	0.0068	<0.0069	0.0069	<0.067	0.067	<0.0074	0.0074	<0.073	0.073	<0.0071	0.0071	<0.0068	0.0068	<0.0076	0.0076
Methoxychlor	72-43-5	~	~	~	<0.036	0.036	<0.036	0.036	<0.036	0.036	<0.036	0.036	<0.035	0.035	<0.035	0.035	<0.034	0.034	<0.035	0.035	<0.34	0.34	<0.037	0.037	<0.36	0.36	<0.035	0.035	<0.034	0.034	<0.038	0.038
Toxaphene	8001-35-2	~	~	~	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<1.3	1.3	<0.15	0.15	<1.5	1.5	<0.14	0.14	<0.14	0.14	<0.15	0.15

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 3

PCBs Pesticides in Soil (mg/Kg)

EPA Method: 8082 8081

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	RISB-8 (3-5)		RISB-8 (5-7)		RISB-8 (9-10)		RISB-8 (10-12)		RISB-8 (12-15)		RISB-8 (20-22)		RISB-8 (22-25)		RISB-8 (25-28)		RISB-8 (28-30)		RISB-8 (30-33)		RISB-8 (33-35)		RISB-8 (40-43)		RISB-8 DUPLICATE		RISB-9 (0-1)	
Phenoix ID					CM50475		CM50476		CM50477		CM50478		CM50479		CM50480		CM50481		CM50482		CM50483		CM50484		CM50485		CM50486		CM50487		CM52571	
Sampling Date					10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/4/22		10/5/22	
Client Matrix					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	CAS Number	Objectives	Residential	Commercial	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Polychlorinated Biphenyls 8082					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
PCB-1016	12674-11-2	~	~	1	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1221	11104-28-2	~	~	1	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1232	11141-16-5	~	~	1	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1242	53469-21-9	~	~	1	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1248	12672-29-6	~	~	1	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1254	11097-69-1	~	~	1	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1260	11096-82-5	~	~	1	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1262	37324-23-5	~	~	~	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
PCB-1268	11100-14-4	~	~	~	<0.076	0.076	<0.072	0.072	<0.069	0.069	<0.077	0.077	<0.068	0.068	<0.073	0.073	<0.068	0.068	<0.069	0.069	<0.067	0.067	<0.072	0.072	<0.071	0.071	<0.07	0.07	<0.07	0.07	<0.074	0.074
Pesticides - Soil - SW8081B					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
4,4' -DDD	72-54-8	14	13	92	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.002	0.002	<0.0022	0.0022	<0.002	0.002	<0.0021	0.0021	<0.002	0.002	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0022	0.0022
4,4' -DDE	72-55-9	17	8.9	62	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.002	0.002	<0.0022	0.0022	<0.002	0.002	<0.0021	0.0021	<0.002	0.002	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0022	0.0022
4,4' -DDT	50-29-3	136	7.9	47	<0.0023	0.0023	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.002	0.002	<0.0022	0.0022	<0.002	0.002	<0.0021	0.0021	<0.002	0.002	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.0022	0.0022
a-BHC	319-84-6	0.02	0.48	3.4	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
a-Chlordane	5103-71-9	2.9	4.2	24	<0.0038	0.0038	<0.0036	0.0036	<0.0034	0.0034	<0.0039	0.0039	<0.0034	0.0034	<0.0036	0.0036	<0.0034	0.0034	<0.0034	0.0034	<0.0033	0.0033	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0035	0.0035	<0.0037	0.0037
Aldrin	309-00-2	0.19	0.097	0.68	<0.0038	0.0038	<0.0036	0.0036	<0.0034	0.0034	<0.0039	0.0039	<0.0034	0.0034	<0.0036	0.0036	<0.0034	0.0034	<0.0034	0.0034	<0.0033	0.0033	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0035	0.0035	<0.0037	0.0037
b-BHC	319-85-7	0.09	0.36	3	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Chlordane	57-74-9	~	~	~	<0.038	0.038	<0.036	0.036	<0.034	0.034	<0.039	0.039	<0.034	0.034	<0.036	0.036	<0.034	0.034	<0.034	0.034	<0.033	0.033	<0.036	0.036	<0.035	0.035	<0.035	0.035	<0.035	0.035	<0.037	0.037
d-BHC	319-86-8	0.25	100	500	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Dieldrin	60-57-1	0.1	0.2	1.4	<0.0038	0.0038	<0.0036	0.0036	<0.0034	0.0034	<0.0039	0.0039	<0.0034	0.0034	<0.0036	0.0036	<0.0034	0.0034	<0.0034	0.0034	<0.0033	0.0033	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0035	0.0035	<0.0037	0.0037
Endosulfan I	959-98-8	102	24	200	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Endosulfan II	33213-65-9	102	24	200	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Endosulfan sulfate	1031-07-8	1000	24	200	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Endrin	72-20-8	0.06	11	89	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Endrin aldehyde	7421-93-4	~	~	~	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Endrin ketone	53494-70-5	~	~	~	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
g-BHC	58-89-9	0.1	1.3	9.2	<0.0015	0.0015	<0.0014	0.0014	<0.0014	0.0014	<0.0015	0.0015	<0.0014	0.0014	<0.0015	0.0015	<0.0014	0.0014	<0.0014	0.0014	<0.0013	0.0013	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0015	0.0015
g-Chlordane	5103-74-2	~	~	~	<0.0038	0.0038	<0.0036	0.0036	<0.0034	0.0034	<0.0039	0.0039	<0.0034	0.0034	<0.0036	0.0036	<0.0034	0.0034	<0.0034	0.0034	<0.0033	0.0033	<0.0036	0.0036	<0.0035	0.0035	<0.0035	0.0035	<0.0035	0.0035	<0.0037	0.0037
Heptachlor	76-44-8	0.38	2.1	15	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Heptachlor epoxide	1024-57-3	~	~	~	<0.0076	0.0076	<0.0072	0.0072	<0.0069	0.0069	<0.0077	0.0077	<0.0068	0.0068	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0067	0.0067	<0.0072	0.0072	<0.0071	0.0071	<0.007	0.007	<0.007	0.007	<0.0074	0.0074
Methoxychlor	72-43-5	~	~	~	<0.038	0.038	<0.036	0.036	<0.034	0.034	<0.039	0.039	<0.034	0.034	<0.036	0.036	<0.034	0.034	<0.034	0.034	<0.033	0.033	<0.036	0.036	<0.035	0.035	<0.035	0.035	<0.035	0.035	<0.037	0.037
Toxaphene	8001-35-2	~	~	~	<0.15	0.15	<0.14	0.14	<0.14	0.14	<0.15	0.15	<0.14	0.14	<0.15	0.15	<0.14	0.14	<0.14	0.14	<0.13	0.13	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.15	0.15

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 3

PCBs Pesticides in Soil (mg/Kg)

EPA Method: 8082 8081

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	RISB-9 (1-2)		RISB-9 (33-35)		RISB-9 (48-50)		RISB-10 (0-1)		RISB-10 (1-2)		RISB-10 (40-43)		RISB-11 (2-3)		RISB-11 (3-4)		RISB-11 (48-50)		RISB-12 (0-1)		RISB-12 (1-2)		RISB-12 (31-33)		RISB-12 (33-35)		RISB-12 (50-52)	
Phenoix ID					CM52572		CM52573		CM52574		CM52565		CM52566		CM52567		CM48201		CM48202		CM48203		CM48180		CM48181		CM48182		CM48183		CM48184	
Sampling Date					10/5/22		10/5/22		10/5/22		10/5/22		10/5/22		10/5/22		09/30/2022		09/30/2022		09/30/2022		09/29/2022		09/29/2022		09/29/2022		09/29/2022		09/29/2022	
Client Matrix					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	CAS Number	Objectives	Residential	Commercial	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Polychlorinated Biphenyls 8082					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
PCB-1016	12674-11-2	~	~	1	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1221	11104-28-2	~	~	1	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1232	11141-16-5	~	~	1	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1242	53469-21-9	~	~	1	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1248	12672-29-6	~	~	1	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1254	11097-69-1	~	~	1	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1260	11096-82-5	~	~	1	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1262	37324-23-5	~	~	~	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
PCB-1268	11100-14-4	~	~	~	<0.072	0.072	<0.069	0.069	<0.079	0.079	<0.073	0.073	<0.069	0.069	<0.076	0.076	<0.35	0.35	<0.37	0.37	<0.34	0.34	<0.35	0.35	<0.36	0.36	<0.34	0.34	<0.34	0.34	<0.38	0.38
Pesticides - Soil - SW8081B					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																
4,4' -DDD	72-54-8	14	13	92	<0.0022	0.0022	<0.0021	0.0021	<0.0024	0.0024	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.0021	0.0021	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.002	0.002	<0.0021	0.0021	<0.0023	0.0023
4,4' -DDE	72-55-9	17	8.9	62	<0.0022	0.0022	<0.0021	0.0021	<0.0024	0.0024	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.0021	0.0021	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.002	0.002	<0.0021	0.0021	<0.0023	0.0023
4,4' -DDT	50-29-3	136	7.9	47	<0.0022	0.0022	<0.0021	0.0021	<0.0024	0.0024	<0.0022	0.0022	<0.0021	0.0021	<0.0023	0.0023	<0.0021	0.0021	<0.0022	0.0022	<0.0021	0.0021	<0.0021	0.0021	<0.0021	0.0021	<0.002	0.002	<0.0021	0.0021	<0.0023	0.0023
a-BHC	319-84-6	0.02	0.48	3.4	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
a-Chlordane	5103-71-9	2.9	4.2	24	<0.0036	0.0036	<0.0035	0.0035	<0.0039	0.0039	<0.0036	0.0036	<0.0034	0.0034	<0.0038	0.0038	<0.0035	0.0035	<0.0037	0.0037	<0.0034	0.0034	**0.018**	0.0035	**0.011**	0.0036	<0.0034	0.0034	<0.0034	0.0034	<0.0038	0.0038
Aldrin	309-00-2	0.19	0.097	0.68	<0.0036	0.0036	<0.0035	0.0035	<0.0039	0.0039	<0.0036	0.0036	<0.0034	0.0034	<0.0038	0.0038	<0.0035	0.0035	<0.0037	0.0037	<0.0034	0.0034	<0.0035	0.0035	<0.0036	0.0036	<0.0034	0.0034	<0.0034	0.0034	<0.0038	0.0038
b-BHC	319-85-7	0.09	0.36	3	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Chlordane	57-74-9	~	~	~	<0.036	0.036	<0.035	0.035	<0.039	0.039	<0.036	0.036	<0.034	0.034	<0.038	0.038	<0.035	0.035	<0.037	0.037	<0.034	0.034	**0.073**	0.035	**0.049**	0.036	<0.034	0.034	<0.034	0.034	<0.038	0.038
d-BHC	319-86-8	0.25	100	500	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Dieldrin	60-57-1	0.1	0.2	1.4	<0.0036	0.0036	<0.0035	0.0035	<0.0039	0.0039	<0.0036	0.0036	<0.0034	0.0034	<0.0038	0.0038	<0.0035	0.0035	<0.0037	0.0037	<0.0034	0.0034	<0.0035	0.0035	<0.0036	0.0036	<0.0034	0.0034	<0.0034	0.0034	<0.0038	0.0038
Endosulfan I	959-98-8	102	24	200	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Endosulfan II	33213-65-9	102	24	200	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Endosulfan sulfate	1031-07-8	1000	24	200	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Endrin	72-20-8	0.06	11	89	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Endrin aldehyde	7421-93-4	~	~	~	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Endrin ketone	53494-70-5	~	~	~	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
g-BHC	58-89-9	0.1	1.3	9.2	<0.0014	0.0014	<0.0014	0.0014	<0.0016	0.0016	<0.0015	0.0015	<0.0014	0.0014	<0.0015	0.0015	<0.0014	0.0014	<0.0015	0.0015	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0014	0.0014	<0.0015	0.0015
g-Chlordane	5103-74-2	~	~	~	<0.0036	0.0036	<0.0035	0.0035	<0.0039	0.0039	<0.0036	0.0036	<0.0034	0.0034	<0.0038	0.0038	<0.0035	0.0035	<0.0037	0.0037	<0.0034	0.0034	**0.0096**	0.0035	**0.006**	0.0014	<0.0034	0.0034	<0.0034	0.0034	<0.0038	0.0038
Heptachlor	76-44-8	0.38	2.1	15	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Heptachlor epoxide	1024-57-3	~	~	~	<0.0072	0.0072	<0.0069	0.0069	<0.0079	0.0079	<0.0073	0.0073	<0.0069	0.0069	<0.0076	0.0076	<0.0071	0.0071	<0.0073	0.0073	<0.0068	0.0068	<0.0069	0.0069	<0.0071	0.0071	<0.0068	0.0068	<0.0069	0.0069	<0.0076	0.0076
Methoxychlor	72-43-5	~	~	~	<0.036	0.036	<0.035	0.035	<0.039	0.039	<0.036	0.036	<0.034	0.034	<0.038	0.038	<0.035	0.035	<0.037	0.037	<0.034	0.034	<0.035	0.035	<0.036	0.036	<0.034	0.034	<0.034	0.034	<0.038	0.038
Toxaphene	8001-35-2	~	~	~	<0.14	0.14	<0.14	0.14	<0.16	0.16	<0.15	0.15	<0.14	0.14	<0.15	0.15	<0.14	0.14	<0.15	0.15	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.14	0.14	<0.15	0.15

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 3

PCBs Pesticides in Soil (mg/Kg)

EPA Method: 8082 8081

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC Part 375 Protection of Groundwater Soil Cleanup	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives-	RISB-13 (0-1)		RISB-13 (1-2)		RISB-13 (48-50)		RISB-14 (0-1)		RISB-14 (1-2)		RISB-14 (40-42)		RISB-15 (0-1)		RISB-15 (1-2)		RISB-15 (44-45)		RISB-15 (50-52)		SB-16 (6-7')	
Phenoix ID					CM48198		CM48199		CM48200		CM61839		CM61840		CM61841		CM48176		CM48177		CM48178		CM48179		CM77059	
Sampling Date					09/30/2022		09/30/2022		09/30/2022		10/7/22		10/7/22		10/7/22		09/29/2022		09/29/2022		09/29/2022		09/29/2022		11/2/22	
Client Matrix					SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Compound	CAS Number	Objectives	Residential	Commercial	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Polychlorinated Biphenyls 8082					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																										
PCB-1016	12674-11-2	~	~	1	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
PCB-1221	11104-28-2	~	~	1	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
PCB-1232	11141-16-5	~	~	1	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
PCB-1242	53469-21-9	~	~	1	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
PCB-1248	12672-29-6	~	~	1	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
PCB-1254	11097-69-1	~	~	1	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
PCB-1260	11096-82-5	~	~	1	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	13	0.1
PCB-1262	37324-23-5	~	~	~	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
PCB-1268	11100-14-4	~	~	~	<0.36	0.36	<0.37	0.37	<0.35	0.35	<0.074	0.074	<0.079	0.079	<0.074	0.074	<0.37	0.37	<0.36	0.36	<0.33	0.33	<0.37	0.37	<0.1	0.1
Pesticides - Soil - SW8081B					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																										
4,4' -DDD	72-54-8	14	13	92	<0.0022	0.0022	<0.0022	0.0022	<0.0021	0.0021	<0.0022	0.0022	<0.0024	0.0024	<0.0022	0.0022	<0.0022	0.0022	<0.0022	0.0022	<0.002	0.002	<0.0022	0.0022	<0.0033	0.0033
4,4' -DDE	72-55-9	17	8.9	62	<0.0022	0.0022	<0.0022	0.0022	<0.0021	0.0021	<0.0022	0.0022	<0.0024	0.0024	<0.0022	0.0022	<0.0022	0.0022	<0.005	0.005	<0.002	0.002	<0.0022	0.0022	<0.0033	0.0033
4,4' -DDT	50-29-3	136	7.9	47	<0.0022	0.0022	<0.0022	0.0022	<0.0021	0.0021	<0.0022	0.0022	<0.0024	0.0024	<0.0022	0.0022	<0.003	0.003	<0.0022	0.0022	<0.002	0.002	<0.0022	0.0022	<0.0033	0.0033
a-BHC	319-84-6	0.02	0.48	3.4	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.02	0.02
a-Chlordane	5103-71-9	2.9	4.2	24	<0.0036	0.0036	<0.01	0.01	<0.0035	0.0035	<0.0037	0.0037	<0.0039	0.0039	<0.0037	0.0037	**0.018**	0.0037	**0.033**	0.0036	<0.0033	0.0033	<0.0037	0.0037	<0.025	0.025
Aldrin	309-00-2	0.19	0.097	0.68	<0.0036	0.0036	<0.0037	0.0037	<0.0035	0.0035	<0.0037	0.0037	<0.0039	0.0039	<0.0037	0.0037	<0.0037	0.0037	<0.0036	0.0036	<0.0033	0.0033	<0.0037	0.0037	<0.005	0.005
b-BHC	319-85-7	0.09	0.36	3	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.036	0.036
Chlordane	57-74-9	~	~	~	<0.036	0.036	<0.037	0.037	<0.035	0.035	<0.037	0.037	<0.039	0.039	<0.037	0.037	**0.091**	0.037	**0.14**	0.036	<0.033	0.033	<0.037	0.037	<1.3	1.3
d-BHC	319-86-8	0.25	100	500	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.04	0.04
Dieldrin	60-57-1	0.1	0.2	1.4	<0.0036	0.0036	<0.0037	0.0037	<0.0035	0.0035	<0.0037	0.0037	<0.0039	0.0039	<0.0037	0.0037	<0.0037	0.0037	<0.0036	0.0036	<0.0033	0.0033	<0.0037	0.0037	<0.005	0.005
Endosulfan I	959-98-8	102	24	200	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.25	0.25
Endosulfan II	33213-65-9	102	24	200	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.25	0.25
Endosulfan sulfate	1031-07-8	1000	24	200	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.25	0.25
Endrin	72-20-8	0.06	11	89	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.014	0.014
Endrin aldehyde	7421-93-4	~	~	~	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<1.3	1.3
Endrin ketone	53494-70-5	~	~	~	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<6.3	6.3
g-BHC	58-89-9	0.1	1.3	9.2	<0.0015	0.0015	<0.0015	0.0015	<0.0014	0.0014	<0.0015	0.0015	<0.0016	0.0016	<0.0015	0.0015	<0.0015	0.0015	<0.0015	0.0015	<0.0013	0.0013	<0.0015	0.0015	<0.05	0.05
g-Chlordane	5103-74-2	~	~	~	<0.0036	0.0036	<0.01	0.01	<0.0035	0.0035	<0.0037	0.0037	<0.0039	0.0039	<0.0037	0.0037	**0.0094**	0.0037	**0.015**	0.0036	<0.0033	0.0033	<0.0037	0.0037	<0.13	0.13
Heptachlor	76-44-8	0.38	2.1	15	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.04	0.04
Heptachlor epoxide	1024-57-3	~	~	~	<0.0073	0.0073	<0.0074	0.0074	<0.0071	0.0071	<0.0074	0.0074	<0.0079	0.0079	<0.0074	0.0074	<0.0074	0.0074	<0.0073	0.0073	<0.0067	0.0067	<0.0073	0.0073	<0.3	0.3
Methoxychlor	72-43-5	~	~	~	<0.036	0.036	<0.037	0.037	<0.035	0.035	<0.037	0.037	<0.039	0.039	<0.037	0.037	<0.037	0.037	<0.036	0.036	<0.033	0.033	<0.037	0.037	<1.3	1.3
Toxaphene	8001-35-2	~	~	~	<0.15	0.15	<0.15	0.15	<0.14	0.14	<0.15	0.15	<0.16	0.16	<0.15	0.15	<0.15	0.15	<0.15	0.15	<0.13	0.13	<0.15	0.15	<5	5

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 4
Metals in Soil (mg/Kg)
EPA Method: 6010
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-1 (0-1) CM61842 10/7/22 SOIL		RISB-1 (1-2) CM61843 10/7/22 SOIL		RISB-1 (30-35) CM61844 10/7/22 SOIL		RISB-1 (40-42) CM61845 10/7/22 SOIL		RISB-2 (0-1) CM61836 10/7/22 SOIL		RISB-2 (1-2) CM61837 10/7/22 SOIL		RISB-2 (35-40) CM61838 10/7/22 SOIL		RISB-3 (0-1) CM52568 10/5/2022 SOIL		RISB-3 (2-4) CM52569 10/5/2022 SOIL		RISB-3 (43-45) CM52570 10/5/2022 SOIL		RISB-4 (1-2) CM49176 10/03/2022 SOIL		RISB-4 (2-3) CM49177 10/03/2022 SOIL		RISB-4 (40-42) CM49178 10/03/2022 SOIL		RISB-5 (0-1) CM48193 09/30/2022 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Metals Total					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																	
Aluminum	7429-90-5	~	~	~	**11,900**	59	**13,300**	54	**3,410**	54	**3,260**	53	**11,000**	60	**6,460**	59	**2,950**	51	**8,130**	59	**5,930**	50	**9,070**	51	**8600**	55	**8310**	58	**2760**	58	**11400**	58
Antimony	7440-36-0	~	~	~	<3.9	3.9	<3.6	3.6	<3.6	3.6	<3.5	3.5	<4.0	4.0	<4.0	4.0	<3.4	3.4	<3.9	3.9	<3.3	3.3	<3.4	3.4	<3.6	3.6	<3.8	3.8	<3.9	3.9	<3.9	3.9
Arsenic	7440-38-2	16	16	16	**5.02**	0.78	**4.61**	0.72	<0.72	0.72	<0.71	0.71	**2.18**	0.80	**11.6**	0.79	**0.82**	0.68	**1.72**	0.79	**2.49**	0.66	**3.39**	0.68	**12.7**	0.73	**12.8**	0.77	<0.77	0.77	**6.63**	0.77
Barium	7440-39-3	820	400	400	**96.4**	0.39	**108**	0.36	**21.5**	0.36	**20.9**	0.35	**55.1**	0.40	**264**	0.40	**21.1**	0.34	**44.6**	0.39	**35.3**	0.33	**58.6**	0.34	**123**	0.36	**117**	0.38	**17.5**	0.39	**73.1**	0.39
Beryllium	7440-41-7	47	72	590	**0.7**	0.31	**0.72**	0.29	<0.29	0.29	<0.28	0.28	**0.57**	0.32	**0.56**	0.32	<0.27	0.27	**0.32**	0.31	**0.27**	0.26	**0.31**	0.27	**0.37**	0.29	**0.36**	0.31	<0.31	0.31	**0.49**	0.31
Cadmium	7440-43-9	7.5	4.3	9.3	**0.83**	0.39	**0.86**	0.36	<0.36	0.36	<0.35	0.35	**0.56**	0.40	**3.44**	0.40	**0.36**	0.34	**0.62**	0.39	**0.84**	0.33	**1.3**	0.34	**1.59**	0.36	**1.25**	0.38	**0.48**	0.39	<0.39	0.39
Calcium	7440-70-2	~	~	~	**4,130**	5.9	**7,150**	5.4	**1,100**	5.4	**1,020**	5.3	**1,640**	6.0	**21,000**	59	**7,870**	5.1	**2,720**	5.9	**33,800**	50	**3,510**	5.1	**29000**	55	**30600**	58	**2000**	5.8	**4110**	5.8
Chromium	7440-47-3	~	~	~	**24.5**	0.39	**23**	0.36	**27.2**	0.36	**12.1**	0.35	**26.5**	0.40	**17.8**	0.40	**29.9**	0.34	**16.6**	0.39	**12.2**	0.33	**20.5**	0.34	**16**	0.36	**13.4**	0.38	**9.36**	0.39	**39.9**	0.39
Cobalt	7440-48-4	~	~	~	**8.92**	0.39	**10.6**	0.36	**3.88**	0.36	**3.45**	0.35	**8.5**	0.40	**6.39**	0.40	**3.14**	0.34	**5.64**	0.39	**4.32**	0.33	**10.1**	0.34	**5.79**	0.36	**6.27**	0.38	**3.3**	0.39	**7.13**	0.39
Copper	7440-50-8	1720	270	270	**32.5**	0.8	**57.1**	0.7	**11.6**	0.7	**8.9**	0.7	**20**	0.8	**145**	0.8	**12.9**	0.7	**14.2**	0.8	**14.6**	0.7	**80.3**	0.7	**28.4**	0.7	**34.6**	0.8	**9**	0.8	**22.8**	0.8
Iron	7439-89-6	~	~	~	**19,500**	59	**22,600**	54	**14,700**	54	**13,700**	53	**16,800**	60	**16,500**	59	**16,900**	51	**12,600**	59	**14,100**	50	**34,100**	51	**15600**	55	**15400**	58	**12300**	58	**18200**	58
Lead	7439-92-1	450	400	1000	**112**	0.39	**146**	0.36	**2.54**	0.36	**2.26**	0.35	**32.8**	0.40	**458**	4.0	**6.02**	0.34	**30.8**	0.39	**54.6**	0.33	**5.57**	0.34	**145**	0.36	**147**	0.38	**6.37**	0.39	**98.1**	0.39
Magnesium	7439-95-4	~	~	~	**3,910**	5.9	**3,480**	5.4	**1,180**	5.4	**1,300**	5.3	**2,690**	6.0	**8,000**	59	**4,710**	5.1	**2,470**	5.9	**12,500**	50	**3,090**	5.1	**8270**	55	**9930**	58	**1440**	5.8	**2910**	5.8
Manganese	7439-96-5	2000	2000	10000	**441**	3.9	**500**	3.6	**264**	3.6	**177**	3.5	**217**	4.0	**284**	4.0	**222**	3.4	**216**	3.9	**263**	3.3	**472**	3.4	**246**	3.6	**248**	3.8	**206**	3.9	**270**	3.9
Mercury	7439-97-6	0.73	0.81	2.8	**0.07**	0.03	0.08	0.03	<0.03	0.03	<0.03	0.03	**0.06**	0.03	**0.2**	0.03	<0.03	0.03	**0.03**	0.03	**0.04**	0.03	<0.03	0.03	**0.09**	0.03	**0.06**	0.03	<0.03	0.03	**0.23**	0.03
Nickel	7440-02-0	130	310	310	**23.4**	0.39	**29**	0.36	**9.3**	0.36	**7.69**	0.35	**16**	0.40	**18.9**	0.40	**7.82**	0.34	**11.9**	0.39	**10.9**	0.33	**15.7**	0.34	**11.3**	0.36	**12.7**	0.38	**7.03**	0.39	**15.4**	0.39
Potassium	7440-09-7	~	~	~	**1,110**	5.9	**1,010**	5.4	**571**	5.4	**683**	5.3	**1,250**	6.0	**761**	5.9	**442**	5.1	**818**	5.9	**570**	5.0	**1,360**	5.1	**665**	5.5	**843**	5.8	**408**	5.8	**970**	5.8
Selenium	7782-49-2	4	180	1500	<1.6	1.6	<1.4	1.4	<1.4	1.4	<1.4	1.4	<1.6	1.6	<1.6	1.6	<1.4	1.4	<1.6	1.6	<1.3	1.3	<1.4	1.4	<1.5	1.5	<1.5	1.5	<1.5	1.5	<1.5	1.5
Silver	7440-22-4	8.3	180	1500	<0.39	0.39	<0.36	0.36	<0.36	0.36	<0.35	0.35	<0.40	0.40	<0.40	0.40	<0.34	0.34	**0.49**	0.39	<0.33	0.33	<0.34	0.34	<0.36	0.36	<0.38	0.38	<0.39	0.39	<0.39	0.39
Sodium	7440-23-5	~	~	~	**92.1**	5.9	**95**	5.4	**249**	5.4	**147**	5.3	**153**	6.0	**207**	5.9	**229**	5.1	**61.3**	5.9	**98**	5.0	**580**	5.1	**309**	5.5	**441**	5.8	**88.9**	5.8	**90.5**	5.8
Thallium	7440-28-0	~	~	~	<3.5	3.5	<3.2	3.2	<3.2	3.2	<3.2	3.2	<3.6	3.6	<3.6	3.6	<3.1	3.1	<3.5	3.5	<3.0	3.0	<3.1	3.1	<3.3	3.3	<3.5	3.5	<3.5	3.5	<3.5	3.5
Vanadium	7440-62-2	~	~	~	**35.3**	0.39	**33.5**	0.36	**13.9**	0.36	**19.4**	0.35	**33.7**	0.40	**23.3**	0.40	**14.8**	0.34	**22.6**	0.39	**15.7**	0.33	**43.7**	0.34	**20.9**	0.36	**23.5**	0.38	**17**	0.39	**28.5**	0.39
Zinc	7440-66-6	2480	10000	10000	**105**	0.8	**119**	0.7	**13.3**	0.7	**13.1**	0.7	**47.8**	0.8	**356**	7.9	**12.1**	0.7	**51.9**	0.8	**111**	0.7	**38.9**	0.7	**567**	7.3	**670**	7.7	**81.4**	0.8	**78**	0.8

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 4
Metals in Soil (mg/Kg)
EPA Method: 6010
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-S (1-2) CM48194 09/30/2022 SOIL		RISB-S (40-43) CM48195 09/30/2022 SOIL		RISB-S (43-45) CM48196 09/30/2022 SOIL		RISB-S DUPLICATE CM48197 09/30/2022 SOIL		RISB-6 (0-1) CM48185 09/29/2022 SOIL		RISB-6 (1-2) CM48186 09/29/2022 SOIL		RISB-6 (15-17) CM48187 09/29/2022 SOIL		RISB-6 (37-38) CM48188 09/29/2022 SOIL		RISB-6 (38-40) CM48189 09/29/2022 SOIL		RISB-6 (50-52) CM48190 09/29/2022 SOIL		RISB-7 (0-1) CM49173 10/03/2022 SOIL		RISB-7 (1-2) CM49174 10/03/2022 SOIL		RISB-7 (38-40) CM49175 10/03/2022 SOIL		RISB-8 (0-3) CM50474 10/4/22 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Metals Total					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																	
Aluminum	7429-90-5	~	~	~	**10200**	58	**2940**	47	**2040**	5.2	**1980**	4.9	**10200**	49	**10000**	51	**3400**	48	**3730**	50	**5490**	50	**2030**	5.4	**10400**	59	**4290**	54	**7280**	50	**8,680**	50
Antimony	7440-36-0	~	~	~	<3.9	3.9	<3.2	3.2	<3.4	3.4	<3.3	3.3	<3.2	3.2	<3.4	3.4	<3.2	3.2	<3.3	3.3	<3.3	3.3	<3.6	3.6	<3.9	3.9	<3.6	3.6	<3.4	3.4	<3.3	3.3
Arsenic	7440-38-2	16	16	16	**9.92**	0.77	<0.63	0.63	<0.69	0.69	<0.65	0.65	**26.7**	0.65	**27.6**	0.68	**1.17**	0.64	**1.03**	0.67	**1.68**	0.67	<0.72	0.72	**2.95**	0.78	**4.87**	0.72	**1.34**	0.67	**4.83**	0.67
Barium	7440-39-3	820	400	400	**100**	0.39	**16.5**	0.32	**13.3**	0.34	**12.2**	0.33	**71.3**	0.32	**72.2**	0.34	**24.2**	0.32	**29.5**	0.33	**38.8**	0.33	**16.9**	0.36	**81.9**	0.39	**70.4**	0.36	**59.3**	0.34	**58.5**	0.33
Beryllium	7440-41-7	47	72	590	**0.51**	0.31	<0.25	0.25	<0.28	0.28	<0.26	0.26	**0.52**	0.26	**0.47**	0.27	**0.2**	0.26	**0.29**	0.27	**0.25**	0.27	<0.29	0.29	**0.42**	0.31	**0.25**	0.29	**0.26**	0.27	**0.41**	0.27
Cadmium	7440-43-9	7.5	4.3	9.3	**1.09**	0.39	**0.78**	0.32	<0.34	0.34	<0.33	0.33	**1.91**	0.32	**1.44**	0.34	<0.32	0.32	<0.33	0.33	<0.33	0.33	<0.36	0.36	**1.05**	0.39	**0.7**	0.36	**0.85**	0.34	**1.69**	0.33
Calcium	7440-70-2	~	~	~	**10800**	5.8	**845**	4.7	**477**	5.2	**464**	4.9	**15300**	49	**27600**	51	**868**	4.8	**1090**	5	**2780**	5	**404**	5.4	**6640**	5.9	**82000**	54	**2290**	5	**13,100**	50
Chromium	7440-47-3	~	~	~	**20.4**	0.39	**13**	0.32	**7.84**	0.34	**7.71**	0.33	**32.9**	0.32	**25.1**	0.34	**17.7**	0.32	**24.9**	0.33	**38.7**	0.33	**5.72**	0.36	**18.4**	0.39	**7.1**	0.36	**21.3**	0.34	**17.2**	0.33
Cobalt	7440-48-4	~	~	~	**6.62**	0.39	**3.89**	0.32	**2.27**	0.34	**2.27**	0.33	**7.33**	0.32	**6.46**	0.34	**3.48**	0.32	**6.04**	0.33	**5.84**	0.33	**2.98**	0.36	**7.26**	0.39	**4.07**	0.36	**7.35**	0.34	**7.02**	0.33
Copper	7440-50-8	1720	270	270	**29**	0.8	**7.6**	0.6	**4.6**	0.7	**4.5**	0.7	**38**	0.6	**36.2**	0.7	**10.8**	0.6	**13.3**	0.7	**19**	0.7	**5.3**	0.7	**19.8**	0.8	**32.9**	0.7	**18.6**	0.7	**25.4**	0.7
Iron	7439-89-6	~	~	~	**20200**	58	**13500**	47	**6170**	5.2	**6330**	4.9	**19600**	49	**15900**	51	**19200**	48	**23100**	50	**21900**	50	**9160**	5.4	**15800**	59	**8960**	5.4	**21700**	50	**20,700**	50
Lead	7439-92-1	450	400	1000	**158**	0.39	**2.65**	0.32	**1.75**	0.34	**1.72**	0.33	**156**	3.2	**133**	0.34	**2.91**	0.32	**3.67**	0.33	**6.66**	0.33	**2.01**	0.36	**76.2**	0.39	**135**	0.36	**4.21**	0.34	**45.7**	0.33
Magnesium	7439-95-4	~	~	~	**4220**	5.8	**970**	4.7	**734**	5.2	**716**	4.9	**8290**	49	**6850**	51	**1160**	4.8	**1230**	5	**2140**	5	**909**	5.4	**2580**	5.9	**42700**	54	**2240**	5	**3,000**	5.0
Manganese	7439-96-5	2000	2000	10000	**305**	3.9	**174**	3.2	**77.4**	0.34	**85.7**	0.33	**322**	3.2	**261**	3.4	**324**	3.2	**347**	3.3	**340**	3.3	**113**	0.36	**322**	3.9	**125**	0.36	**327**	3.4	**342**	3.3
Mercury	7439-97-6	0.73	0.81	2.8	**0.09**	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	**0.1**	0.03	**0.1**	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	**0.06**	0.03	**1.4**	0.14	<0.02	0.02	<0.03	0.03
Nickel	7440-02-0	130	310	310	**13.5**	0.39	**8.63**	0.32	**6.51**	0.34	**6.47**	0.33	**19.4**	0.32	**14**	0.34	**8.2**	0.32	**9.79**	0.33	**13**	0.33	**7.78**	0.36	**12.7**	0.39	**11.8**	0.36	**14.6**	0.34	**13.9**	0.33
Potassium	7440-09-7	~	~	~	**860**	5.8	**459**	4.7	**452**	5.2	**412**	4.9	**1170**	4.9	**972**	5.1	**558**	4.8	**649**	5	**1030**	5	**625**	5.4	**667**	5.9	**583**	5.4	**868**	5	**866**	5.0
Selenium	7782-49-2	4	180	1500	<1.5	1.5	<1.3	1.3	<1.4	1.4	<1.3	1.3	<1.3	1.3	<1.4	1.4	<1.3	1.3	<1.3	1.3	<1.3	1.3	<1.4	1.4	<1.6	1.6	<1.4	1.4	<1.3	1.3	<1.3	1.3
Silver	7440-22-4	8.3	180	1500	<0.39	0.39	<0.32	0.32	<0.34	0.34	<0.33	0.33	<0.32	0.32	<0.34	0.34	<0.32	0.32	<0.33	0.33	<0.33	0.33	<0.36	0.36	<0.39	0.39	<0.36	0.36	<0.34	0.34	**0.47**	0.33
Sodium	7440-23-5	~	~	~	**112**	5.8	**132**	4.7	**99**	5.2	**91.2**	4.9	**232**	4.9	**234**	5.1	**139**	4.8	**172**	5	**355**	5	**75.5**	5.4	**107**	5.9	**218**	5.4	**540**	5	**357**	5.0
Thallium	7440-28-0	~	~	~	<3.5	3.5	<2.8	2.8	<3.1	3.1	<2.9	2.9	<2.9	2.9	<3.1	3.1	<2.9	2.9	<3.0	3	<3.0	3	<3.2	3.2	<3.5	3.5	<3.3	3.3	<3.0	3	<3.0	3.0
Vanadium	7440-62-2	~	~	~	**27.1**	0.39	**26**	0.32	**7.22**	0.34	**8.67**	0.33	**26.6**	0.32	**26.3**	0.34	**13.3**	0.32	**22**	0.33	**23.5**	0.33	**7.18**	0.36	**26.3**	0.39	**24.3**	0.36	**44.3**	0.34	**29.4**	0.33
Zinc	7440-66-6	2480	10000	10000	**211**	7.7	**12.4**	0.6	**8.1**	0.7	**8**	0.7	**86.5**	0.6	**87.1**	0.7	**13.8**	0.6	**19.7**	0.7	**22.1**	0.7	**10.5**	0.7	**126**	0.8	**108**	0.7	**23**	0.7	**953**	6.7

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 4
Metals in Soil (mg/Kg)
EPA Method: 6010
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-8 (3-5) CMS0475 10/4/22 SOIL		RISB-8 (5-7) CMS0476 10/4/22 SOIL		RISB-8 (9-10) CMS0477 10/4/22 SOIL		RISB-8 (10-12) CMS0478 10/4/22 SOIL		RISB-8 (12-15) CMS0479 10/4/22 SOIL		RISB-8 (20-22) CMS0480 10/4/22 SOIL		RISB-8 (22-25) CMS0481 10/4/22 SOIL		RISB-8 (25-28) CMS0482 10/4/22 SOIL		RISB-8 (28-30) CMS0483 10/4/22 SOIL		RISB-8 (30-33) CMS0484 10/4/22 SOIL		RISB-8 (33-35) CMS0485 10/4/22 SOIL		RISB-8 (40-43) CMS0486 10/4/22 SOIL		RISB-8 DUPLICATE CMS0487 10/4/22 SOIL		RISB-9 (0-1) CMS2571 10/5/22 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Metals Total					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg			
Dilution Factor																																
Aluminum	7429-90-5	~	~	~	**9,230**	55	**6,450**	54	**3,330**	52	**7,260**	57	**2,480**	54	**4,080**	50	**4,020**	46	**2,560**	47	**2,640**	50	**3,570**	54	**3,580**	49	**3,610**	53	**3,810**	49	**6,970**	60
Antimony	7440-36-0	~	~	~	<3.7	3.7	<3.6	3.6	<3.5	3.5	<3.8	3.8	<3.6	3.6	<3.3	3.3	<3.1	3.1	<3.1	3.1	<3.3	3.3	<3.6	3.6	<3.2	3.2	<3.5	3.5	<3.3	3.3	<4.0	4.0
Arsenic	7440-38-2	16	16	16	**4.86**	0.74	**3.31**	0.71	**2.16**	0.69	**4.84**	0.76	<0.72	0.72	**2.01**	0.67	**1.09**	0.61	<0.63	0.63	<0.66	0.66	**1.02**	0.72	**0.69**	0.65	<0.71	0.71	<0.66	0.66	**6.41**	0.80
Barium	7440-39-3	820	400	400	**63.3**	0.37	**43.7**	0.36	**35.2**	0.35	**63.1**	0.38	**24.5**	0.36	**31.1**	0.33	**20.8**	0.31	**14.9**	0.31	**16.1**	0.33	**31.5**	0.36	**28.8**	0.32	**20.5**	0.35	**31.1**	0.33	**51.4**	0.40
Beryllium	7440-41-7	47	72	590	**0.49**	0.29	**0.28**	0.29	**0.31**	0.28	**0.4**	0.30	**0.18**	0.29	**0.21**	0.27	**0.24**	0.25	**0.21**	0.25	**0.16**	0.26	**0.26**	0.29	**0.21**	0.26	**0.19**	0.28	**0.16**	0.26	**0.33**	0.32
Cadmium	7440-43-9	7.5	4.3	9.3	**2.74**	0.37	**1.16**	0.36	**2.01**	0.35	**2.24**	0.38	**0.67**	0.36	**0.8**	0.33	**1.09**	0.31	**0.53**	0.31	**0.63**	0.33	**0.81**	0.36	**0.68**	0.32	**0.59**	0.35	**0.52**	0.33	**2.08**	0.40
Calcium	7440-70-2	~	~	~	**5,950**	5.5	**72,200**	54	**1,720**	5.2	**48,800**	57	**604**	5.4	**26,900**	50	**1,450**	4.6	**8,550**	4.7	**6,990**	5.0	**2,870**	5.4	**2,930**	4.9	**1,320**	5.3	**1,410**	4.9	**4,520**	6.0
Chromium	7440-47-3	~	~	~	**17.8**	0.37	**17.8**	0.36	**75.4**	0.35	**32.4**	0.38	**12**	0.36	**16.7**	0.33	**9.81**	0.31	**6.73**	0.31	**9.6**	0.33	**21.9**	0.36	**18.5**	0.32	**13.4**	0.35	**10.9**	0.33	**19**	0.40
Cobalt	7440-48-4	~	~	~	**7.06**	0.37	**5.12**	0.36	**7.52**	0.35	**10.8**	0.38	**4.56**	0.36	**4.66**	0.33	**5.88**	0.31	**3.32**	0.31	**3.62**	0.33	**5.42**	0.36	**4.64**	0.32	**4.96**	0.35	**3.72**	0.33	**5.13**	0.40
Copper	7440-50-8	1720	270	270	**24.8**	0.7	**27.1**	0.7	**18.5**	0.7	**46**	0.8	**8.9**	0.7	**15.7**	0.7	**14.1**	0.6	**7.1**	0.6	**8.8**	0.7	**13.8**	0.7	**11.4**	0.6	**16.4**	0.7	**16.6**	0.7	**44.7**	0.8
Iron	7439-89-6	~	~	~	**30,400**	55	**24,100**	54	**43,800**	52	**39,500**	57	**15,200**	54	**16,000**	50	**26,400**	46	**11,700**	47	**13,500**	50	**16,500**	54	**14,900**	49	**13,300**	53	**10,600**	49	**20,600**	60
Lead	7439-92-1	450	400	1000	**70.7**	0.37	**24.7**	0.36	**6.6**	0.35	**64**	0.38	**2.88**	0.36	**13.8**	0.33	**4.22**	0.31	**2.14**	0.31	**2.75**	0.33	**6.71**	0.36	**3.69**	0.32	**2.89**	0.35	**2.07**	0.33	**104**	0.40
Magnesium	7439-95-4	~	~	~	**2,920**	5.5	**14,300**	54	**1,400**	5.2	**13,500**	57	**1,060**	5.4	**11,300**	50	**1,520**	4.6	**4,190**	4.7	**3,710**	5.0	**1,600**	5.4	**2,290**	4.9	**1,520**	5.3	**1,340**	4.9	**2,100**	6.0
Manganese	7439-96-5	2000	2000	10000	**488**	3.7	**334**	3.6	**643**	3.5	**1,180**	3.8	**217**	3.6	**276**	3.3	**431**	3.1	**184**	3.1	**262**	3.3	**1,780**	36	**268**	3.2	**220**	3.5	**158**	3.3	**263**	4.0
Mercury	7439-97-6	0.73	0.81	2.8	**0.06**	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	<0.02	0.02	<0.03	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03	**0.07**	0.03
Nickel	7440-02-0	130	310	310	**15.9**	0.37	**16.7**	0.36	**16.5**	0.35	**22.2**	0.38	**9.39**	0.36	**12**	0.33	**10.9**	0.31	**6.38**	0.31	**8.21**	0.33	**11.5**	0.36	**11.2**	0.32	**11.5**	0.35	**10.8**	0.33	**13.9**	0.40
Potassium	7440-09-7	~	~	~	**708**	5.5	**1,230**	5.4	**694**		**967**	5.7	**634**	5.4	**810**	5.0	**532**	4.6	**395**	4.7	**374**	5.0	**699**	5.4	**818**	4.9	**494**	5.3	**598**	4.9	**474**	6.0
Selenium	7782-49-2	4	180	1500	<1.5	1.5	<1.4	1.4	<1.4	1.4	<1.5	1.5	<1.4	1.4	<1.3	1.3	<1.2	1.2	<1.3	1.3	<1.3	1.3	<1.4	1.4	<1.3	1.3	<1.4	1.4	<1.3	1.3	<1.6	1.6
Silver	7440-22-4	8.3	180	1500	<0.37	0.37	<0.36	0.36	<0.35	0.35	<0.38	0.38	<0.36	0.36	<0.33	0.33	<0.31	0.31	<0.31	0.31	<0.33	0.33	<0.36	0.36	<0.32	0.32	<0.35	0.35	<0.33	0.33	<0.40	0.40
Sodium	7440-23-5	~	~	~	**225**	5.5	**357**	5.4	**111**	5.2	**346**	5.7	**56**	5.4	**233**	5.0	**255**	4.6	**167**	4.7	**179**	5.0	**196**	5.4	**182**	4.9	**206**	5.3	**300**	4.9	**69.4**	6.0
Thallium	7440-28-0	~	~	~	<3.3	3.3	<3.2	3.2	<3.1	3.1	<3.4	3.4	<3.3	3.3	<3.0	3.0	<2.8	2.8	<2.8	2.8	<3.0	3.0	<3.3	3.3	<2.9	2.9	<3.2	3.2	<3.0	3.0	<3.6	3.6
Vanadium	7440-62-2	~	~	~	**24.8**	0.37	**15.7**	0.36	**34.1**	0.35	**25**	0.38	**21.5**	0.36	**15.3**	0.33	**24.4**	0.31	**8.4**	0.31	**11.3**	0.33	**17.2**	0.36	**17.7**	0.32	**24.3**	0.35	**15.2**	0.33	**26.1**	0.40
Zinc	7440-66-6	2480	10000	10000	**3,150**	74	**52.8**	0.7	**28.8**	0.7	**974**	7.6	**17.6**	0.7	**80.6**	0.7	**20.7**	0.6	**13.2**	0.6	**12.9**	0.7	**108**	0.7	**22.5**	0.6	**15**	0.7	**13.2**	0.7	**247**	8.0

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 4
Metals in Soil (mg/Kg)
EPA Method: 6010
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-9 (1-2) CM52572 10/5/22 SOIL		RISB-9 (33-35) CM52573 10/5/22 SOIL		RISB-9 (48-50) CM52574 10/5/22 SOIL		RISB-10 (0-1) CM52565 10/5/22 SOIL		RISB-10 (1-2) CM52566 10/5/22 SOIL		RISB-10 (40-43) CM52567 10/5/22 SOIL		RISB-11 (2-3) CM48201 09/30/2022 SOIL		RISB-11 (3-4) CM48202 09/30/2022 SOIL		RISB-11 (48-50) CM48203 09/30/2022 SOIL		RISB-12 (0-1) CM48180 09/29/2022 SOIL		RISB-12 (1-2) CM48181 09/29/2022 SOIL		RISB-12 (31-33) CM48182 09/29/2022 SOIL		RISB-12 (33-35) CM48183 09/29/2022 SOIL		RISB-12 (50-52) CM48184 09/29/2022 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Metals Total											mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																																				
Aluminum	7429-90-5	~	~	~	**5,350**	54	**2,440**	51	**5,180**	54	**4,980**	50	**8,220**	51	**5,350**	51	**12300**	50	**11200**	50	**11400**	47	**11000**	49	**10700**	50	**5990**	54	**4780**	51	**2450**	59
Antimony	7440-36-0	~	~	~	<3.6	3.6	<3.4	3.4	<3.6	3.6	<3.3	3.3	<3.4	3.4	<3.4	3.4	<3.4	3.4	<3.3	3.3	<3.1	3.1	<3.2	3.2	<3.4	3.4	<3.6	3.6	<3.4	3.4	<3.9	3.9
Arsenic	7440-38-2	16	16	16	**10.7**	0.72	<0.68	0.68	**0.78**	0.73	**1.68**	0.66	**2.57**	0.67	**1.12**	0.68	**5.36**	0.67	**13.3**	0.66	**1.05**	0.63	**2.58**	0.65	**2.74**	0.67	**1.5**	0.71	**1.42**	0.68	<0.79	0.79
Barium	7440-39-3	820	400	400	**25.8**	0.36	**16.3**	0.34	**101**	0.36	**23.3**	0.33	**122**	0.34	**31.2**	0.34	**106**	0.34	**81.2**	0.33	**44.2**	0.31	**54.7**	0.32	**51.2**	0.34	**41.6**	0.36	**32.6**	0.34	**19.6**	0.39
Beryllium	7440-41-7	47	72	590	**0.27**	0.29	**0.19**	0.27	**0.16**	0.29	**0.22**	0.26	**0.38**	0.27	**0.31**	0.27	**0.5**	0.27	**0.51**	0.26	**0.24**	0.25	**0.38**	0.26	**0.41**	0.27	<0.29	0.29	<0.27	0.27	<0.31	0.31
Cadmium	7440-43-9	7.5	4.3	9.3	**1.35**	0.36	**0.56**	0.34	**0.57**	0.36	**0.47**	0.33	**0.96**	0.34	**1.35**	0.34	**0.65**	0.34	**0.64**	0.33	<0.31	0.31	**1.75**	0.32	**1.29**	0.34	**1.62**	0.36	**1.11**	0.34	**0.58**	0.39
Calcium	7440-70-2	~	~	~	**1,590**	5.4	**864**	5.1	**2,820**	5.4	**2,850**	5.0	**6,180**	5.1	**1,950**	5.1	**9640**	5	**22500**	50	**5840**	4.7	**5020**	4.9	**1650**	5	**3810**	5.4	**1930**	5.1	**762**	5.9
Chromium	7440-47-3	~	~	~	**17.5**	0.36	**9.37**	0.34	**18.2**	0.36	**9.86**	0.33	**13.2**	0.34	**16.8**	0.34	**21.1**	0.34	**20.7**	0.33	**14.5**	0.31	**19.4**	0.32	**18.1**	0.34	**48.4**	0.36	**35.3**	0.34	**7.83**	0.39
Cobalt	7440-48-4	~	~	~	**5.22**	0.36	**4.25**	0.34	**5.08**	0.36	**4.45**	0.33	**6.72**	0.34	**6.08**	0.34	**7.18**	0.34	**7.52**	0.33	**10.2**	0.31	**10.2**	0.32	**6.96**	0.34	**6.74**	0.36	**5.2**	0.34	**3.26**	0.39
Copper	7440-50-8	1720	270	270	**26.4**	0.7	**9.4**	0.7	**18.6**	0.7	**8.4**	0.7	**40.7**	0.7	**26.2**	0.7	**38.3**	0.7	**39**	0.7	**45.3**	0.6	**83.8**	0.6	**21.2**	0.7	**24.8**	0.7	**17.9**	0.7	**9.2**	0.8
Iron	7439-89-6	~	~	~	**16,700**	54	**13,900**	51	**12,200**	54	**8,180**	5.0	**16,500**	51	**33,000**	51	**21700**	50	**21600**	50	**23900**	47	**22100**	49	**18800**	50	**25600**	54	**15500**	51	**8100**	5.9
Lead	7439-92-1	450	400	1000	**57.4**	0.36	**2.84**	0.34	**3**	0.36	**16.5**	0.33	**232**	3.4	**6.17**	0.34	**371**	3.4	**191**	3.3	**3.73**	0.31	**90.2**	0.32	**66.2**	0.34	**10.3**	0.36	**22**	0.34	**1.63**	0.39
Magnesium	7439-95-4	~	~	~	**1,400**	5.4	**1,060**	5.1	**1,780**	5.4	**1,060**	5.0	**3,290**	5.1	**1,830**	5.1	**5870**	50	**12800**	50	**3560**	4.7	**3090**	4.9	**2000**	5	**1840**	5.4	**1720**	5.1	**1150**	5.9
Manganese	7439-96-5	2000	2000	10000	**293**	3.6	**260**	3.4	**247**	3.6	**136**	0.33	**257**	3.4	**322**	3.4	**446**	3.4	**452**	3.3	**275**	3.1	**328**	3.2	**354**	3.4	**446**	3.6	**303**	3.4	**67.8**	0.39
Mercury	7439-97-6	0.73	0.81	2.8	**0.02**	0.03	<0.02	0.02	<0.03	0.03	**0.03**	0.03	**0.08**	0.02	<0.03	0.03	**0.21**	0.03	**0.15**	0.03	<0.02	0.02	**0.08**	0.03	**0.06**	0.03	<0.03	0.03	<0.03	0.03	<0.03	0.03
Nickel	7440-02-0	130	310	310	**12.4**	0.36	**7.38**	0.34	**11.1**	0.36	**5.77**	0.33	**12.2**	0.34	**12.9**	0.34	**15.6**	0.34	**13.4**	0.33	**14.5**	0.31	**14.7**	0.32	**12.6**	0.34	**14**	0.36	**12.3**	0.34	**7.15**	0.39
Potassium	7440-09-7	~	~	~	**429**	5.4	**356**	5.1	**696**	5.4	**367**	5.0	**759**	5.1	**754**	5.1	**892**	5	**830**	5	**1570**	4.7	**1200**	4.9	**762**	5	**1010**	5.4	**710**	5.1	**839**	5.9
Selenium	7782-49-2	4	180	1500	<1.4	1.4	<1.4	1.4	<1.5	1.5	<1.3	1.3	<1.3	1.3	<1.4	1.4	<1.3	1.3	<1.3	1.3	<1.3	1.3	<1.3	1.3	<1.3	1.3	<1.4	1.4	<1.4	1.4	<1.6	1.6
Silver	7440-22-4	8.3	180	1500	<0.36	0.36	<0.34	0.34	<0.36	0.36	<0.33	0.33	<0.34	0.34	<0.34	0.34	<0.34	0.34	<0.33	0.33	<0.31	0.31	<0.32	0.32	<0.34	0.34	<0.36	0.36	<0.34	0.34	<0.39	0.39
Sodium	7440-23-5	~	~	~	**47.7**	5.4	**117**	5.1	**585**	5.4	**48.5**	5.0	**174**	5.1	**355**	5.1	**168**	5	**151**	5	**1300**	4.7	**625**	4.9	**84.7**	5	**380**	5.4	**241**	5.1	**178**	5.9
Thallium	7440-28-0	~	~	~	<3.2	3.2	<3.0	3.0	<3.3	3.3	<3.0	3.0	<3.0	3.0	<3.0	3.0	<3.0	3	<3.0	3	<2.8	2.8	<2.9	2.9	<3.0	3	<3.2	3.2	<3.0	3	<3.5	3.5
Vanadium	7440-62-2	~	~	~	**21.9**	0.36	**19.5**	0.34	**26.3**	0.36	**13.4**	0.33	**30.4**	0.34	**60.4**	0.34	**37**	0.34	**40.3**	0.33	**54.2**	0.31	**49.6**	0.32	**27.7**	0.34	**24.3**	0.36	**17.9**	0.34	**10.9**	0.39
Zinc	7440-66-6	2480	10000	10000	**145**	0.7	**16.5**	0.7	**16.6**	0.7	**22.1**	0.7	**84.9**	0.7	**30.8**	0.7	**164**	6.7	**116**	0.7	**26.9**	0.6	**78.4**	0.6	**53.6**	0.7	**35.2**	0.7	**23.5**	0.7	**11.6**	0.8

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 4
Metals in Soil (mg/Kg)
EPA Method: 6010
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-13 (0-1) CM48198 09/30/2022 SOIL		RISB-13 (1-2) CM48199 09/30/2022 SOIL		RISB-13 (48-50) CM48200 09/30/2022 SOIL		RISB-14 (0-1) CM61839 10/7/22 SOIL		RISB-14 (1-2) CM61840 10/7/22 SOIL		RISB-14 (40-42) CM61841 10/7/22 SOIL		RISB-15 (0-1) CM48176 09/29/2022 SOIL		RISB-15 (1-2) CM48177 09/29/2022 SOIL		RISB-15 (44-45) CM48178 09/29/2022 SOIL		RISB-15 (50-52) CM48179 09/29/2022 SOIL		SB-16 (6-7') CM77059 11/2/22 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Metals Total					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor																										
Aluminum	7429-90-5	~	~	~	**8880**	49	**11200**	54	**2610**	48	**5,030**	59	**13,600**	60	**3,720**	61	**11600**	55	**10800**	56	**11200**	46	**2360**	54	**5,470**	84
Antimony	7440-36-0	~	~	~	<3.3	3.3	<3.6	3.6	<3.2	3.2	<4.0	4.0	<4.0	4.0	<4.1	4.1	<3.7	3.7	<3.7	3.7	<3.1	3.1	<3.6	3.6	**14.1**	5.6
Arsenic	7440-38-2	16	16	16	**2.24**	0.65	**2.61**	0.72	<0.64	0.64	**4.65**	0.79	**7.03**	0.80	<0.81	0.81	**3.41**	0.74	**3.66**	0.74	**1.3**	0.62	<0.72	0.72	**62.7**	1.1
Barium	7440-39-3	820	400	400	**51.3**	0.33	**58.9**	0.36	**20.1**	0.32	**38.3**	0.40	**101**	0.40	**25.5**	0.41	**93.8**	0.37	**91.7**	0.37	**65.5**	0.31	**18.1**	0.36	**316**	0.56
Beryllium	7440-41-7	47	72	590	**0.43**	0.26	**0.47**	0.29	<0.26	0.26	<0.32	0.32	**0.76**	0.32	<0.32	0.32	**0.53**	0.3	**0.47**	0.3	**0.32**	0.25	<0.29	0.29	<0.45	0.45
Cadmium	7440-43-9	7.5	4.3	9.3	<0.33	0.33	<0.36	0.36	<0.32	0.32	**2.25**	0.40	**1.33**	0.40	<0.41	0.41	**1.83**	0.37	**1.68**	0.37	**1.49**	0.31	**0.56**	0.36	**11**	0.56
Calcium	7440-70-2	~	~	~	**3130**	4.9	**2490**	5.4	**661**	4.8	**13,600**	59	**10,600**	6.0	**1,040**	6.1	**3160**	5.5	**6860**	5.6	**3770**	4.6	**427**	5.4	**6,570**	8.4
Chromium	7440-47-3	~	~	~	**19**	0.33	**25.2**	0.36	**7.88**	0.32	**12.3**	0.40	**22**	0.40	**11.6**	0.41	**21.5**	0.37	**21**	0.37	**50.4**	0.31	**6.41**	0.36	**13.2**	0.56
Cobalt	7440-48-4	~	~	~	**6.77**	0.33	**6.99**	0.36	**3.46**	0.32	**5.8**	0.40	**8.7**	0.40	**4.03**	0.41	**10.6**	0.37	**7.15**	0.37	**8.31**	0.31	**3.15**	0.36	**6.04**	0.56
Copper	7440-50-8	1720	270	270	**18.8**	0.7	**19.3**	0.7	**6.8**	0.6	**33.9**	0.8	**32.1**	0.8	**13.1**	0.8	**50.2**	0.7	**38**	0.7	**27.9**	0.6	**7.3**	0.7	**230**	11
Iron	7439-89-6	~	~	~	**16700**	49	**18300**	54	**11400**	48	**19,700**	59	**30,100**	60	**11,600**	61	**19600**	55	**17900**	56	**25000**	46	**8840**	5.4	**8,980**	8.4
Lead	7439-92-1	450	400	1000	**36.1**	0.33	**38.9**	0.36	**2.3**	0.32	**123**	0.40	**801**	4.0	**2.65**	0.41	**323**	3.7	**221**	3.7	**3.68**	0.31	**1.67**	0.36	**2,760**	56
Magnesium	7439-95-4	~	~	~	**3330**	4.9	**2450**	5.4	**1060**	4.8	**1,600**	5.9	**2,490**	6.0	**1,190**	6.1	**2530**	5.5	**3060**	5.6	**3190**	4.6	**1020**	5.4	**1,540**	8.4
Manganese	7439-96-5	2000	2000	10000	**288**	3.3	**316**	3.6	**102**	0.32	**274**	4.0	**605**	4.0	**309**	4.1	**442**	3.7	**443**	3.7	**403**	3.1	**101**	0.36	**103**	0.56
Mercury	7439-97-6	0.73	0.81	2.8	**0.04**	0.03	**0.05**	0.03	<0.03	0.03	**0.07**	0.03	**0.19**	0.03	<0.03	0.03	**0.34**	0.03	**0.43**	0.03	<0.02	0.02	<0.03	0.03	**0.48**	0.05
Nickel	7440-02-0	130	310	310	**12.6**	0.33	**13.5**	0.36	**8**	0.32	**17.6**	0.40	**16.8**	0.40	**8.79**	0.41	**15.3**	0.37	**14.9**	0.37	**18.2**	0.31	**7.76**	0.36	**22**	0.56
Potassium	7440-09-7	~	~	~	**1090**	4.9	**1100**	5.4	**830**	4.8	**539**	5.9	**764**	6.0	**532**	6.1	**1170**	5.5	**1150**	5.6	**2610**	4.6	**852**	5.4	**710**	8.4
Selenium	7782-49-2	4	180	1500	<1.3	1.3	<1.4	1.4	<1.3	1.3	<1.6	1.6	<1.6	1.6	<1.6	1.6	<1.5	1.5	<1.5	1.5	<1.2	1.2	<1.4	1.4	<2.2	2.2
Silver	7440-22-4	8.3	180	1500	<0.33	0.33	<0.36	0.36	<0.32	0.32	<0.40	0.40	<0.40	0.40	<0.41	0.41	<0.37	0.37	<0.37	0.37	<0.31	0.31	<0.36	0.36	<0.56	0.56
Sodium	7440-23-5	~	~	~	**104**	4.9	**109**	5.4	**116**	4.8	**93.9**	5.9	**185**	6.0	**145**	6.1	**137**	5.5	**235**	5.6	**1230**	4.6	**51.4**	5.4	**831**	8.4
Thallium	7440-28-0	~	~	~	<2.9	2.9	<3.2	3.2	<2.9	2.9	<3.6	3.6	<3.6	3.6	<3.7	3.7	<3.3	3.3	<3.3	3.3	<2.8	2.8	<3.2	3.2	<5.0	5.0
Vanadium	7440-62-2	~	~	~	**36.1**	0.33	**29.5**	0.36	**10.3**	0.32	**23.2**	0.40	**34.3**	0.40	**17.4**	0.41	**33.3**	0.37	**32.7**	0.37	**45.3**	0.31	**10.3**	0.36	**21.7**	0.56
Zinc	7440-66-6	2480	10000	10000	**45.3**	0.7	**43.3**	0.7	**12.3**	0.6	**77.5**	0.8	**116**	0.8	**13.1**	0.8	**135**	0.7	**125**	0.7	**27.6**	0.6	**11.4**	0.7	**303**	11

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 5
Miscellaneous/Inorganics in Soil

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-1 (0-1) CM61842 10/7/22 SOIL		RISB-1 (1-2) CM61843 10/7/22 SOIL		RISB-1 (30-35) CM61844 10/7/22 SOIL		RISB-1 (40-42) CM61845 10/7/22 SOIL		RISB-2 (0-1) CM61836 10/7/22 SOIL		RISB-2 (1-2) CM61837 10/7/22 SOIL		RISB-2 (35-40) CM61838 10/7/22 SOIL		RISB-3 (0-1) CM52568 10/5/2022 SOIL		RISB-3 (2-4) CM52569 10/5/2022 SOIL		RISB-3 (43-45) CM52570 10/5/2022 SOIL		RISB-4 (1-2) CM49176 10/03/2022 SOIL		RISB-4 (2-3) CM49177 10/03/2022 SOIL		RISB-4 (40-42) CM49178 10/03/2022 SOIL		RISB-5 (0-1) CM48193 09/30/2022 SOIL	
Compound	**CAS Number**				**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Miscellaneous/Inorganics					mg/Kg		%		%		%		%		%		%		%		%		%		%		%		%		%		%	
Percent Solid	PHNX - PCTSOLID				**84**		**85**		**90**		**92**		**87**		**89**		**94**		**87**		**97**		**95**		**88**		**88**		**80**		**90**		
Miscellaneous/Inorganics							ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g	
1H,1H,2H,2H-Perfluorodecanesulfonic acid	39108-34-4	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
1H,1H,2H,2H-Perfluorooctanesulfonic acid	27619-97-2	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
NEtFOSAA	2991-50-6	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
NMeFOSAA	2355-31-9	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluoro-n-butanoic acid (PFBA)	375-22-4	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorobutanesulfonic acid (PFBS)	375-73-5	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorodecanoic acid (PFDA)	335-76-2	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorododecanoic acid (PFDoA)	307-55-1	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluoroheptanoic acid (PFHpA)	375-85-9	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorohexanoic acid (PFHxA)	307-24-4	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorononanoic acid (PFNA)	375-95-1	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	3.7	44	440	**0.353**	0.283	**0.706**	0.269			<0.260	0.260	<0.273	0.273	**0.878**	0.272	<0.250	0.250			**1.27**	0.252	<0.247	0.247	**0.486**	0.274	<0.271	0.271	<0.287	0.287	**0.363**	0.252
Perfluorooctanoic acid (PFOA)	335-67-1	1.1	33	500	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluoropentanoic acid (PFPeA)	2706-90-3	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorotetradecanoic acid (PFTA)	376-06-7	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	**0.281**	0.271	<0.287	0.287	<0.252	0.252
Perfluoroundecanoic acid (PFUnA)	2058-94-8	~	~	~	<0.283	0.283	<0.269	0.269			<0.260	0.260	<0.273	0.273	<0.272	0.272	<0.250	0.250			<0.252	0.252	<0.247	0.247	<0.274	0.274	<0.271	0.271	<0.287	0.287	<0.252	0.252
Miscellaneous/Inorganics					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg			
Total Cyanide (SW9010C Distill.)	57-12-5	40	27	27																					<0.57	0.57	<0.57	0.57	<0.63	0.63		

NOTES:
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Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
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Table 5

Miscellaneous/Inorganics in Soil

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-5 (1-2) CM48194 09/30/2022 SOIL		RISB-5 (40-43) CM48195 09/30/2022 SOIL		RISB-5 (43-45) CM48196 09/30/2022 SOIL		RISB-5 DUPLICATE CM48197 09/30/2022 SOIL		RISB-6 (0-1) CM48185 09/29/2022 SOIL		RISB-6 (1-2) CM48186 09/29/2022 SOIL		RISB-6 (15-17) CM48187 09/29/2022 SOIL		RISB-6 (37-38) CM48188 09/29/2022 SOIL		RISB-6 (38-40) CM48189 09/29/2022 SOIL		RISB-6 (50-52) CM48190 09/29/2022 SOIL		RISB-7 (0-1) CM49173 10/03/2022 SOIL		RISB-7 (1-2) CM49174 10/03/2022 SOIL		RISB-7 (38-40) CM49175 10/03/2022 SOIL		RISB-8 (0-3) CM50474 10/4/22 SOIL	
Compound	**CAS Number**				**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**	**Result**	**RL**
Miscellaneous/Inorganics					%		%		%		%		%		%		%		%		%		%		%		%		%		%		%	
Percent Solid	PHNX - PCTSOLID				**90**		**93**		**92**		**92**		**93**		**93**		**97**		**96**		**97**		**89**		**90**		**92**		**98**		**88**			
Miscellaneous/Inorganics					ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g	
1H,1H,2H,2H-Perfluorodecanesulfonic acid	39108-34-4	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
1H,1H,2H,2H-Perfluorooctanesulfonic acid	27619-97-2	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
NEtFOSAA	2991-50-6	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
NMeFOSAA	2355-31-9	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluoro-n-butanoic acid (PFBA)	375-22-4	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorobutanesulfonic acid (PFBS)	375-73-5	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorodecanoic acid (PFDA)	335-76-2	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorododecanoic acid (PFDoA)	307-55-1	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluoroheptanoic acid (PFHpA)	375-85-9	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorohexanoic acid (PFHxA)	307-24-4	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	**0.394**	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorononanoic acid (PFNA)	375-95-1	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	3.7	44	440	**1.17**	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	**0.446**	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorooctanoic acid (PFOA)	335-67-1	1.1	33	500	**0.353**	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	**0.259**	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluoropentanoic acid (PFPeA)	2706-90-3	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	**0.368**	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorotetradecanoic acid (PFTA)	376-06-7	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Perfluoroundecanoic acid (PFUnA)	2058-94-8	~	~	~	<0.266	0.266	<0.252	0.252	<0.271	0.271	<0.259	0.259	<0.244	0.244	<0.263	0.263	<1.23	1.23	<0.241	0.241	<1.28	1.28	<0.268	0.268	<0.266	0.266	<0.256	0.256	<0.239	0.239	<0.282	0.282		
Miscellaneous/Inorganics					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Total Cyanide (SW9010C Distill.)	57-12-5	40	27	27																					<0.56	0.56	<0.54	0.54	<0.51	0.51				

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 5
Miscellaneous/Inorganics in Soil

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-8 (3-5) CMS0475 10/4/22 SOIL		RISB-8 (5-7) CMS0476 10/4/22 SOIL		RISB-8 (9-10) CMS0477 10/4/22 SOIL		RISB-8 (10-12) CMS0478 10/4/22 SOIL		RISB-8 (12-15) CMS0479 10/4/22 SOIL		RISB-8 (20-22) CMS0480 10/4/22 SOIL		RISB-8 (22-25) CMS0481 10/4/22 SOIL		RISB-8 (25-28) CMS0482 10/4/22 SOIL		RISB-8 (28-30) CMS0483 10/4/22 SOIL		RISB-8 (30-33) CMS0484 10/4/22 SOIL		RISB-8 (33-35) CMS0485 10/4/22 SOIL		RISB-8 (40-43) CMS0486 10/4/22 SOIL		RISB-8 DUPLICATE CMS0487 10/4/22 SOIL		RISB-9 (0-1) CMS2571 10/5/22 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Miscellaneous/Inorganics					%		%		%		%		%		%		%		%		%		%		%		%		%		%		%	
Percent Solid	PHNX - PCTSOLID				**87**		**91**		**95**		**86**		**96**		**90**		**97**		**96**		**97**		**92**		**94**		**93**		**93**		**88**		
Miscellaneous/Inorganics					ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g	
1H,1H,2H,2H-Perfluorodecanesulfonic acid	39108-34-4	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
1H,1H,2H,2H-Perfluorooctanesulfonic acid	27619-97-2	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
NEtFOSAA	2991-50-6	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
NMeFOSAA	2355-31-9	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	**1.77**	0.277
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluoro-n-butanoic acid (PFBA)	375-22-4	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorobutanesulfonic acid (PFBS)	375-73-5	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorodecanoic acid (PFDA)	335-76-2	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorododecanoic acid (PFDoA)	307-55-1	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	**0.283**	0.277
Perfluoroheptanoic acid (PFHpA)	375-85-9	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorohexanoic acid (PFHxA)	307-24-4	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorononanoic acid (PFNA)	375-95-1	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	3.7	44	440	**0.288**	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	**0.42**	0.277
Perfluorooctanoic acid (PFOA)	335-67-1	1.1	33	500	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluoropentanoic acid (PFPeA)	2706-90-3	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorotetradecanoic acid (PFTA)	376-06-7	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Perfluoroundecanoic acid (PFUnA)	2058-94-8	~	~	~	<0.269	0.269	<0.264	0.264	<0.258	0.258	<0.268	0.268	<0.255	0.255	<0.268	0.268	<0.257	0.257	<0.246	0.246	<0.247	0.247	<0.258	0.258	<0.260	0.26	<0.261	0.261	<0.251	0.251	<0.277	0.277
Miscellaneous/Inorganics					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Total Cyanide (SW9010C Distill.)	57-12-5	40	27	27																												

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 5

Miscellaneous/Inorganics in Soil

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-9 (1-2) CM52572 10/5/22 SOIL		RISB-9 (33-35) CM52573 10/5/22 SOIL		RISB-9 (48-50) CM52574 10/5/22 SOIL		RISB-10 (0-1) CM52565 10/5/22 SOIL		RISB-10 (1-2) CM52566 10/5/22 SOIL		RISB-10 (40-43) CM52567 10/5/22 SOIL		RISB-11 (2-3) CM48201 09/30/2022 SOIL		RISB-11 (3-4) CM48202 09/30/2022 SOIL		RISB-11 (48-50) CM48203 09/30/2022 SOIL		RISB-12 (0-1) CM48180 09/29/2022 SOIL		RISB-12 (1-2) CM48181 09/29/2022 SOIL		RISB-12 (31-33) CM48182 09/29/2022 SOIL		RISB-12 (33-35) CM48183 09/29/2022 SOIL		RISB-12 (50-52) CM48184 09/29/2022 SOIL	
Compound	CAS Number	Objectives			Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Miscellaneous/Inorganics					%		%		%		%		%		%		%		%		%		%		%		%		%		%		%	
Percent Solid	PHNX - PCTSOLID				**90**		**96**		**82**		**91**		**95**		**87**		**92**		**90**		**97**		**94**		**92**		**96**		**96**		**86**	
Miscellaneous/Inorganics					ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g	
1H,1H,2H,2H-Perfluorodecanesulfonic acid	39108-34-4	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
1H,1H,2H,2H-Perfluorooctanesulfonic acid	27619-97-2	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
NEtFOSAA	2991-50-6	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
NMeFOSAA	2355-31-9	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	~	~	~	**0.284**	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluoro-n-butanoic acid (PFBA)	375-22-4	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorobutanesulfonic acid (PFBS)	375-73-5	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorodecanoic acid (PFDA)	335-76-2	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorododecanoic acid (PFDoA)	307-55-1	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluoroheptanoic acid (PFHpA)	375-85-9	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorohexanoic acid (PFHxA)	307-24-4	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorononanoic acid (PFNA)	375-95-1	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	3.7	44	440	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	**0.653**	0.266	**1.05**	0.267	<0.255	0.255			**0.531**	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorooctanoic acid (PFOA)	335-67-1	1.1	33	500	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluoropentanoic acid (PFPeA)	2706-90-3	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorotetradecanoic acid (PFTA)	376-06-7	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	**0.31**	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Perfluoroundecanoic acid (PFUnA)	2058-94-8	~	~	~	<0.279	0.279	<0.237	0.237			<0.291	0.291	<0.253	0.253	<0.277	0.277	<0.266	0.266	<0.267	0.267	<0.255	0.255			<0.259	0.259	<0.239	0.239	<0.236	0.236	<0.269	0.269
Miscellaneous/Inorganics					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Total Cyanide (SW9010C Distill.)	57-12-5	40	27	27																												

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives

Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential

Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 5
Miscellaneous/Inorganics in Soil

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Part 375 Protection of Groundwater Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	RISB-13 (0-1) CM48198 09/30/2022 SOIL		RISB-13 (1-2) CM48199 09/30/2022 SOIL		RISB-13 (48-50) CM48200 09/30/2022 SOIL		RISB-14 (0-1) CM61839 10/7/22 SOIL		RISB-14 (1-2) CM61840 10/7/22 SOIL		RISB-14 (40-42) CM61841 10/7/22 SOIL		RISB-15 (0-1) CM48176 09/29/2022 SOIL		RISB-15 (1-2) CM48177 09/29/2022 SOIL		RISB-15 (44-45) CM48178 09/29/2022 SOIL		RISB-15 (50-52) CM48179 09/29/2022 SOIL		SB-16 (6-7') CM77059 11/2/22 SOIL	
Compound	CAS Number				Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Miscellaneous/Inorganics					%		%		%		%		%		%		%		%		%		%		%	
Percent Solid	PHNX - PCTSOLID				**91**		**88**		**92**		**89**		**83**		**88**		**89**		**90**		**99**		**89**		**54**	
Miscellaneous/Inorganics					ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g		ng/g			
1H,1H,2H,2H-Perfluorodecanesulfonic acid	39108-34-4	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
1H,1H,2H,2H-Perfluorooctanesulfonic acid	27619-97-2	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
NEtFOSAA	2991-50-6	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
NMeFOSAA	2355-31-9	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluoro-n-butanoic acid (PFBA)	375-22-4	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorobutanesulfonic acid (PFBS)	375-73-5	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorodecanoic acid (PFDA)	335-76-2	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorododecanoic acid (PFDoA)	307-55-1	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluoroheptanoic acid (PFHpA)	375-85-9	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorohexanoic acid (PFHxA)	307-24-4	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorononanoic acid (PFNA)	375-95-1	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	3.7	44	440	<0.255	0.255	<0.277	0.277	<0.259	0.259			**2.03**	0.289	**0.319**	0.263			**0.802**	0.27	<0.252	0.252	<0.267	0.267		
Perfluorooctanoic acid (PFOA)	335-67-1	1.1	33	500	<0.255	0.255	<0.277	0.277	<0.259	0.259			**0.296**	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluoropentanoic acid (PFPeA)	2706-90-3	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorotetradecanoic acid (PFTA)	376-06-7	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Perfluoroundecanoic acid (PFUnA)	2058-94-8	~	~	~	<0.255	0.255	<0.277	0.277	<0.259	0.259			<0.289	0.289	<0.263	0.263			<0.270	0.27	<0.252	0.252	<0.267	0.267		
Miscellaneous/Inorganics					mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg											
Total Cyanide (SW9010C Distill.)	57-12-5	40	27	27																					**0.97**	0.93

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives
Orange Highlight = Exceedance of NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential
Red Highlight =NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 6
Volatile Organic Compounds in Groundwater (ug/L)
EPA Method: 8260
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC TOGS Standards and Guidance Values - GA	RIMW-1		RIMW-2		RIMW-3		RIMW-4		RIMW-5		RIMW-6		DUPLICATE		EQUIPMENT BLANK		TRIP BLANK	
Phenoix ID			CM70875		CM70876		CM70871		CM70868		CM70874		CM70870		CM70869		CM70872		CM70873	
Sampling Date			10/25/22		10/25/22		10/24/22		10/24/22		10/25/22		10/24/22		10/24/22		10/24/22		10/24/22	
Client Matrix			GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		WATER		WATER	
Compound	CAS Number		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles-8260			ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor																				
1,1,1,2-Tetrachloroethane	630-20-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1,1-Trichloroethane	71-55-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1,2,2-Tetrachloroethane	79-34-5	5	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
1,1,2-Trichloroethane	79-00-5	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloroethane	75-34-3	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloroethene	75-35-4	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloropropene	563-58-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,3-Trichlorobenzene	87-61-6	~	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,3-Trichloropropane	96-18-4	0.04	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25
1,2,4-Trichlorobenzene	120-82-1	~	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,4-Trimethylbenzene	95-63-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dibromo-3-chloropropane	96-12-8	0.04	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
1,2-Dibromoethane	106-93-4	0.0006	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25	<0.25	0.25
1,2-Dichlorobenzene	95-50-1	~	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dichloroethane	107-06-2	0.6	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60
1,2-Dichloropropane	78-87-5	1	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3,5-Trimethylbenzene	108-67-8	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3-Dichlorobenzene	541-73-1	3	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3-Dichloropropane	142-28-9	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,4-Dichlorobenzene	106-46-7	~	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2,2-Dichloropropane	594-20-7	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2-Chlorotoluene	95-49-8	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2-Hexanone	591-78-6	50	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
2-Isopropyltoluene	527-84-4	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
4-Chlorotoluene	106-43-4	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
4-Methyl-2-pentanone	108-10-1	~	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Acetone	67-64-1	50	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25
Acrylonitrile	107-13-1	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Benzene	71-43-2	1	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70
Bromobenzene	108-86-1	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromochloromethane	74-97-5	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromodichloromethane	75-27-4	50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
Bromoform	75-25-2	50	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromomethane	74-83-9	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Carbon Disulfide	75-15-0	~	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Carbon tetrachloride	56-23-5	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chlorobenzene	108-90-7	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chloroethane	75-00-3	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chloroform	67-66-3	7	**4**	1.0	**4.2**	1.0	**2.8**	1.0	<1.0	1.0	<1.0	1.0	**1.4**	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chloromethane	74-87-3	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
cis-1,2-Dichloroethene	156-59-2	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
cis-1,3-Dichloropropene	10061-01-5	0.4	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40
Dibromochloromethane	124-48-1	50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
Dibromomethane	74-95-3	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Dichlorodifluoromethane	75-71-8	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Ethylbenzene	100-41-4	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Hexachlorobutadiene	87-68-3	0.5	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40
Isopropylbenzene	98-82-8	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
m&p-Xylene	179601-23-1	~	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Methyl ethyl ketone	78-93-3	50	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Methyl t-butyl ether (MTBE)	1634-04-4	~	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Methylene chloride	75-09-2	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Naphthalene	91-20-3	10	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
n-Butylbenzene	104-51-8	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
n-Propylbenzene	103-65-1	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
o-Xylene	95-47-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
p-Isopropyltoluene	99-87-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
sec-Butylbenzene	135-98-8	5	**4.3**	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Styrene	100-42-5	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
tert-Butylbenzene	98-06-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Tetrachloroethene	127-18-4	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Tetrahydrofuran (THF)	109-99-9	50	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5
Toluene	108-88-3	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Total Xylenes	1330-20-7	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
trans-1,2-Dichloroethene	156-60-5	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
trans-1,3-Dichloropropene	10061-02-6	0.4	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40
trans-1,4-dichloro-2-butene	110-57-6	5	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Trichloroethene	79-01-6	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Trichlorofluoromethane	75-69-4	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Trichlorotrifluoroethane	76-13-1	5	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Vinyl chloride	75-01-4	2	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0

Sample ID	EQUIP BLANK		TRIP BLANK		TRIP BLANK 9/29		EQUIP BLANK		TRIP BLANK 9/30		EQUIP BLANK		TRIP BLANK WATER		EQUIP BLANK	
Phenoix ID	CM70877		CM70878		CM48191		CM48192		CM48204		CM48205		CM49179		CM50473	
Sampling Date	10/25/22		10/25/22		09/29/2022		09/29/2022		09/30/2022		09/30/2022		10/03/2022		10/4/22	
Client Matrix	WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Compound	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles-8260	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor																
1,1,1,2-Tetrachloroethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,1,1-Trichloroethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,1,2,2-Tetrachloroethane	<0.50	0.50	<0.50	0.50	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.50
1,1,2-Trichloroethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,1-Dichloroethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,1-Dichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,1-Dichloropropene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2,3-Trichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2,3-Trichloropropane	<0.25	0.25	<0.25	0.25	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2,4-Trichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2,4-Trimethylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2-Dibromo-3-chloropropane	<0.50	0.50	<0.50	0.50	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2-Dibromoethane	<0.25	0.25	<0.25	0.25	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2-Dichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,2-Dichloroethane	<0.60	0.60	<0.60	0.60	<0.60	0.6	<0.60	0.6	<0.60	0.6	<0.60	0.6	<0.60	0.6	<0.60	0.60
1,2-Dichloropropane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,3,5-Trimethylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,3-Dichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,3-Dichloropropane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
1,4-Dichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
2,2-Dichloropropane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
2-Chlorotoluene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
2-Hexanone	<5.0	5.0	<5.0	5.0	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5.0
2-Isopropyltoluene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
4-Chlorotoluene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
4-Methyl-2-pentanone	<5.0	5.0	<5.0	5.0	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5.0
Acetone	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25
Acrylonitrile	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Benzene	<0.70	0.70	<0.70	0.70	<0.70	0.7	<0.70	0.7	<0.70	0.7	<0.70	0.7	<0.70	0.7	<0.70	0.70
Bromobenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Bromochloromethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Bromodichloromethane	<0.50	0.50	<0.50	0.50	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.50
Bromoform	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Bromomethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Carbon Disulfide	<5.0	5.0	<5.0	5.0	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5.0
Carbon tetrachloride	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Chlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Chloroethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Chloroform	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Chloromethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
cis-1,2-Dichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
cis-1,3-Dichloropropene	<0.40	0.40	<0.40	0.40	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.40
Dibromochloromethane	<0.50	0.50	<0.50	0.50	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.5	<0.50	0.50
Dibromomethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Dichlorodifluoromethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Ethylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Hexachlorobutadiene	<0.40	0.40	<0.40	0.40	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.40
Isopropylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
m&p-Xylene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Methyl ethyl ketone	<5.0	5.0	<5.0	5.0	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5.0
Methyl t-butyl ether (MTBE)	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Methylene chloride	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Naphthalene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
n-Butylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
n-Propylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
o-Xylene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
p-Isopropyltoluene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
sec-Butylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Styrene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
tert-Butylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Tetrachloroethene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Tetrahydrofuran (THF)	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5
Toluene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Total Xylenes	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
trans-1,2-Dichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
trans-1,3-Dichloropropene	<0.40	0.40	<0.40	0.40	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.4	<0.40	0.40
trans-1,4-dichloro-2-butene	<5.0	5.0	<5.0	5.0	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5	<5.0	5.0
Trichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Trichlorofluoromethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Trichlorotrifluoroethane	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0
Vinyl chloride	<1.0	1.0	<1.0	1.0	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1	<1.0	1.0

Sample ID	EQUIP BLANK		TRIP BLANK LOW		TRIP BLANK		EQUIP BLANK		EQUIP BLANK		TRIP BLANK		EQUIP BLANK	
Phenoix ID	CM50488		CM50489		CM52575		CM61834		CM61835		CM61846		CM77060	
Sampling Date	10/4/22		10/4/22		10/5/22		10/6/22		10/7/22		10/7/22		11/2/22	
Client Matrix	WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Compound	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatiles-8260	ug/L		ug/L		ug/L		ng/L		ng/L		ng/L		ng/L	
Dilution Factor														
1,1,1,2-Tetrachloroethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1,1-Trichloroethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1,2,2-Tetrachloroethane	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
1,1,2-Trichloroethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloroethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,1-Dichloropropene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,3-Trichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,3-Trichloropropane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,4-Trichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2,4-Trimethylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dibromo-3-chloropropane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dibromoethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,2-Dichloroethane	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60	<0.60	0.60
1,2-Dichloropropane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3,5-Trimethylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3-Dichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,3-Dichloropropane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
1,4-Dichlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2,2-Dichloropropane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2-Chlorotoluene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
2-Hexanone	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
2-Isopropyltoluene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
4-Chlorotoluene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
4-Methyl-2-pentanone	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Acetone	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25	<25	25
Acrylonitrile	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Benzene	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70	<0.70	0.70
Bromobenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromochloromethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromodichloromethane	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
Bromoform	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Bromomethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Carbon Disulfide	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Carbon tetrachloride	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chlorobenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chloroethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chloroform	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Chloromethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
cis-1,2-Dichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
cis-1,3-Dichloropropene	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40
Dibromochloromethane	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50	<0.50	0.50
Dibromomethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Dichlorodifluoromethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Ethylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Hexachlorobutadiene	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40
Isopropylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
m&p-Xylene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Methyl ethyl ketone	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Methyl t-butyl ether (MTBE)	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Methylene chloride	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	**1.6**	1.0
Naphthalene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
n-Butylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
n-Propylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
o-Xylene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
p-Isopropyltoluene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
sec-Butylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Styrene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
tert-Butylbenzene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Tetrachloroethene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Tetrahydrofuran (THF)	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5
Toluene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Total Xylenes	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
trans-1,2-Dichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
trans-1,3-Dichloropropene	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40
trans-1,4-dichloro-2-butene	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0	<5.0	5.0
Trichloroethene	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Trichlorofluoromethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Trichlorotrifluoroethane	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0
Vinyl chloride	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0	<1.0	1.0

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC TOGS Guidance Value
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 7

Semi-Volatile Organic Compounds in Groundwater (ug/L)
EPA Method: 8270
148-28 Hillside Avenue, Jamaica, NY11435

Sample ID / Phenoix ID / Sampling Date / Client Matrix		NYSDEC TOGS Standards and Guidance Values - GA	RIMW-1 CM70875 10/25/22 GROUND WATER		RIMW-2 CM70876 10/25/22 GROUND WATER		RIMW-3 CM70871 10/24/22 GROUND WATER		RIMW-4 CM70868 10/24/22 GROUND WATER		RIMW-5 CM70874 10/25/22 GROUND WATER		RIMW-6 CM70870 10/24/22 GROUND WATER		DUPLICATE CM70869 10/24/22 GROUND WATER	
Compound	CAS Number		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles - SW8270D			ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor																
1,2,4,5-Tetrachlorobenzene	95-94-3	~	<3.3	3.3	<3.3	3.3	<3.3	3.3	<3.3	3.3	<3.3	3.3	<3.3	3.3	<3.3	3.3
1,2,4-Trichlorobenzene	120-82-1	~	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
1,2-Dichlorobenzene	95-50-1	~	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4
1,2-Diphenylhydrazine	122-66-7	~	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
1,3-Dichlorobenzene	541-73-1	3	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4
1,4-Dichlorobenzene	106-46-7	~	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4
2,2'-Oxybis(1-Chloropropane)	108-60-1	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
2,4,5-Trichlorophenol	95-95-4	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
2,4,6-Trichlorophenol	88-06-2	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
2,4-Dichlorophenol	120-83-2	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
2,4-Dimethylphenol	105-67-9	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
2,4-Dinitrophenol	51-28-5	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
2,4-Dinitrotoluene	121-14-2	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
2,6-Dinitrotoluene	606-20-2	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
2-Chloronaphthalene	91-58-7	10	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
2-Chlorophenol	95-57-8	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
2-Methylphenol (o-cresol)	95-48-7	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
2-Nitroaniline	88-74-4	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
2-Nitrophenol	88-75-5	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
3&4-Methylphenol (m&p-cresol)	PHNX - M&P CRESOL	~	<9.5	9.5	<9.4	9.4	<9.4	9.4	<9.4	9.4	<9.4	9.4	<9.5	9.5	<9.4	9.4
3,3'-Dichlorobenzidine	91-94-1	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
3-Nitroaniline	99-09-2	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
4,6-Dinitro-2-methylphenol	534-52-1	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
4-Bromophenyl phenyl ether	101-55-3	~	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
4-Chloro-3-methylphenol	59-50-7	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
4-Chloroaniline	106-47-8	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
4-Chlorophenyl phenyl ether	7005-72-3	~	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
4-Nitroaniline	100-01-6	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
4-Nitrophenol	100-02-7	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
Acetophenone	98-86-2	~	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Aniline	62-53-3	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Benzidine	92-87-5	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Benzoic acid	65-85-0	~	<48	48	<47	47	<47	47	<47	47	<47	47	<48	48	<47	47
Benzyl butyl phthalate	85-68-7	50	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Bis(2-chloroethoxy)methane	111-91-1	5	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Bis(2-chloroethyl)ether	111-44-4	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
Bis(2-ethylhexyl)phthalate	117-81-7	5	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	**1**	0.94
Carbazole	86-74-8	~	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Dibenzofuran	132-64-9	~	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Diethyl phthalate	84-66-2	50	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Dimethylphthalate	131-11-3	50	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Di-n-butylphthalate	84-74-2	50	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Di-n-octylphthalate	117-84-0	50	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Hexachloroethane	67-72-1	5	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
Isophorone	78-59-1	50	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
N-Nitrosodi-n-propylamine	621-64-7	~	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
N-Nitrosodiphenylamine	86-30-6	50	<4.8	4.8	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.7	4.7	<4.8	4.8	<4.7	4.7
Pentachloronitrobenzene	82-68-8	~	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4	<2.4	2.4
Phenol	108-95-2	1	<0.95	0.95	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.94	0.94	<0.95	0.95	<0.94	0.94
Semivolatiles (SIM) - SW8270D (SIM)			ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor																
2-Methylnaphthalene	91-57-6	~	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Acenaphthene	83-32-9	20	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Acenaphthylene	208-96-8	~	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Anthracene	120-12-7	50	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Benz(a)anthracene	56-55-3	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	**0.03**	0.02	<0.02	0.02	<0.02	0.02
Benzo(a)pyrene	50-32-8	~	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Benzo(b)fluoranthene	205-99-2	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Benzo(ghi)perylene	191-24-2	~	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Benzo(k)fluoranthene	207-08-9	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Chrysene	218-01-9	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	**0.02**	0.02	<0.02	0.02	<0.02	0.02
Dibenz(a,h)anthracene	53-70-3	~	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Fluoranthene	206-44-0	50	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Fluorene	86-73-7	50	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Hexachlorobenzene	118-74-1	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04
Hexachlorobutadiene	87-68-3	0.5	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Hexachlorocyclopentadiene	77-47-4	5	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Indeno(1,2,3-cd)pyrene	193-39-5	0.002	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02
Naphthalene	91-20-3	10	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Nitrobenzene	98-95-3	0.4	<0.38	0.38	<0.38	0.38	<0.38	0.38	<0.38	0.38	<0.38	0.38	<0.38	0.38	<0.38	0.38
N-Nitrosodimethylamine	62-75-9	~	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Pentachlorophenol	87-86-5	1	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Phenanthrene	85-01-8	50	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	**0.49**	0.47	<0.48	0.48	<0.47	0.47
Pyrene	129-00-0	50	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
Pyridine	110-86-1	50	<0.48	0.48	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.47	0.47	<0.48	0.48	<0.47	0.47
1,4-dioxane - EPA522			ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor																
1,4-dioxane	123-91-1	~	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20

Sample ID / Phenoix ID / Sampling Date / Client Matrix	EQUIPMENT BLANK CM70872 10/24/22 WATER		EQUIP BLANK CM70877 10/25/22 WATER		EQUIP BLANK CM48192 09/29/2022 WATER		EQUIP BLANK CM48205 09/30/2022 WATER		EQUIP BLANK CM50473 10/4/22 WATER		EQUIP BLANK CM50488 10/4/22 WATER		EQUIP BLANK CM61834 10/6/22 WATER		EQUIP BLANK CM61835 10/7/22 WATER		EQUIP BLANK CM77060 11/2/22 WATER	
Compound	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Semivolatiles - SW8270D	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ng/L		ng/L		ng/L	
Dilution Factor																		
1,2,4,5-Tetrachlorobenzene	<3.4	3.4	<3.5	3.5	<3.5	3.5	<3.4	3.4	<3.4	3.4	<3.4	3.4	<3.6	3.6	<3.5	3.5		
1,2,4-Trichlorobenzene	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
1,2-Dichlorobenzene	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.4	2.4	<2.6	2.6	<2.5	2.5		
1,2-Diphenylhydrazine	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
1,3-Dichlorobenzene	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.4	2.4	<2.6	2.6	<2.5	2.5		
1,4-Dichlorobenzene	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.4	2.4	<2.6	2.6	<2.5	2.5		
2,2'-Oxybis(1-Chloropropane)	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
2,4,5-Trichlorophenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
2,4,6-Trichlorophenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
2,4-Dichlorophenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
2,4-Dimethylphenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
2,4-Dinitrophenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
2,4-Dinitrotoluene	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
2,6-Dinitrotoluene	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
2-Chloronaphthalene	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
2-Chlorophenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
2-Methylphenol (o-cresol)	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
2-Nitroaniline	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
2-Nitrophenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
3&4-Methylphenol (m&p-cresol)	<9.8	9.8	<9.9	9.9	<9.9	9.9	<9.8	9.8	<9.8	9.8	<9.7	9.7	<10	10	<10	10		
3,3'-Dichlorobenzidine	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
3-Nitroaniline	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
4,6-Dinitro-2-methylphenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
4-Bromophenyl phenyl ether	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
4-Chloro-3-methylphenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
4-Chloroaniline	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
4-Chlorophenyl phenyl ether	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
4-Nitroaniline	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
4-Nitrophenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
Acetophenone	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Aniline	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Benzidine	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Benzoic acid	<49	49	<50	50	<50	50	<49	49	<49	49	<49	49	<52	52	<51	51		
Benzyl butyl phthalate	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Bis(2-chloroethoxy)methane	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Bis(2-chloroethyl)ether	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
Bis(2-ethylhexyl)phthalate	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
Carbazole	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Dibenzofuran	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Diethyl phthalate	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Dimethylphthalate	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Di-n-butylphthalate	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Di-n-octylphthalate	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Hexachloroethane	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
Isophorone	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
N-Nitrosodi-n-propylamine	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
N-Nitrosodiphenylamine	<4.9	4.9	<5.0	5.0	<5.0	5	<4.9	4.9	<4.9	4.9	<4.9	4.9	<5.2	5.2	<5.1	5.1		
Pentachloronitrobenzene	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.5	2.5	<2.4	2.4	<2.6	2.6	<2.5	2.5		
Phenol	<0.98	0.98	<0.99	0.99	<0.99	0.99	<0.98	0.98	<0.98	0.98	<0.97	0.97	<1.0	1.0	<1.0	1.0		
Semivolatiles (SIM) - SW8270D (SIM)	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor																		
2-Methylnaphthalene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Acenaphthene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Acenaphthylene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Anthracene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Benz(a)anthracene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02		
Benzo(a)pyrene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02		
Benzo(b)fluoranthene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02		
Benzo(ghi)perylene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Benzo(k)fluoranthene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02		
Chrysene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02		
Dibenz(a,h)anthracene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Fluoranthene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Fluorene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Hexachlorobenzene	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04	<0.04	0.04		
Hexachlorobutadiene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Hexachlorocyclopentadiene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Indeno(1,2,3-cd)pyrene	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02		
Naphthalene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Nitrobenzene	<0.39	0.39	<0.40	0.40	<0.50	0.5	<0.49	0.49	<0.39	0.39	<0.39	0.39	<0.52	0.52	<0.51	0.51		
N-Nitrosodimethylamine	<0.49	0.49	<0.50	0.50	<0.40	0.4	<0.39	0.39	<0.49	0.49	<0.49	0.49	<0.41	0.41	<0.40	0.40		
Pentachlorophenol	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Phenanthrene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Pyrene	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
Pyridine	<0.49	0.49	<0.50	0.50	<0.50	0.5	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.52	0.52	<0.51	0.51		
1,4-dioxane - EPA522	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Dilution Factor																		
1,4-dioxane	<0.20	0.20	<0.20	0.20	<0.20	0.2	<0.20	0.2	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20	<0.20	0.20

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC TOGS Guidance Value
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 8

PCBs and Pesticides in Groundwater (ug/L)

EPA Method: 8082 8081

148-28 Hillside Avenue, Jamaica, NY11435

Sample ID		NYSDEC TOGS Standards and Guidance Values - GA	RIMW-1		RIMW-2		RIMW-3		RIMW-4		RIMW-5		RIMW-6		DUPLICATE		EQUIPMENT BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK	
Phenoix ID			CM70875		CM70876		CM70871		CM70868		CM70874		CM70870		CM70869		CM70872		CM70877		CM48192		CM48205		CM50473		CM50488		CM61834		CM61835		CM77060	
Sampling Date			10/25/22		10/25/22		10/24/22		10/24/22		10/25/22		10/24/22		10/24/22		10/24/22		10/25/22		09/29/2022		09/30/2022		10/4/22		10/4/22		10/6/22		10/7/22		11/2/22	
Client Matrix			GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Compound	CAS Number		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Polychlorinated Biphenyls 8082			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		ng/L		ng/L		ng/L	
Dilution Factor																																		
PCB-1016	12674-11-2	0.09	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1221	11104-28-2	0.09	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1232	11141-16-5	0.09	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1242	53469-21-9	0.09	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1248	12672-29-6	0.09	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1254	11097-69-1	0.09	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1260	11096-82-5	0.09	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1262	37324-23-5	~	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
PCB-1268	11100-14-4	~	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.048	0.048	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.051	0.051	<0.049	0.049	<0.050	0.050	<0.047	0.047	<0.049	0.049	<0.048	0.048
Pesticides - SW-8081B			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		ng/L		ng/L		ng/L	
Dilution Factor																																		
4,4'-DDD	72-54-8	0.3	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.002	0.002	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
4,4'-DDE	72-55-9	0.2	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.002	0.002	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
4,4'-DDT	50-29-3	0.2	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.002	0.002	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
a-BHC	319-84-6	0.01	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.024	0.024
a-chlordane	5103-71-9	~	<0.010	0.010	<0.020	0.020	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010		
Alachlor	15972-60-8	0.5	<0.072	0.072	<0.071	0.071	<0.072	0.072	<0.072	0.072	<0.072	0.072	<0.071	0.071	<0.071	0.071	<0.074	0.074	<0.076	0.076	<0.074	0.074	<0.076	0.076	<0.073	0.073	<0.075	0.075	<0.071	0.071	<0.073	0.073	<0.071	0.071
Aldrin	309-00-2	~	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.010	0.010	<0.010	0.010	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.001	0.001	<0.002	0.002	<0.001	0.001
b-BHC	319-85-7	0.04	<0.040	0.040	<0.005	0.005	<0.010	0.010	<0.005	0.005	<0.010	0.010	<0.010	0.010	<0.005	0.005	<0.005	0.005	<0.010	0.010	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005
Chlordane	57-74-9	0.05	<0.019	0.019	<0.019	0.019	<0.019	0.019	<0.019	0.019	<0.019	0.019	<0.019	0.019	<0.019	0.019	<0.020	0.020	<0.020	0.020	<0.098	0.098	<0.10	0.1	<0.097	0.097	<0.10	0.10	<0.094	0.094	<0.097	0.097	<0.29	0.29
d-BHC	319-86-8	0.04	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.024	0.024
Dieldrin	60-57-1	0.004	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.004	0.004	<0.001	0.001	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.001	0.001	<0.002	0.002	<0.001	0.001
Endosulfan I	959-98-8	~	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
Endosulfan II	33213-65-9	~	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
Endosulfan Sulfate	1031-07-8	~	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
Endrin	72-20-8	~	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.005	0.005	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
Endrin Aldehyde	7421-93-4	5	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
Endrin ketone	53494-70-5	5	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.048	0.048
g-BHC (Lindane)	58-89-9	0.05	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.024	0.024
g-chlordane	5103-74-2	~	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010		
Heptachlor	76-44-8	0.04	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.005	0.005	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.024	0.024
Heptachlor epoxide	1024-57-3	0.03	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.005	0.005	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.009	0.009	<0.010	0.010	<0.024	0.024
Methoxychlor	72-43-5	35	<0.096	0.096	<0.095	0.095	<0.096	0.096	<0.096	0.096	<0.096	0.096	<0.095	0.095	<0.095	0.095	<0.098	0.098	<0.10	0.10	<0.098	0.098	<0.10	0.1	<0.097	0.097	<0.10	0.10	<0.094	0.094	<0.097	0.097	<0.095	0.095
Toxaphene	8001-35-2	0.06	<0.19	0.19	<0.19	0.19	<0.19	0.19	<0.19	0.19	<0.19	0.19	<0.19	0.19	<0.19	0.19	<0.20	0.20	<0.20	0.20	<0.25	0.25	<0.25	0.25	<0.24	0.24	<0.25	0.25	<0.24	0.24	<0.24	0.24	<0.95	0.95

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC TOGS Guidance Value

RL is the Laboratory Reporting Limit

~ = this indicates that no regulatory limit has been established for this analyte

Table 9
Metals in groundwater (mg/L)
EPA Method: 6010
148-28 Hillside Avenue,
Jamaica, NY 11435

Sample ID		NYSDEC TOGS Standards and Guidance Values - GA	RIMW-1		RIMW-2		RIMW-3		RIMW-4		RIMW-5		RIMW-6		DUPLICATE		EQUIPMENT BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK		EQUIP BLANK	
Phenoix ID			CM70875		CM70876		CM70871		CM70868		CM70874		CM70870		CM70869		CM70872		CM70877		CM48192		CM4820S		CM50473		CM50488		CM61834		CM61835		CM77060	
Sampling Date			10/25/22		10/25/22		10/24/22		10/24/22		10/25/22		10/24/22		10/24/22		10/24/22		10/25/22		09/29/2022		09/30/2022		10/4/22		10/4/22		10/6/22		10/7/22		11/2/22	
Client Matrix			GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		GROUND WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Compound	CAS Number		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Metals, Dissolved			mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		ng/L		ng/L		ng/L	
Dilution Factor			Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved		Dissolved	
Aluminum	7429-90-5	0.1	**0.016**	0.011	**0.02**	0.011	**0.013**	0.011	**0.03**	0.011	**0.013**	0.011	**0.044**	0.011	**0.044**	0.011	<0.011	0.011	<0.011	0.011	<0.020	0.02	<0.020	0.02	**0.021**	0.020	**0.144**	0.020	<0.020	0.020	<0.020	0.020	**0.099**	0.020
Antimony	7440-36-0	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005
Arsenic	7440-38-2	0.025	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004	<0.004	0.004
Barium	7440-39-3	1	**0.156**	0.002	**0.12**	0.002	**0.096**	0.002	**0.081**	0.002	**0.061**	0.002	**0.111**	0.002	**0.081**	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	**0.001**	0.002	<0.002	0.002	<0.002	0.002	**0.003**	0.002
Beryllium	7440-41-7	0.003	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001
Cadmium	7440-43-9	0.005	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001
Calcium	7440-70-2	~	**75**	0.01	**84.8**	0.01	**83**	0.01	**70.7**	0.01	**36.5**	0.01	**70.7**	0.01	**69.7**	0.01	**0.53**	0.01	**0.85**	0.01	**0.053**	0.01	**0.036**	0.01	**0.199**	0.010	**1.42**	0.010	**0.599**	0.010	**0.553**	0.010	**0.778**	0.010
Chromium	7440-47-3	0.05	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	**0.002**	0.001	**0.004**	0.001	**0.001**	0.001	**0.002**	0.001	**0.003**	0.001
Cobalt	7440-48-4	~	<0.001	0.001	**0.003**	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.002	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002
Copper	7440-50-8	0.2	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005
Thallium	7439-89-6	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	**0.012**	0.01	<0.010	0.01	**0.15**	0.010	**0.393**	0.010	**0.059**	0.010	**0.018**	0.010	**0.154**	0.010
Iron	7439-92-1	0.3	**0.159**	0.011	**0.52**	0.011	<0.011	0.011	**0.015**	0.011	**0.018**	0.011	**0.018**	0.011	<0.011	0.011	<0.011	0.011	<0.011	0.011	<0.002	0.002	<0.002	0.002	<0.002	0.002	**0.003**	0.002	<0.002	0.002	<0.002	0.002	**0.002**	0.002
Lead	7439-95-4	0.025	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.010	0.01	<0.010	0.01	**0.014**	0.010	**0.089**	0.010	**0.091**	0.010	**0.089**	0.010	**0.161**	0.010
Magnesium	7439-96-5	35	**18.5**	0.01	**20.6**	0.01	**24.1**	0.01	**28.3**	0.01	**9.78**	0.01	**25**	0.01	**28.1**	0.01	**0.09**	0.01	**0.16**	0.01	<0.001	0.001	<0.001	0.001	**0.001**	0.001	**0.011**	0.001	**0.002**	0.001	**0.002**	0.001	**0.006**	0.001
Manganese	7439-97-6	0.3	**1.86**	0.001	**1.83**	0.001	**0.542**	0.001	**0.148**	0.001	**0.53**	0.001	**0.346**	0.001	**0.156**	0.001	**0.003**	0.001	**0.004**	0.001	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002
Mercury	7440-02-0	0.0007	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.001	0.001	**0.002**	0.001	**0.001**	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	**0.002**	0.001
Nickel	7440-09-7	0.1	**0.002**	0.001	**0.006**	0.001	**0.003**	0.001	**0.004**	0.001	**0.002**	0.001	**0.007**	0.001	**0.004**	0.001	<0.001	0.001	<0.001	0.001	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	**0.2**	0.1	**0.1**	0.1	**0.2**	0.1
Potassium	7782-49-2	~	**5.8**	0.1	**5**	0.1	**7.8**	0.1	**2.9**	0.1	**3.5**	0.1	**5.5**	0.1	**3**	0.1	<0.1	0.1	**0.2**	0.1	<0.010	0.01	<0.010	0.01	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010
Selenium	7440-22-4	0.01	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001
Silver	7440-23-5	0.05	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.10	0.1	<0.10	0.1	**0.13**	0.10	**0.17**	0.10	**0.17**	0.10	<0.10	0.10	**0.2**	0.10
Sodium	7440-28-0	20	**135**	1.1	**126**	1.1	**131**	1.1	**117**	1.1	**172**	1.1	**120**	1.1	**120**	1.1	**0.13**	0.11	**0.15**	0.11	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.001	0.001
Vanadium	7440-62-2	~	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	**0.001**	0.002	<0.002	0.002	<0.002	0.002	**0.002**	0.002
Zinc	7440-66-6	5	<0.002	0.002	**0.003**	0.002	**0.003**	0.002	**0.009**	0.002	**0.002**	0.002	<0.002	0.002	**0.008**	0.002	**0.009**	0.002	**0.012**	0.002	<0.004	0.004	<0.004	0.004	**0.002**	0.004	**0.004**	0.004	<0.004	0.004	<0.004	0.004	**0.004**	0.004

NOTES:
Bold Value = Laboratory Detection
Yellow Highlight = Exceedance of NYSDEC TOGS Guidance Value
RL is the Laboratory Reporting Limit
~ = this indicates that no regulatory limit has been established for this analyte

Table 10

Miscellaneous and Inorganics in groundwater (ng/L)

EPA Method: 537 and 9010 9012

148-28 Hillside Avenue, Jamaica, NY 11435

Sample ID Phenoix ID Sampling Date Client Matrix		NYSDEC Groundwater Screening Level	RIMW-1 CM70875 10/25/22 GROUND WATER		RIMW-2 CM70876 10/25/22 GROUND WATER		RIMW-3 CM70871 10/24/22 GROUND WATER		RIMW-4 CM70868 10/24/22 GROUND WATER		RIMW-5 CM70874 10/25/22 GROUND WATER		RIMW-6 CM70870 10/24/22 GROUND WATER		DUPLICATE CM70869 10/24/22 GROUND WATER		EQUIPMENT BLANK CM70872 10/24/22 WATER		EQUIP BLANK CM70877 10/25/22 WATER		EQUIP BLANK CM48192 09/29/2022 WATER		EQUIP BLANK CM48205 09/30/2022 WATER		EQUIP BLANK CM50473 10/4/22 WATER		EQUIP BLANK CM50488 10/4/22 WATER		EQUIP BLANK CM61834 10/6/22 WATER		EQUIP BLANK CM61835 10/7/22 WATER		EQUIP BLANK CM77060 11/2/22 WATER	
Compound	CAS Number		Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Miscellaneous/Inorganics			ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L		ng/L	
Dilution Factor																																		
1H,1H,2H,2H-Perfluorodecanesulfonic acid	39108-34-4	~	<9.26	9.26	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
1H,1H,2H,2H-Perfluorooctanesulfonic acid	27619-97-2	~	<23.1	23.1	<4.81	4.81	<4.81	4.81	<4.81	4.81	<4.73	4.73	**305**	24.0	<4.81	4.81	<27.2	27.2	<5.43	5.43	<5.68	5.68	<6.25	6.25	<5.21	5.21	<6.25	6.25	<4.81	4.81	<4.81	4.81		
NEtFOSAA	2991-50-6	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
NMeFOSAA	2355-31-9	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluoro-n-butanoic acid (PFBA)	375-22-4	~	**8.26**	1.85	**7.27**	1.92	**7.77**	1.92	**9.89**	1.92	**10.1**	1.89	<9.62	9.62	**10.6**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorobutanesulfonic acid (PFBS)	375-73-5	~	**3.57**	1.85	**4.84**	1.92	**7.99**	1.92	**11.1**	1.92	**8.01**	1.89	<9.62	9.62	**10**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorodecanoic acid (PFDA)	335-76-2	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorododecanoic acid (PFDoA)	307-55-1	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluoroheptanoic acid (PFHpA)	375-85-9	~	**11.5**	1.85	**7.39**	1.92	**8.7**	1.92	**12.2**	1.92	**8.73**	1.89	<9.62	9.62	**10.2**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	~	**6.75**	1.85	**3.43**	1.92	**10.4**	1.92	**9.61**	1.92	**6.58**	1.89	<9.62	9.62	**8.62**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorohexanoic acid (PFHxA)	307-24-4	~	**22.1**	1.85	**8.58**	1.92	**11.6**	1.92	**16.8**	1.92	**15.1**	1.89	<9.62	9.62	**15.2**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorononanoic acid (PFNA)	375-95-1	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	10	**5.28**	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	**6.56**	1.89	<9.62	9.62	**1.98**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorooctanoic acid (PFOA)	335-67-1	10	**24.2**	1.85	**19.7**	1.92	**19.1**	1.92	**26.5**	1.92	**24.3**	1.89	**18.6**	9.62	**29**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluoropentanoic acid (PFPeA)	2706-90-3	~	**21.8**	1.85	**11**	1.92	**14.5**	1.92	**16.7**	1.92	**15.4**	1.89	<9.62	9.62	**16.8**	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorotetradecanoic acid (PFTA)	376-06-7	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	**4.58**	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Perfluoroundecanoic acid (PFUnA)	2058-94-8	~	<1.85	1.85	<1.92	1.92	<1.92	1.92	<1.92	1.92	<1.89	1.89	<9.62	9.62	<1.92	1.92	<2.17	2.17	<2.17	2.17	<2.27	2.27	<2.50	2.5	<2.08	2.08	<2.50	2.5	<1.92	1.92	<1.92	1.92		
Miscellaneous/Inorganics			mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Total Cyanide	57-12-5	0.2	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010													<0.010	0.010

NOTES:

Bold Value = Laboratory Detection

Yellow Highlight = Exceedance of NYSDEC Groundwater Screening level

RL is the Laboratory Reporting Limit

"~ = this indicates that no regulatory limit has been established for this analyte

Table 11

Volatile Organic Compounds in Soil Vapor (ug/m3)

148-28 Hillside Avenue, Jamaica, NY 11435

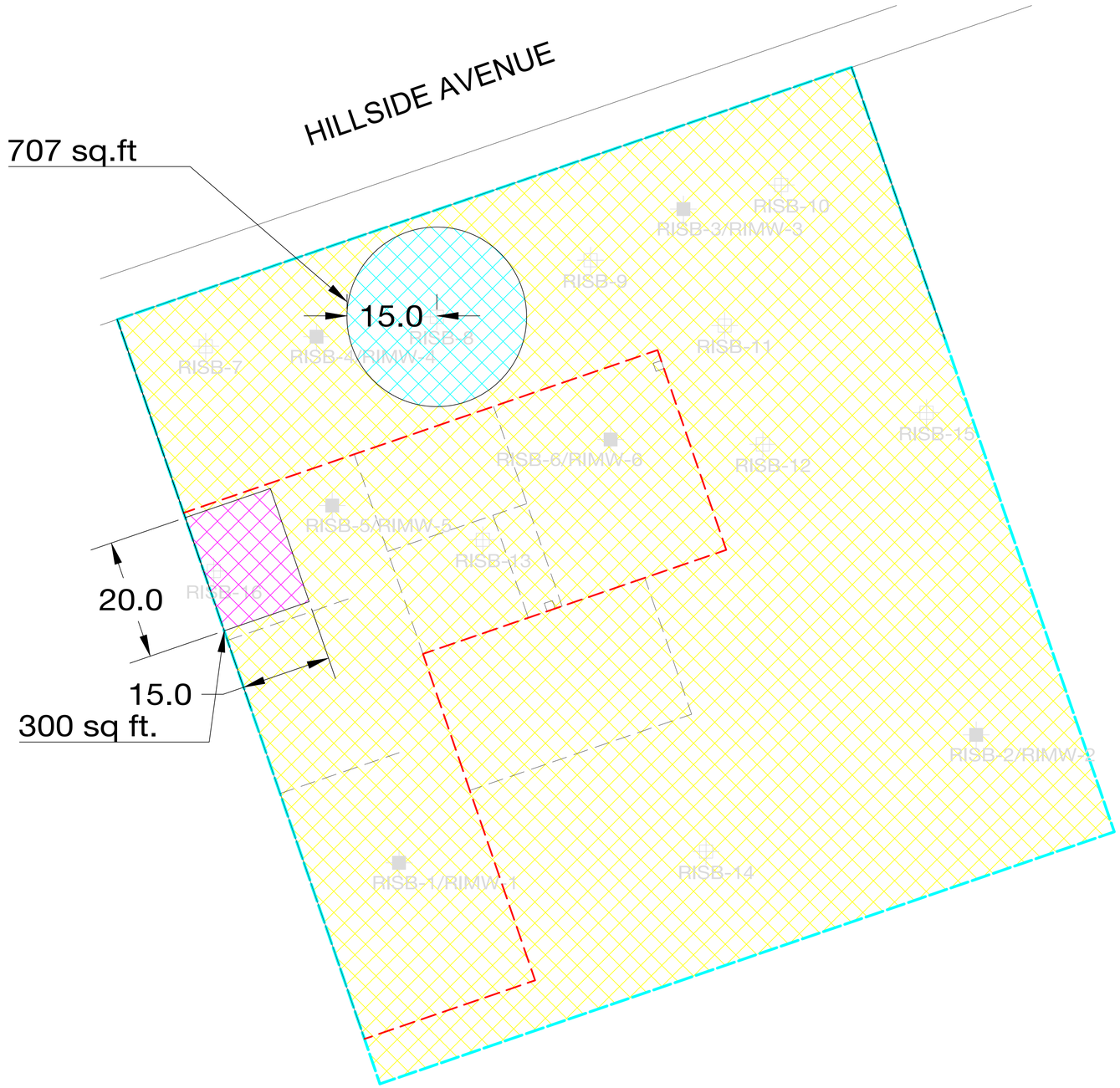
Sample ID		RISV-1		RISV-2		R1SV-3		R1SV-4		RISV-5	
York ID		CM48173		CM48174		CM49181		CM49182		CM48175	
Sampling Date		9/27/22		9/27/22		10/3/22		10/3/22		9/27/22	
Client Matrix		AIR		AIR		AIR		AIR		AIR	
Compound	CAS Number	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Volatile Organics By EPA TO15 Full List		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3	
Dilution Factor											
1,1,1,2-Tetrachloroethane	630-20-6	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,1-Trichloroethane	71-55-6	< 1.00	1.00	**3.7**	1.00	**1.12**	1.00	< 1.00	1.00	**10.2**	1.00
1,1,2,2-Tetrachloroethane	79-34-5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1,2-Trichloroethane	79-00-5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethane	75-34-3	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,1-Dichloroethene	75-35-4	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20
1,2,4-Trichlorobenzene	120-82-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2,4-Trimethylbenzene	95-63-6	**4.69**	1.00	**10.7**	1.00	< 1.00	1.00	**5.45**	1.00	**10.8**	1.00
1,2-Dibromoethane(EDB)	106-93-4	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorobenzene	95-50-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichloroethane	107-06-2	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-dichloropropane	78-87-5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,2-Dichlorotetrafluoroethane	76-14-2	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,3,5-Trimethylbenzene	108-67-8	**1.27**	1.00	**2.5**	1.00	**2.1**	1.00	**1.44**	1.00	**2.5**	1.00
1,3-Butadiene	106-99-0	< 1.00	1.00	**15.5**	1.00	**37.6**	1.00	**17.4**	1.00	**63.2**	1.00
1,3-Dichlorobenzene	541-73-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,4-Dichlorobenzene	106-46-7	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
1,4-Dioxane	123-91-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
2-Hexanone(MBK)	591-78-6	**2.21**	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
4-Ethyltoluene	622-96-8	**4.33**	1.00	**8.99**	1.00	**1.77**	1.00	**4.51**	1.00	**8.99**	1.00
4-Isopropyltoluene	99-87-6	< 1.00	1.00	< 1.00	1.00	**1.61**	1.00	< 1.00	1.00	< 1.00	1.00
4-Methyl-2-pentanone(MIBK)	108-10-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	**2.07**	1.00
Acetone	67-64-1	**39.2**	1.00	**73.4**	1.00	**49.6**	1.00	**61.2**	1.00	**143**	15.0
Acrylonitrile	107-13-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Benzene	71-43-2	**3.48**	1.00	**8.05**	1.00	**11.8**	1.00	**5.75**	1.00	**17.2**	1.00
Benzyl chloride	100-44-7	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromodichloromethane	75-27-4	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromoform	75-25-2	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Bromomethane	74-83-9	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Carbon Disulfide	75-15-0	**2.04**	1.00	**3.61**	1.00	**15**	1.00	**4.67**	1.00	**13.1**	1.00
Carbon Tetrachloride	56-23-5	**0.31**	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20
Chlorobenzene	108-90-7	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	**3.86**	1.00	< 1.00	1.00
Chloroethane	75-00-3	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Chloroform	67-66-3	**12.2**	1.00	**4.98**	1.00	**1.05**	1.00	< 1.00	1.00	< 1.00	1.00
Chloromethane	74-87-3	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	**1.1**	1.00
Cis-1,2-Dichloroethene	156-59-2	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	**0.24**	0.20	< 0.20	0.20
cis-1,3-Dichloropropene	10061-01-5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Cyclohexane	110-82-7	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Dibromochloromethane	124-48-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Dichlorodifluoromethane	75-71-8	< 1.00	1.00	**2.18**	1.00	**3.45**	1.00	< 1.00	1.00	**6.67**	1.00
Ethanol	64-17-5	**19.8**	1.00	< 1.00	1.00	**6.14**	1.00	< 1.00	1.00	**12.1**	1.00
Ethyl acetate	141-78-6	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Ethylbenzene	100-41-4	**2.89**	1.00	**5.6**	1.00	**4.11**	1.00	**3.29**	1.00	**6.12**	1.00
Heptane	142-82-5	**2.77**	1.00	**21.5**	1.00	**16**	1.00	**13.6**	1.00	**68.4**	1.00
Hexachlorobutadiene	87-68-3	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Hexane	110-54-3	**2.93**	1.00	**4.68**	1.00	**23.4**	1.00	**11.6**	1.00	**71.5**	1.00
Isopropylalcohol	67-63-0	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	**2.51**	1.00	< 1.00	1.00
Isopropylbenzene	98-82-8	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
m,p-Xylene	179601-23-1	**11.4**	1.00	**22.1**	1.00	**15.2**	1.00	**12.7**	1.00	**23.7**	1.00
Methyl Ethyl Ketone	78-93-3	**7.87**	1.00	**6.51**	1.00	**8.61**	1.00	**12.1**	1.00	**29.8**	1.00
Methyl tert-butyl ether(MTBE)	1634-04-4	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Methylene Chloride	75-09-2	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00	< 3.00	3.00
n-Butylbenzene	104-51-8	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
o-Xylene	95-47-6	**3.71**	1.00	**7.38**	1.00	**5.68**	1.00	**4.2**	1.00	**7.33**	1.00
Propylene	115-07-1	< 1.00	1.00	< 1.00	1.00	**273**	15.0	< 1.00	1.00	< 1.00	1.00
sec-Butylbenzene	135-98-8	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Styrene	100-42-5	< 1.00	1.00	**1.2**	1.00	**1.09**	1.00	< 1.00	1.00	**1.09**	1.00
Tetrachloroethene	127-18-4	**44.3**	0.25	**1,760**	2.50	**231**	0.25	**136**	0.25	**800**	3.75
Tetrahydrofuran	109-99-9	**3.8**	1.00	< 1.00	1.00	**3.15**	1.00	**3.21**	1.00	< 1.00	1.00
Toluene	108-88-3	**9.3**	1.00	**19**	1.00	**15.9**	1.00	**12.8**	1.00	**26.3**	1.00
Trans-1,2-Dichloroethene	156-60-5	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
trans-1,3-Dichloropropene	10061-02-6	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Trichloroethene	79-01-6	**0.38**	0.20	**1.33**	0.20	**1.23**	0.20	**2.08**	0.20	**11**	0.20
Trichlorofluoromethane	75-69-4	**1.9**	1.00	**1.85**	1.00	**1.61**	1.00	**2.71**	1.00	< 1.00	1.00
Trichlorotrifluoroethane	76-13-1	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00	< 1.00	1.00
Vinyl Chloride	75-01-4	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20	< 0.20	0.20

NOTES:

Bold Value = Laboratory Detection

RL is the Laboratory Reporting Limit

Figures



Notes

Legend

	Site Boundary
	Former Building Boundary
	Former Petroleum Storage Facilities
	Former Storm and Floor Drains
MW-1	Monitoring Well
SB-1	Soil Boring
SV-1	Soil Vapor Point
EP-1	End Point
	Foundation Excavation (see SOE)
	Cellar Excavation to 13ft bgs
	Approximate Hotspot Excavation to 15ft
	Approximate Hotspot Excavation to 8ft
	Contaminated Soil Excavation to 2 ft

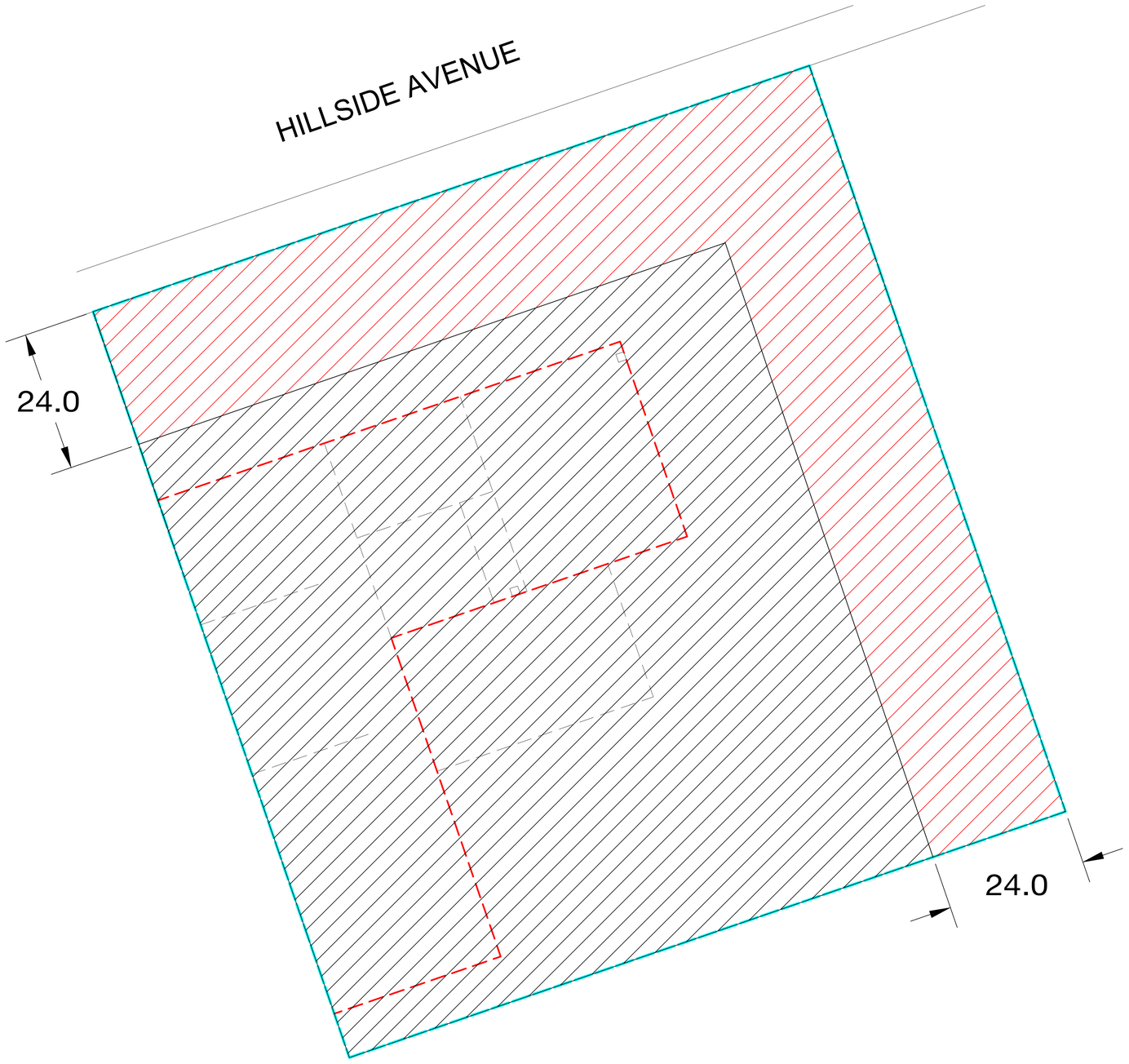
Title
Track 2 Cleanup Depths

No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
200 Broadhollow Road-Suite 207
Melville, New York 11747

Project Name and Address
C241199
148-28 Hillside AVE
Jamaica, NY
11435

Project: 8346-JANY	Figure: 4
Date: 2/3/2023	
Scale: As Noted	



Notes

Legend

	Site Boundary
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	Former Petroleum Storage Facilities
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	Approximate Hotspot Excavation to 15ft
	Approximate Hotspot Excavation to 8ft
	Contaminated Soil Excavation to 2 ft

Title
Development Excavation Plan

No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants

200 Broadhollow Road-Suite 207
Melville, New York 11747

Project Name and Address

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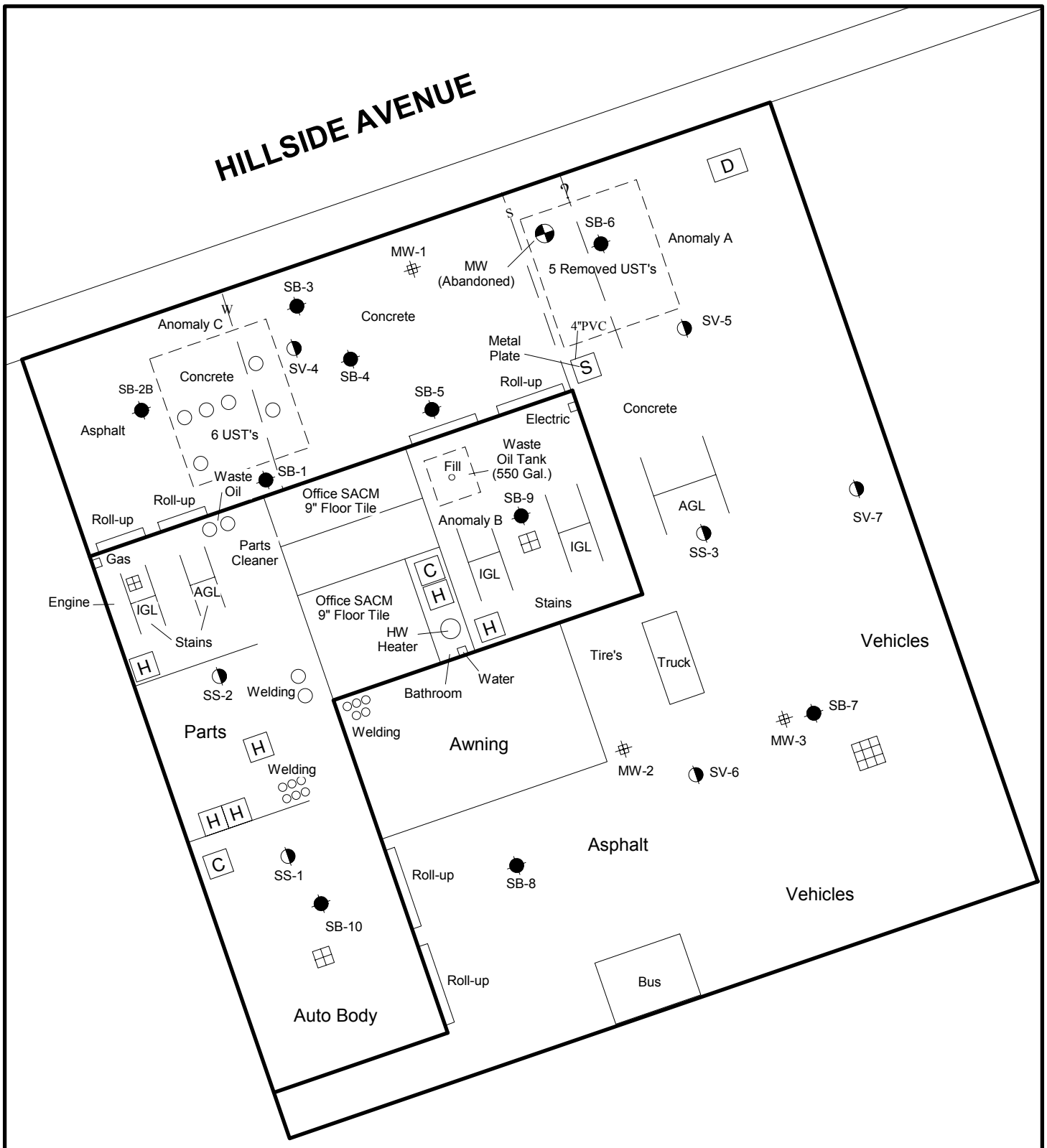
Project: 8346-JANY	Figure: 4
Date: 2/3/2023	
Scale: As Noted	



Legend

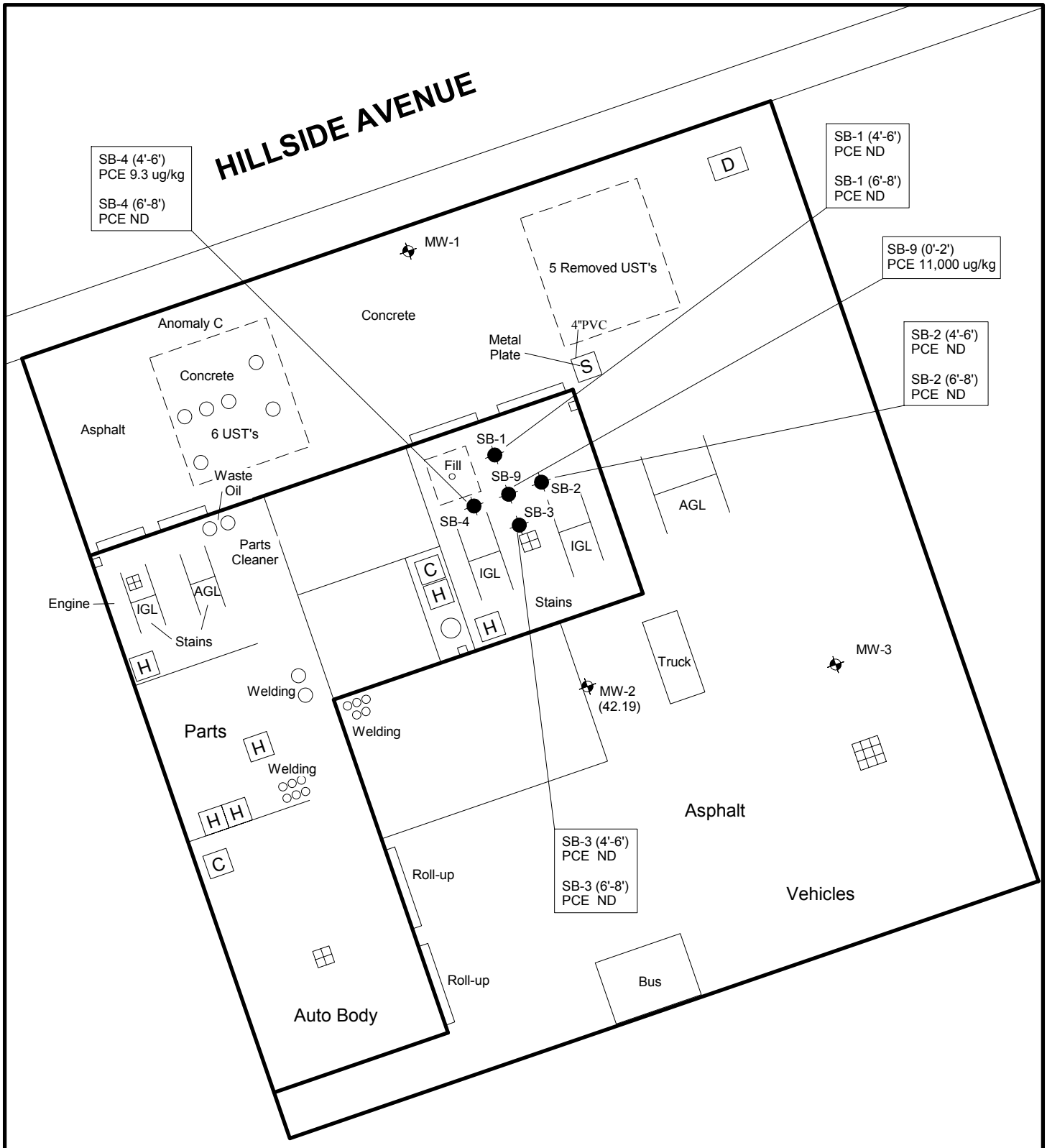
- Subsurface Utility
- SB-1 — Soil Boring Sampling Location
- SS-1 — Soil Vapor / Sub-Slab Soil Vapor Sampling Location
- MW-1 — Groundwater Monitoring Well Location

N

Sampling Diagram

Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS
110 Main Street, Suite 103, Port Washington, New York 11050
Tel: 516-441-5800 Fax: 516-441-5511

Project No.:8346-JANY	Figure No.: 2
Date: 12/30/2016	Scale: Not To Scale



Legend

SB-1 Soil Boring

MW-1 Groundwater Monitoring Well

PCE Delineration Soil Borings, SB-1 through SB-4 were collected in 2017

ND - Not Detected

N

PCE Delineation Results

Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS
110 Main Street, Suite 103, Port Washington, New York 11050
Tel: 516-441-5800 Fax: 516-441-5511

Project No.:8346-JANY	Figure No.: 3
Date: 05/01/2017	Scale: Not To Scale

Notes

Legend

	Site Boundary
	Former Building Boundary
	Former Petroleum Storage Facilities
	Former Storm and Floor Drains
MW-1	Monitoring Well
SB-1	Soil Boring
SV-1	Soil Vapor Point

Title

SB/MW Sampling Diagram

No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants

200 Broadhollow Road-Suite 207
Melville, New York 11747

Project Name and Address

C241199
148-28 Hillside AVE
Jamaica, NY
11435

Project	Figure
8346-JANY	4
Date: 11/30/2022	
Scale: As Noted	

Notes

Legend

	Site Boundary
	Former Building Boundary
	Former Petroleum Storage Facilities
	Former Storm and Floor Drains
MW-1	Monitoring Well
SB-1	Soil Boring
SV-1	Soil Vapor Point

Title

SV Sampling Diagram

No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
200 Broadhollow Road-Suite 207
Melville, New York 11747

Project Name and Address

C241199
148-28 Hillside AVE
Jamaica, NY
11435

Project	Figure
8346-JANY	5
Date: 11/30/2022	
Scale: As Noted	

RISB-4 (1-2)				
Compound	**10/03/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
VOCs				
Benzene	0.44	0.06	4.8	44
Toluene	1.1	0.7	100	500
Total Xylenes	1.93	1.6	100	500
RISB-4 (2-3)				
VOCs				
Benzene	3.1	0.06	4.8	44
Ethylbenzene	1.4	1	41	390
Toluene	6.9	0.7	100	500
Total Xylenes	11.1	1.6	100	500

RISB-7 (1-2)				
Compound	**10/03/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
Metals				
Mercury	3.24	0.73	0.81	2.8

RISB-16 (6-7)				
Compound	**11/02/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
Metals				
Arsenic	42.7	16	16	16
Cadmium	11	2.5	4.3	9.3
Lead	5700	63	400	1000
PCBs				
PCB-1260	13	~	~	1
VOCs				
1,1-Dichloroethene	9	0.33	100	500
1,2,4-Trimethylbenzene	85	3.6	52	190
1,3,5-Trimethylbenzene	39	8.4	52	190
Benzene	5.8	0.06	4.8	44
cis-1,2-Dichloroethene	3200	0.25	100	500
Ethylbenzene	28	1	41	390
Naphthalene	32	12	100	500
n-Propylbenzene	13	3.9	100	500
Tetrachloroethene	7800	1.3	19	150
Toluene	130	0.7	100	500
Total Xylenes	162	1.6	100	500
trans-1,2-Dichloroethene	5.6	0.19	100	500
Trichloroethene	430	0.47	21	200
Vinyl chloride	45	0.02	0.9	13
SVOCs				
Benzo(a)pyrene	2.1	22	1	1
Chrysene	2.5	1	3.9	56
Naphthalene	24	12	100	500

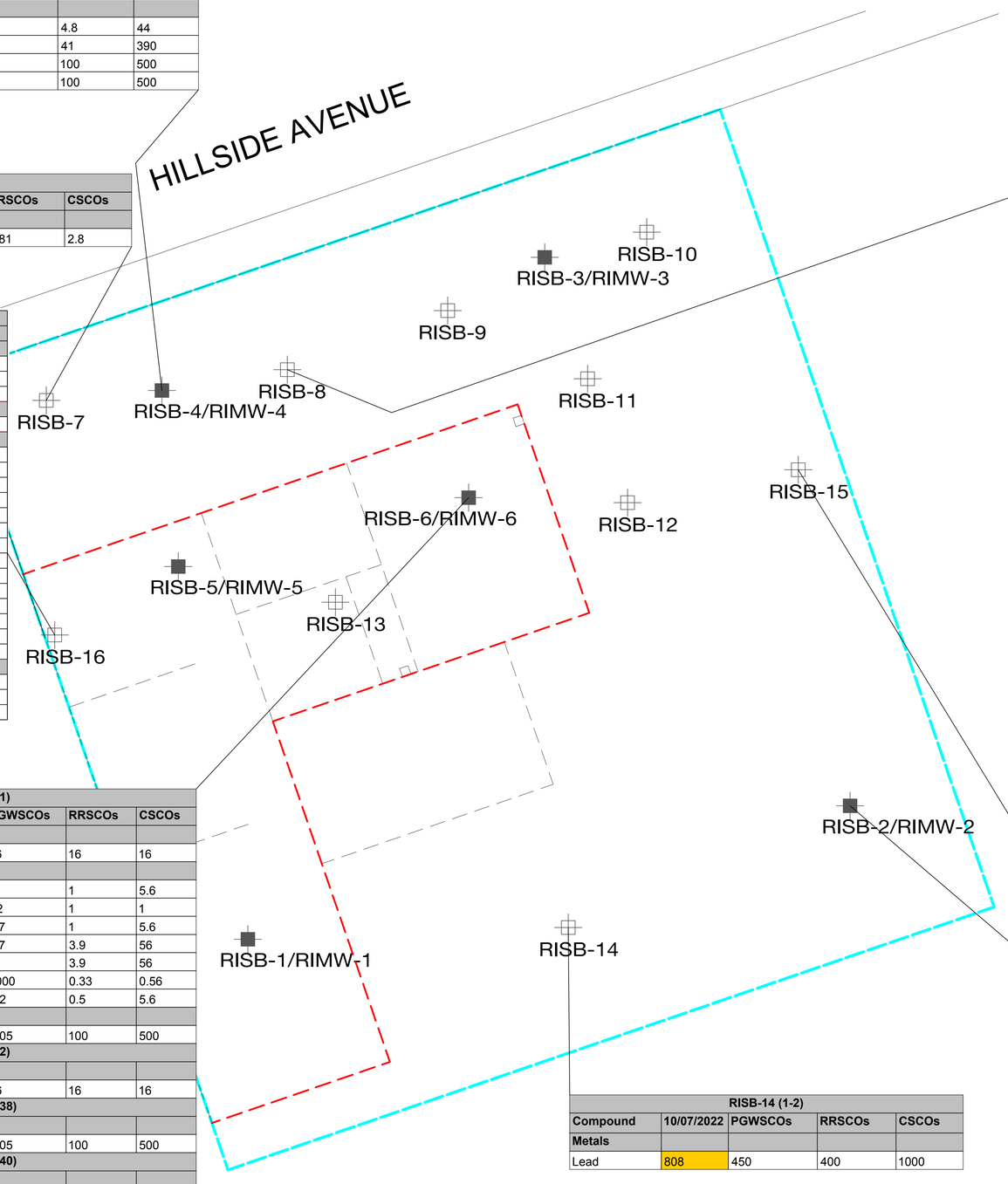
RISB-6 (0-1)				
Compound	**09/29/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
Metals				
Arsenic	26.7	16	16	16
SVOCs				
Benz(a)anthracene	5.6	1	1	5.6
Benzo(a)pyrene	8.9	22	1	1
Benzo(b)fluoranthene	5.6	1.7	1	5.6
Benzo(k)fluoranthene	5	1.7	3.9	56
Chrysene	8.8	1	3.9	56
Dibenz(a,h)anthracene	1.3	1000	0.33	0.56
Indeno(1,2,3-cd)pyrene	5	8.2	0.5	5.6
VOCs				
Acetone	0.056	0.05	100	500
RISB-6 (1-2)				
Metals				
Arsenic	27.6	16	16	16
RISB-6 (37-38)				
VOCs				
Acetone	0.13	0.05	100	500
RISB-6 (38-40)				
VOCs				
Acetone	0.15	0.05	100	500

RISB-8 (3-5)				
Compound	**10/04/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
Metals				
Zinc	3150	2480	10000	10000
RISB-8 (5-7)				
VOCs				
1,2,4-Trimethylbenzene	8.5	3.6	52	190
Benzene	0.96	0.06	4.8	44
Ethylbenzene	3.1	1	41	390
Methyl t-butyl ether (MTBE)	14	0.93	100	500
Toluene	7.2	0.7	100	500
Total Xylenes	16.4	1.6	100	500
RISB-8 (9-10)				
VOCs				
Methyl t-butyl ether (MTBE)	1.1	0.93	100	500
RISB-8 (10-12)				
VOCs				
1,2,4-Trimethylbenzene	61	3.6	52	190
1,3,5-Trimethylbenzene	19	8.4	52	190
Benzene	7.7	0.06	4.8	44
Ethylbenzene	21	1	41	390
Methyl t-butyl ether (MTBE)	94	0.93	100	500
Naphthalene	14	12	100	500
n-Propylbenzene	8.7	3.9	100	500
Toluene	57	0.7	100	500
Total Xylenes	118	1.6	100	500
RISB-8 (20-22)				
VOCs				
1,2,4-Trimethylbenzene	29	3.6	52	190
1,3,5-Trimethylbenzene	9.2	8.4	52	190
Benzene	5.5	0.06	4.8	44
Ethylbenzene	9.4	1	41	390
Methyl t-butyl ether (MTBE)	65	0.93	100	500
n-Propylbenzene	4	3.9	100	500
Toluene	26	0.7	100	500
Total Xylenes	50	1.6	100	500
RISB-8 (22-25)				
VOCs				
Benzene	0.15	0.06	4.8	44
RISB-8 (25-28)				
VOCs				
Benzene	0.45	0.06	4.8	44
Methyl t-butyl ether (MTBE)	4.3	0.93	100	500
Toluene	2.4	0.7	100	500
Total Xylenes	3.23	1.6	100	500
RISB-8 (30-33)				
VOCs				
Acetone	0.16	0.05	100	500
Benzene	0.1	0.06	4.8	44
Methyl t-butyl ether (MTBE)	8.1	0.93	100	500
Toluene	0.8	0.7	100	500
Total Xylenes	1.97	1.6	100	500

RISB-15 (44-45)				
Compound	**09/29/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
VOCs				
Acetone	0.059	0.05	100	500

RISB-14 (1-2)				
Compound	**10/07/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
Metals				
Lead	808	450	400	1000

RISB-2 (1-2)				
Compound	**10/07/2022**	**PGWSCOs**	**RRSCOs**	**CSCOs**
Metals				
Lead	458	450	400	1000
SVOCs				
Benz(a)anthracene	4.1	1	1	5.6
Benzo(a)pyrene	3.8	22	1	1
Benzo(b)fluoranthene	4.4	1.7	1	5.6
Benzo(k)fluoranthene	2.6	1.7	3.9	56
Chrysene	4.5	1	3.9	56
Dibenz(a,h)anthracene	0.69	1000	0.33	0.56
Indeno(1,2,3-cd)pyrene	2.8	8.2	0.5	5.6



Notes

Units: mg/kg

Yellow denotes an exceedance of protection of groundwater soil cleanup objectives

Orange denotes an exceedance of restricted residential soil cleanup objectives

Red denotes an exceedance of commercial soil cleanup objectives

Legend

	Site Boundary
	Former Building Boundary
	Former Petroleum Storage Facilities
	Former Storm and Floor Drains
MW-1	Monitoring Well
SB-1	Soil Boring
SV-1	Soil Vapor Point

Title

Soil Exceedance Spider Diagram

No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
200 Broadhollow Road-Suite 207
Melville, New York 11747

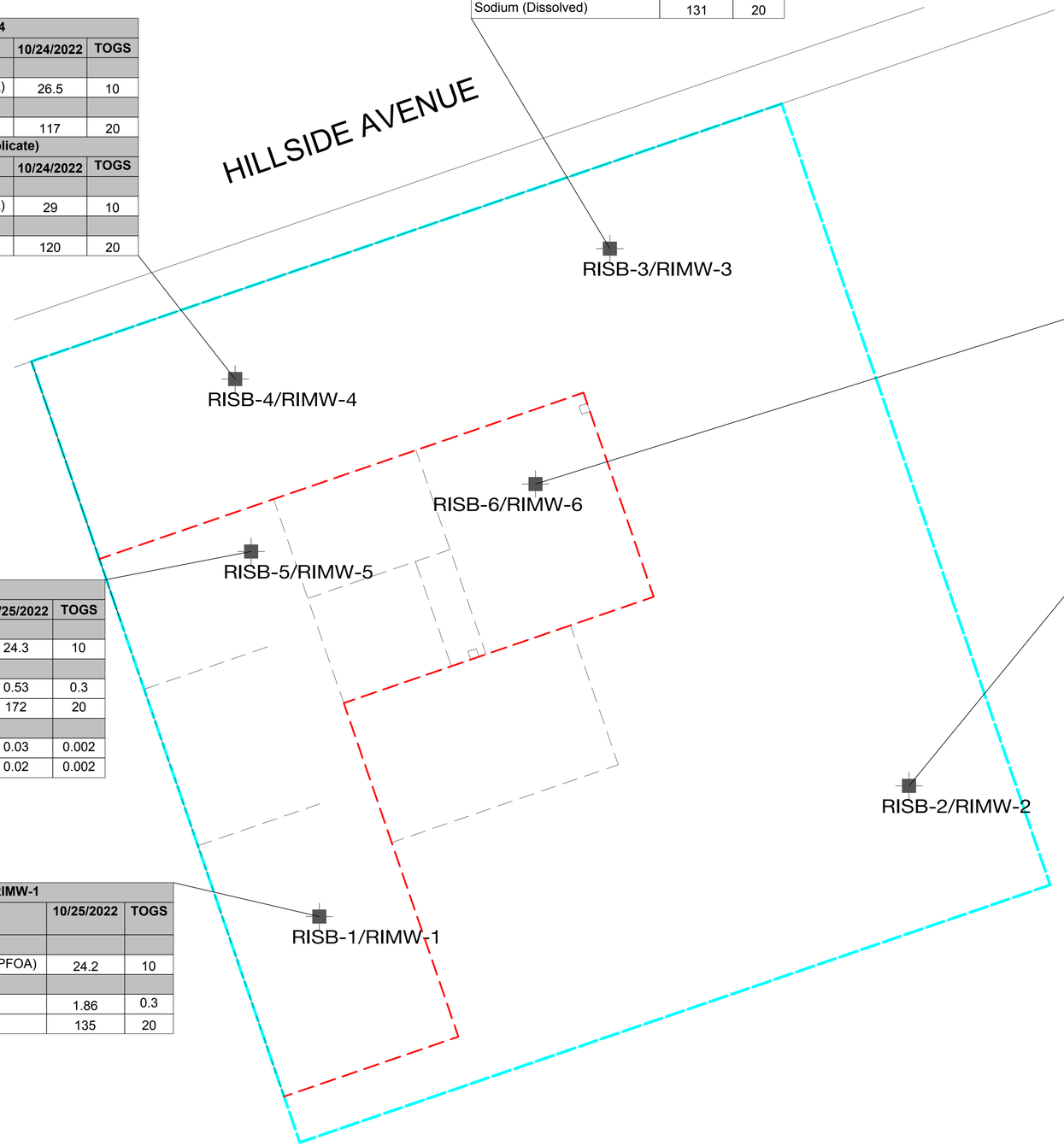
Project Name and Address

C241199
148-28 Hillside AVE
Jamaica, NY
11435

Project	Figure
8346-JANY	6
Date: 11/30/2022	
Scale: As Noted	

hillside_ave_diagram_fi

1/15/2004



RIMW-3		
Compound	**10/24/2022**	**TOGS**
PFAS		
Perfluorooctanoic acid (PFOA)	19.1	10
Metals		
Manganese (Dissolved)	0.542	0.3
Sodium (Dissolved)	131	20

RIMW-4		
Compound	**10/24/2022**	**TOGS**
PFAS		
Perfluorooctanoic acid (PFOA)	26.5	10
Metals		
Sodium (Dissolved)	117	20

RIMW-4(Duplicate)		
Compound	**10/24/2022**	**TOGS**
PFAS		
Perfluorooctanoic acid (PFOA)	29	10
Metals		
Sodium (Dissolved)	120	20

RIMW-6		
Compound	**10/24/2022**	**TOGS**
PFAS		
Perfluorooctanoic acid (PFOA)	18.6	10
Metals		
Manganese (Dissolved)	0.346	0.3
Sodium (Dissolved)	120	20

RIMW-5		
Compound	**10/25/2022**	**TOGS**
PFAS		
Perfluorooctanoic acid (PFOA)	24.3	10
Metals		
Manganese (Dissolved)	0.53	0.3
Sodium (Dissolved)	172	20
SVOCs		
Benz(a)anthracene	0.03	0.002
Chrysene	0.02	0.002

RIMW-2		
Compound	**10/25/2022**	**TOGS**
PFAS		
Perfluorooctanoic acid (PFOA)	19.7	10
Metals		
Iron (Dissolved)	0.52	0.3
Manganese (Dissolved)	1.83	0.3
Sodium (Dissolved)	126	20

RIMW-1		
Compound	**10/25/2022**	**TOGS**
PFAS		
Perfluorooctanoic acid (PFOA)	24.2	10
Metals		
Manganese (Dissolved)	1.86	0.3
Sodium (Dissolved)	135	20

Notes

Units: mg/L
PFAS Units: ng/L

Values denote an exceedance of NYSDEC Technical and Operational Guidance Series (1.1.1)

Legend

	Site Boundary
	Former Building Boundary
	Former Petroleum Storage Facilities
	Former Storm and Floor Drains
MW-1	Monitoring Well
SB-1	Soil Boring
SV-1	Soil Vapor Point

Title

GW Exceedance Spider Diagram

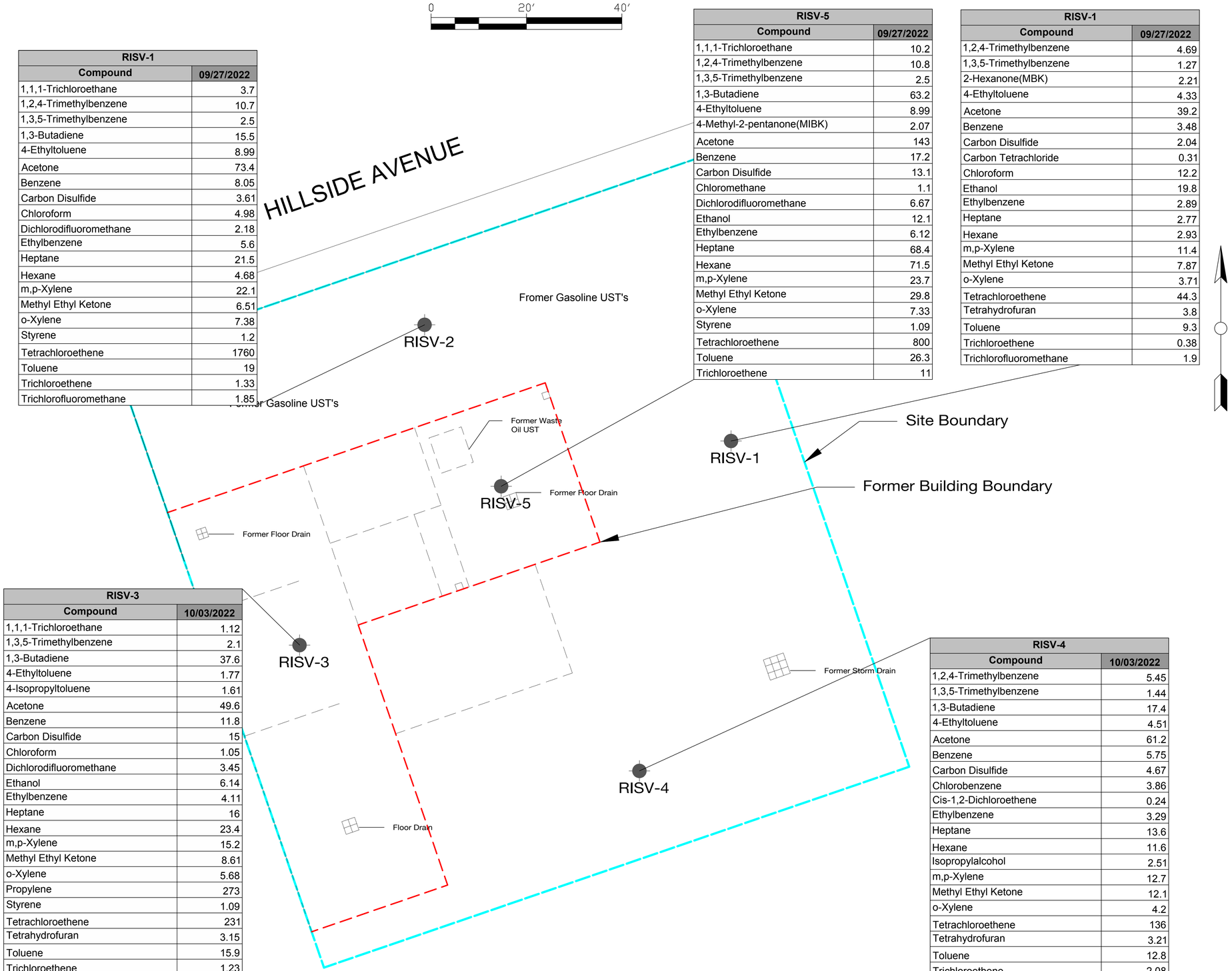
No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
200 Broadhollow Road-Suite 207
Melville, New York 11747

Project Name and Address

C241199
148-28 Hillside AVE
Jamaica, NY
11435

Project	Figure
8346-JANY	7
Date: 11/30/2022	
Scale: As Noted	



RISV-1	
Compound	09/27/2022
1,1,1-Trichloroethane	3.7
1,2,4-Trimethylbenzene	10.7
1,3,5-Trimethylbenzene	2.5
1,3-Butadiene	15.5
4-Ethyltoluene	8.99
Acetone	73.4
Benzene	8.05
Carbon Disulfide	3.61
Chloroform	4.98
Dichlorodifluoromethane	2.18
Ethylbenzene	5.6
Heptane	21.5
Hexane	4.68
m,p-Xylene	22.1
Methyl Ethyl Ketone	6.51
o-Xylene	7.38
Styrene	1.2
Tetrachloroethene	1760
Toluene	19
Trichloroethene	1.33
Trichlorofluoromethane	1.85

RISV-5	
Compound	09/27/2022
1,1,1-Trichloroethane	10.2
1,2,4-Trimethylbenzene	10.8
1,3,5-Trimethylbenzene	2.5
1,3-Butadiene	63.2
4-Ethyltoluene	8.99
4-Methyl-2-pentanone(MIBK)	2.07
Acetone	143
Benzene	17.2
Carbon Disulfide	13.1
Chloromethane	1.1
Dichlorodifluoromethane	6.67
Ethanol	12.1
Ethylbenzene	6.12
Heptane	68.4
Hexane	71.5
m,p-Xylene	23.7
Methyl Ethyl Ketone	29.8
o-Xylene	7.33
Styrene	1.09
Tetrachloroethene	800
Toluene	26.3
Trichloroethene	11

RISV-1	
Compound	09/27/2022
1,2,4-Trimethylbenzene	4.69
1,3,5-Trimethylbenzene	1.27
2-Hexanone(MBK)	2.21
4-Ethyltoluene	4.33
Acetone	39.2
Benzene	3.48
Carbon Disulfide	2.04
Carbon Tetrachloride	0.31
Chloroform	12.2
Ethanol	19.8
Ethylbenzene	2.89
Heptane	2.77
Hexane	2.93
m,p-Xylene	11.4
Methyl Ethyl Ketone	7.87
o-Xylene	3.71
Tetrachloroethene	44.3
Tetrahydrofuran	3.8
Toluene	9.3
Trichloroethene	0.38
Trichlorofluoromethane	1.9

RISV-3	
Compound	10/03/2022
1,1,1-Trichloroethane	1.12
1,3,5-Trimethylbenzene	2.1
1,3-Butadiene	37.6
4-Ethyltoluene	1.77
4-Isopropyltoluene	1.61
Acetone	49.6
Benzene	11.8
Carbon Disulfide	15
Chloroform	1.05
Dichlorodifluoromethane	3.45
Ethanol	6.14
Ethylbenzene	4.11
Heptane	16
Hexane	23.4
m,p-Xylene	15.2
Methyl Ethyl Ketone	8.61
o-Xylene	5.68
Propylene	273
Styrene	1.09
Tetrachloroethene	231
Tetrahydrofuran	3.15
Toluene	15.9
Trichloroethene	1.23
Trichlorofluoromethane	1.61

RISV-4	
Compound	10/03/2022
1,2,4-Trimethylbenzene	5.45
1,3,5-Trimethylbenzene	1.44
1,3-Butadiene	17.4
4-Ethyltoluene	4.51
Acetone	61.2
Benzene	5.75
Carbon Disulfide	4.67
Chlorobenzene	3.86
Cis-1,2-Dichloroethene	0.24
Ethylbenzene	3.29
Heptane	13.6
Hexane	11.6
Isopropylalcohol	2.51
m,p-Xylene	12.7
Methyl Ethyl Ketone	12.1
o-Xylene	4.2
Tetrachloroethene	136
Tetrahydrofuran	3.21
Toluene	12.8
Trichloroethene	2.08
Trichlorofluoromethane	2.71

Notes

Units: ug/m^3

Legend

	Site Boundary
	Former Building Boundary
	Former Petroleum Storage Facilities
	Former Storm and Floor Drains
MW-1	Monitoring Well
SB-1	Soil Boring
SV-1	Soil Vapor Point

Title

SV Spider Diagram

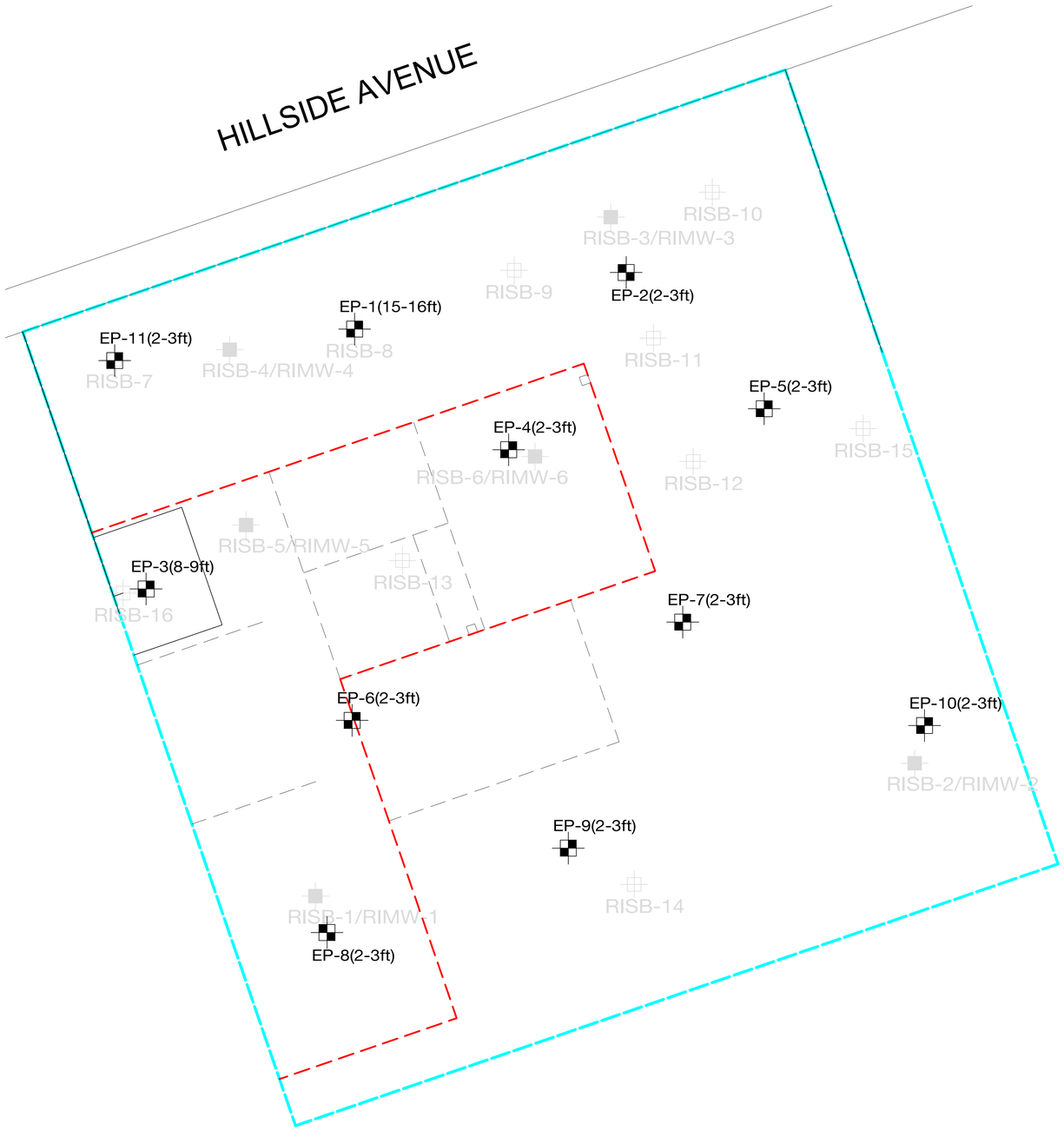
No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
200 Broadhollow Road-Suite 207
Melville, New York 11747

Project Name and Address

C241199
148-28 Hillside AVE
Jamaica, NY
11435

Project	Figure
8346-JANY	8
Date: 11/30/2022	
Scale: As Noted	



Notes

Legend

	Site Boundary
	Former Building Boundary
	Former Petroleum Storage Facilities
	Former Storm and Floor Drains
MW-1	Monitoring Well
SB-1	Soil Boring
SV-1	Soil Vapor Point
EP-1	End Point
	Foundation Excavation (see SOE)
	Cellar Excavation to 13ft bgs
	Approximate Hotspot Excavation to 15ft
	Approximate Hotspot Excavation to 8ft
	Contaminated Soil Excavation to 2 ft

Title

Endpoint Sampling Diagram

No.	Revision/Issue	Date

Advanced Cleanup Technologies
Environmental Consultants
200 Broadhollow Road-Suite 207
Melville, New York 11747

Project Name and Address

C241199
148-28 Hillside AVE
Jamaica, NY
11435

Project: 8346-JANY	Figure: 9
Date: 2/3/2023	
Scale: As Noted	

Appendix A

CONSTRUCTION HEALTH

AND SAFETY PLAN

CONSTRUCTION HEALTH AND SAFETY PLAN

For

148-28 Hillside Avenue

QUEENS, NEW YORK

Block 9694, Lot 417

NYSDEC BCP No. C241199

Prepared for:

Chung Lam

Hillside 168 Inc

148-26 Hillside Avenue

Jamaica, NY 11435

Prepared by:

Jason Stewart, P.E. and Advanced Cleanup Technologies, Inc.

228 Park Ave S PMB 34864

New York, New York 10003

516-441-5800

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FIGURES

APPENDICES

1.0 INTRODUCTION

The construction of a 9-story mixed-use residential and commercial building with a cellar is being proposed at the property located at 148-28 Hillside Avenue, Jamaica, New York ("the Site"). This Construction Health and Safety Plan (CHASP) has been prepared to identify site-specific health and safety procedures to be followed by on-site contractors during remedial activities at the site. All activities performed under this CHASP are targeted to comply with Occupational Safety and Health Administration (OSHA) Regulations 29 CFR Part 1910, *et seq.*

1.1 Purpose

The purpose of this CHASP is to provide the contractors' field personnel, and other visitors with an understanding of the potential chemical and physical hazards that exist or may arise while portions of this project are being performed. The primary objective is to ensure the well being of all field personnel and the community surrounding this site. A copy of this CHASP will be available to anyone that requests it. Visiting personnel (e.g. government officials, administrators, bank inspectors, assessors, etc.) that will have limited exposure to the site native soil/fill material during construction activities will be instructed on how to reduce the probability of exposure to site contaminants, but will not be required to read the CHASP.

All on-site personnel shall familiarize themselves with the contents of this CHASP and the remedial activities planned for the site. Personnel choosing not to comply with this CHASP will be removed from the worksite.

1.2 Site Description

The Site is located at 148-28 Hillside Avenue, Jamaica, NY in the central section of Queens County, New York and is identified as Block 9694 and Lots 17 on the New York City Tax Map. Figure 1 shows the Site location. The Site is 17,450-square feet and is located along the southern side of Hillside Avenue between 148th Street to the west and 150th Street to the east. To the north of the property is Hillside Avenue followed by a two-story mixed-use building with apartments

above commercial businesses. To the east of the property is a one-story commercial building occupied by a supermarket. To the south, a six-story residential apartment building and a two-story religious building are located. The west is a two-story commercial building occupied by the National Organization of Industrial Trade Unions. A map of the site boundary is shown in Figure 1. Currently, the Site is a vacant commercial building.

1.3 Environmental Concerns

Advanced Cleanup Technologies completed a Phase I Environmental Site Assessment on July 14, 2015. The Phase I identifies the property as of 1888 contained a three-story residential building. By 1925, a one-story filling station with gasoline tanks had also been constructed. By 1942, the three-story building was identified as mixed-use and it was demolished by 1963. By 1967, the gasoline tanks were no longer identified, and by 1992 the building was identified as an auto repair shop. The property remained substantially unchanged through 2006.

According to ACT's Phase I Environmental Site Assessment dated July 14, 2015, five abandoned 550-gallon gasoline underground storage tanks were present in front of the building. One inactive 250-gallon waste oil underground storage tank was observed in the interior of the repair shop. According to the site contact, six underground storage tanks were removed from the property approximately 25 years ago. The GPR survey detected disturbed soil that likely was the former location of removed underground storage tanks.

In a Remedial Investigation Report prepared by Advanced Cleanup Technologies in October 2016, soil quality data was compared to Unrestricted and Restricted Residential Use Soil Cleanup Objectives (UUSCOs and RRSCOs) contained in NYSDEC 6 NYCRR Part 375. VOC compounds including acetone (maximum of 110 mg/kg) and tetrachloroethene (11,000 mg/kg) were detected above their Unrestricted Use SCOs in two shallow soil samples. Two SVOCs, Benzo(a)anthracene (1,550 mg/kg) and Chrysene (1,560 mg/kg) exceeded Unrestricted Use SCOs in one shallow soil sample. Benzo(a)anthracene also exceeded Restricted Residential Use SCOs. One Pesticide, 4,4'-DDT (max. of 5.06 mg/kg) exceeded its Unrestricted Use Soil Cleanup Objective. Several metals were identified and lead (1,100 mg/Kg) and selenium (7.18 mg/Kg)

exceeded Unrestricted Use SCOs. Lead also exceeded Restricted Residential Use SCOs. Overall, with the exception of PCE disposal, the soil chemistry is similar to sites with historic urban fill in New York City.

Soil vapor samples collected during the RI were compared to the compounds listed in Table 3.1 Air Guidance Values derived by the New York State Department of Health (NYSDOH) located in the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006, updated June 2007 for the soil vapor/indoor air matrices, updated September 2013 for tetrachloroethylene (PCE), and updated August 2015 for trichloroethylene (TCE). Soil vapor sampling detected several petroleum related and chlorinated compounds. Highest concentrations were detected for 2-Butanone at 1,100 ug/m^3. Petroleum related (BTEX) compounds were detected at a maximum concentration of 299 ug/m^3. Chlorinated compound Tetrachloroethylene PCE was detected in all six samples and ranged in concentrations from 50 to 2,700 ug/m^3, compared to a NYSDOH screening value of 30 ug/m^3. Trichloroethylene was detected in one soil vapor sample in the east section of the site at 55 ug/m^3, above the NYSDOH screening value of 2 ug/m^3. Concentrations of PCE and TCE are above the NYSDOH guidance matrix and require mitigation.

In October 2022, ACT performed a BCP Remedial Investigation, which included a site inspection, geophysical investigation, and the installation, screening, and sampling of 16 soil borings, 6 groundwater monitoring wells, and 5 soil vapor probes throughout the Site.

Soil:

- Shallow onsite soil quality is generally indicative of urban fill to approximately 5 ft bgs. Shallow soil contained exceedances of Restricted Residential Soil Cleanup Objectives (RRSCOs) for SVOCs (Benz(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenz(a,h)anthracene, and Indeno(1,2,3-cd)pyrene) and metals (mercury, arsenic, and lead). Soil deeper than 5ft bgs is generally indicative of native soil with no exceedances of RRSCOs.

- During the remedial investigation, two onsite hotspots were identified in the vicinity of soil borings RISB-8 and RISB-16. Soil contamination identified in the vicinity of RISB-8 is indicative of gasoline contamination related to the historically abandoned gasoline USTs. There were exceedances of RRSCOs for BTEX compounds to a depth of approximately 22ft bgs. No liquid petroleum product was found in the soil boring. No exceedances of TOGS were identified for any BTEX compounds in any of the onsite monitoring wells.
- During the installation of an onsite test pit, a spill was identified along the western property boundary (NYSDEC Spill No. 22-03747). During the remedial investigation, a supplemental soil sample was collected from saturated source material at the base of a test pit(RISB-16). The test pit had been excavated to a depth of 6ft bgs and the soil sample was collected from 6-7ft bgs. The soil sample contained contamination indicative of automotive waste from a floor drain inside the historic onsite auto shop. The source area appears to be very small in size and limited to only to a shallow depth. The soil boring RISB-5 and monitoring well RIMW-5 were installed directly adjacent to the spill. RISB-5 had no soil exceedances above RRSCOs.
- The soil from the source material at the base of the hotspot contained compounds above commercial soil cleanup objectives including:
    - arsenic @ 42.7 mg/kg
    - cadmium @ 11 mg/kg
    - lead @ 5,700 mg/kg
    - PCB-1260 @ 13 mg/kg
    - cis-1,2-Dichloroethene @ 3,200 mg/kg
    - Tetrachloroethene @ 7,800 mg/kg
    - Trichloroethene @ 430 mg/kg
    - Vinyl chloride @ 45 mg/kg
    - SVOC Benzo(a)pyrene @ 2.1 mg/kg

Soil Vapor:

- Soil vapor quality contained the CVOCs Tetrachloroethylene and Trichloroethene above NYSDOH indoor air guidelines. Tetrachloroethylene was identified above NYSDOH indoor air guidelines throughout the site, with the highest level found in the front of the property in SV-2 @ 1,760 ug/m3. Trichloroethene was identified above NYSDOH indoor air guidelines in soil vapor samples SV-4 and SV-5, with the highest level found in the center of the site in SV-5 @ 11 ug/m3

2.0 SITE PERSONNEL

All on-site personnel shall have training in accordance with the regulations codified at 29 CFR 1910.20. The Site Supervisor will maintain proof that the qualifications of the on-site personnel comply with these regulations, prior to them being allowed to be included in the on-Site workforce.

All on-site personnel shall familiarize themselves with the contents of the CHASP, the scope of the Remedial Action Work Plan (RAWP) for the Site and attend a daily site specific health and safety briefing prior to the commencement of work activities. Personnel choosing not to comply with this CHASP will be removed from the worksite.

ACT's Site Supervisor will have oversight responsibility over the project to ensure that this CHASP is properly implemented and that ACT and its subcontractors adhere to all OSHA regulations and other established industry health and safety practices.

Each contractor will designate an on-site individual responsible for health and safety issues relating to excavation and construction activities. Each contractor will communicate to the Site Supervisor the name of this individual and what specific actions are to be taken by each contractor during that work day that will be required to comply with the CHASP.

The Site Supervisor will coordinate the activities of all other contractors on-site so as not to

jeopardize the health and safety of any personnel on-site. In addition, the Site Supervisor will continually monitor and inspect personnel and equipment for compliance with established safe work practices.

A list of the pertinent personnel authorized to supervise site health and safety operations is presented below:

Title	Name	Telephone Number
Site Supervisor ACT	Tim Young	516-640-2947 (Mobile)
Project Manager ACT	Jason Stewart	516-441-5800, Ext. 3 516-589-4050 (Mobile)
Health and Safety Officer ACT	Yisong Yang	718-508-2970 (Mobile)

3.0 PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE) is divided into the following four categories based on the degree of protection afforded:

Level A: This PPE level will be selected when the greatest level of skin, respiratory, and eye protection is required. It includes positive pressure, full face-piece self-contained breathing apparatus (SCBA), or NIOSH-approved positive pressure supplied air respirator with escape SCBA and a totally-encapsulating chemical-protective suit.

Level B: This PPE level will be selected when the highest level of respiratory protection is necessary but a lesser level of skin protection is needed. It includes positive

pressure, full face-piece SCBA, or NIOSH-approved positive pressure supplied air respirator with escape SCBA and hooded chemical-resistant clothing such as overalls and long-sleeved jacket, coveralls, one or two-piece chemical-splash suit or disposable chemical-resistant overalls.

Level C: This PPE level will be selected when the concentration(s) and type(s) of airborne substance(s) present in the work area is known and the criteria for using air purifying respirators are met. It includes full-face or half-mask, NIOSH-approved air purifying respirators and hooded chemical-resistant clothing such as overalls and long-sleeved jacket, coveralls, one or two-piece chemical-splash suit or disposable chemical-resistant overalls.

Level D: This PPE level will be selected for nuisance contamination only. It includes coveralls, gloves, chemical-resistant steel toe and shank boots, safety glasses or chemical splash goggles, hard hat, escape mask and face shield.

PPE shall be selected in accordance with the site air monitoring program (Section 5.3), OSHA 29 CFR 1910.120(c), (g), and 1910.132. Protective equipment shall be NIOSH-approved and respiratory protection shall conform to OSHA 29 CFR Part 1910.133 and 1910.134 specifications; head protection shall conform to 1910.135; eye and face protection shall conform to 1910.133; and foot protection shall conform to 1910.136. The only true difference among the levels of protection from D thru B is the addition of the type of respiratory protection.

Before site personnel are required to use any respirator with a negative or positive pressure tight-fitting face-piece, the personnel will be fit tested with the same make, model, style, and size of respirator that will be used. The fit test shall be administered using only an OSHA-accepted fit test protocol. The OSHA-accepted fit test protocols and procedures provided for in 29 CFR 1910.120 are contained in Appendix B of this CHASP.

All Site workers will be required to participate in a comprehensive PPE program. The PPE program will consist of daily "Tailgate" Health and Safety meetings, proper inspection, donning, use,

maintenance, storage and decontamination of protective clothing and equipment, use of protective equipment in temperature extremes and monitoring of co-workers and the work environment.

The Site Supervisor will determine the level of protection required for all field activities and whether the level of protection should be upgraded. It is anticipated that all on-site activities will be conducted in Level D PPE, unless otherwise upgraded by the Site Supervisor. Changes in the level of protection will be recorded in the dedicated site logbook along with the rationale for the changes.

4.0 HAZARD EVALUATION

4.1 Chemical Exposure

A list of chemicals including VOCs, SVOCs, metals and pesticides that are present in subsurface soil at the Site is provided in Table 1. These types of contaminants at the detected concentrations represent a low to moderate potential for exposure. The standards listed in the table represent Immediate Danger to Life and Health (IDLH), Time-Weighted Average (TWA) and Short-Term Exposure Limit (STEL).

The primary routes of exposure for these chemicals are inhalation, ingestion and absorption through the skin and mucous membranes. The health risks associated with the exposure to these substances during construction activities will be minimized through a combination of education, personal protection equipment (PPE) and dust control measures.

4.2 Temperature Hazards

4.2.1 Heat Exposure Hazards

Heat stress may occur even in moderate temperature areas and may present any or all of the following:

Heat Rash

Heat rash results from continuous exposure to heat, humid air, and chafing clothes. Heat rash

is uncomfortable and decreases the ability to tolerate heat.

Heat Cramps

Cramps result from the inadequate replacement of body electrolytes lost through perspiration. Signs include severe spasms and pain in the extremities and abdomen.

Heat Exhaustion

Exhaustion results from increased stress on the vital organs of the body in the effort to meet the body's cooling demands. Signs include shallow breathing; pale, cool, moist skin; profuse sweating; and dizziness.

Heat Stroke

Heat stroke results from an overworked cooling system. Heat stroke is the most serious form of heat stress. Body surfaces must be cooled and medical help must be obtained immediately to prevent severe injury and/or death. Signs include red, hot, dry skin, absence of perspiration, nausea, dizziness and confusion, strong, rapid pulse, coma, and death.

The following procedures should be followed to prevent or control heat stroke:

A. Replace body fluids (water and electrolytes) lost through perspiration. Solutions may include a 0.1% salt and water solution or commercial mixes such as "Gatorade". Employees must be encouraged to drink more than the amount required in order to satisfy thirst.
B. Use cooling devices to aid the natural body ventilation. Cooling occurs through evaporation of perspiration and limited body contact with heat-absorbing protective clothing. Utilize fans and air conditioners to assist in evaporation. Long, cotton underwear is suggested to absorb perspiration and limit any contact with heat-absorbing protective clothing (i.e., coated Tyvek suits).
C. Provide shelter against heat and direct sunlight to protect personnel. Take breaks in

shaded areas.

D. Rotate workers utilizing protective clothing during hot weather.

E. Establish a work regime that will provide adequate rest periods, with personnel working in shifts.

4.2.2 Cold Exposure Hazards

Work schedules will be adjusted to provide sufficient rest periods in a heated area for warming up during operations conducted in cold weather. Also, thermal protective clothing such as wind and/or moisture resistant outerwear is recommended to be worn.

If work is performed continuously in the cold at or below -7 °C (20 °F), including wind chill factor, heated warming shelters (company vehicles, rest rooms, etc.) shall be made available nearby and the worker should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability, or euphoria, are indications for immediate return to the shelter. When entering the heated shelter, the outer layer of clothing shall be removed and the remainder of the clothing loosened to permit sweat evaporation.

A change of dry work clothing shall be provided as necessary to prevent workers from returning to their work with wet clothing. Dehydration, or the loss of body fluids, occurs in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soups should be provided at the work site to provide caloric intake and fluid volume. The intake of coffee should be limited because of a diuretic and circulatory effect (adapted from TLV's and Biological Exposure Indices 1988-1989, ACGIH).

4.3 Fire Prevention

One portable fire extinguisher with a rating (ratio) of 20 pound A/B/C will be conspicuously and centrally located at the site. Portable extinguishers will be properly tagged with inspection dates

and maintained in accordance with standard maintenance procedures for portable fire extinguishers. The following fire prevention guidelines are to be followed:

- Only approved safety cans will be used to transport and store flammable liquids.
- All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool prior to filling.
- Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved, or vapor forms, or other flammable liquids may be present.
- No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.

4.4 Operation of Heavy Equipment

When operating or working around heavy equipment, the Site Supervisor will ensure that site personnel conform to this CHASP to include the wearing of proper clothing such as hard hats and safety glasses. Any specific health and safety issues relating to the equipment to be used on-site that work day, will be covered in the daily health and safety briefing.

5.0 MANAGEMENT AND PLANNING

5.1 General Site Control

The Site Supervisor will establish a command post within the Site. A perimeter site fence, as required by the New York City Department of Buildings, will be erected to define the limits of the Site. All work must be performed within the site fence. Flagmen and traffic control will be provided as required at all times.

The Site will be left hazard-free at the end of each work day. In addition, all fence gates will be operable and locked in a closed position, all site fencing will be properly standing or braced and site lighting will be operational. The property owner will provide site security during off-work hours.

During site excavation, worker exposure to potential hazardous substances will be minimized through Health and Safety Communication (Section 5.2), Decontamination Procedures (Section 5.3) and Dust Control Methods (Section 5.3).

5.2 Health and Safety Communication

The relatively small size of the work area makes normal verbal communication the primary mode of communication for the project. In the event that verbal communication is impossible the following hand signals will be used.

Gripping a partners wrist = "Leave area immediately"
Hands on top of head = " I need assistance"
Thumbs up = "OK; I'm alright; I understand"
Thumbs down = "No; Negative"

Daily Health and Safety Meetings will address a list of tasks to be performed that day, the equipment and machinery involved, and any hazards identified with this type of activity. Workers will be given the opportunity to list out additional perceived hazards, and discuss safe work practices while in these operations. The daily safety meeting will also be an opportunity to review the work performed the previous day, any hazards encountered, mitigating actions taken, and suggestions for future improvement.

5.3 Air Monitoring

This section of the CHASP discusses air monitoring that will be performed to address community and site personnel concerns of possible exposures due to airborne migration of

suspected contaminants that may be encountered during on-site field activities.

Periodic air monitoring will be performed for VOCs at the perimeter of the work area once every two hours during field activities. Continuous air monitoring will be performed for VOCs during all ground intrusive activities such as soil excavation, loading and offsite transport. All ambient air readings will be recorded and provided as an appendix in the P.E.-certified Remedial Closure Report.

5.3.1 Community Air Monitoring

Periodic air monitoring for VOCs at the perimeter of the work area will be accomplished as follows:

- VOCs will be monitored at the upwind perimeter of the work area at the start of each work day and periodically thereafter to establish background conditions. The monitoring will be performed utilizing a Photovac 2020 portable Photoionization Detector (PID) or equivalent equipped with a 10.6 eV lamp capable of detecting the types of contaminants known or suspected to be present.
- VOCs will be monitored at the downwind perimeter of the work area daily at 2 hour intervals. If ambient air concentrations of total organic vapors at the downwind perimeter of the work area exceeds 5 parts per million (ppm) above background, work activities will be halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the work area or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over

background for the 15 minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

5.3.2 Activity-Specific Air Monitoring

Continuous air monitoring will be conducted inside the work area for VOC levels during all ground-intrusive activities, such as soil excavation, loading and offsite transport in accordance with 29 CFR 1910.120(h). Continuous air monitoring will also be performed utilizing a Photovac 2020 PID or equivalent. Continuous air monitoring will be performed in the following manner:

- Volatile organic compounds will be monitored inside the work area of construction and health and safety personnel on a continuous basis. The PID will be programmed to calculate 15-minute running average concentrations. If ambient air concentrations of total organic vapors inside the work area exceed 5 ppm above background, work activities will be halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels inside the work area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level inside the work area or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15 minute average.

5.4 Dust Control

Each contractor shall control any dust generated on-site that may be produced during work activities. Dust control measures will be employed to ensure that there is no off-site migration of dust

into the community by use of a stream of water applied through a fine spray nozzle. The NYC hydrant used for a water source will be fitted with a RPZ control device to prevent inadvertent contamination of the public water supply. In addition, a solid barrier fence will be installed around the perimeter of the property to control any fugitive migration of dust.

5.5 Spill Control and Prevention

Spills associated with site activities may be attributed to project specific heavy equipment and include gasoline, diesel and hydraulic oil. In the event of a leak or a release, site personnel will inform their supervisor immediately, locate the source of spillage and stop the flow if it can be done safely. A spill containment kit including absorbent pads, booms and/or granulated speedy dry absorbent material will be available to site personnel to facilitate the immediate recovery of the spilled material.

Daily inspections of site equipment components including hydraulic lines, fuel tanks, etc. will be performed by their respective operators as a preventative measure for equipment leaks and to ensure equipment soundness. In the event of a spill, site personnel will immediately notify the NYSDEC (1-800-457-7362), and a spill number will be generated.

5.6 Decontamination Procedures

Contaminants will be removed from personnel and equipment through a decontamination regiment. Workers will be required to remove any contaminated PPE before leaving the Site. Work boots, safety glasses, hard hats and work gloves will be washed in a two percent Alconox Solution, followed by three consecutive clean water rinses. All wash and rinse water will be containerized into a DOT drum. Gross contaminants will be brushed from worker's clothing before leaving the Site. A station for hand washing will also be set up.

Decontamination of heavy equipment will also be required before leaving the Site. Excavator buckets and vehicle wheels or tracks will be brushed clean with a broom, before being moved off-site. Reusable hand tools will be washed in a two percent Alconox solution, followed by a series of clean water rinses. All wash and rinse water will be containerized in appropriate steel drums for proper

disposal.

5.7 Soil Disposal

Any contaminated soil (organic or inorganic constituents) encountered during the remedial activities will be segregated, stockpiled on-site onto polyethylene sheeting, and covered with polyethylene sheeting to prevent exposure to workers and the community until proper transportation and disposal in accordance with all NYSDEC Regulations is arranged.

6.0 EMERGENCY MEDICAL CARE AND PROCEDURES

If a personnel accident occurs on-site requiring emergency care, immediate care will be administered appropriate to the injury in accordance with established Red Cross procedures and practices. In the event of serious injury to on-site personnel, the Emergency Medical Service of the City of New York (EMS) will be summoned to remove the injured individual to the nearest medical facility for treatment as follows.

Ambulance:	**911**
Emergency Medical:	**911**
Fire Department:	**911**
Jamaica Hospital Medical Center:	**(718) 206-6066**
Police Department:	**911**
Poison Control Center:	**(516) 542-2323**

The nearest emergency medical facility is 8900 Van Wyck Expressway, Jamaica, NY 11418, which is located 1.0 miles from the Site. A map of the route to this hospital is attached. The directions to this medical facility from the Site are as follows:

- **Head northeast on Hillside Avenue toward 150th Street;**
- **Turn Right on 150th Street;**
- **Turn Right on Jamaica Avenue;**

- **Turn Left on Van Wyck Expressway Service Road;**
- **Turn Right on 89th Avenue;**
- **Turn Left onto 135th Street;**
- **Jamaica Hospital Medical Center is located on the Left.**

OSHA approved First Aid Kits will be maintained on-Site along with a First Aid blanket for treating shock, and will be readily accessible to all workers if an emergency occurs. The emergency signal for evacuation of personnel from the Site will be three (3) long blasts of a vehicle horn with the off-site rallying point designated as the corner of 150th Street and Hillside Avenue. If in the event of a fire, explosion or other life-threatening incident on-site, the emergency signal above will be sounded and all personnel will evacuate the Site. The appropriate New York City emergency personnel (fire, police, etc.) will be immediately notified.

All injuries, no matter how slight, will be reported to the site safety supervisor immediately. The Site Supervisor will complete an accident report for all incidents. Some injuries, such as severe lacerations or burns, may require immediate treatment. Unless required due to immediate danger, seriously injured persons should not be moved without direction from attending medical personnel. The Site Supervisor will record occupational injuries and illnesses within 48 hours of occurrence, as required by statute.

Table 1

NIOSH Exposure Limits

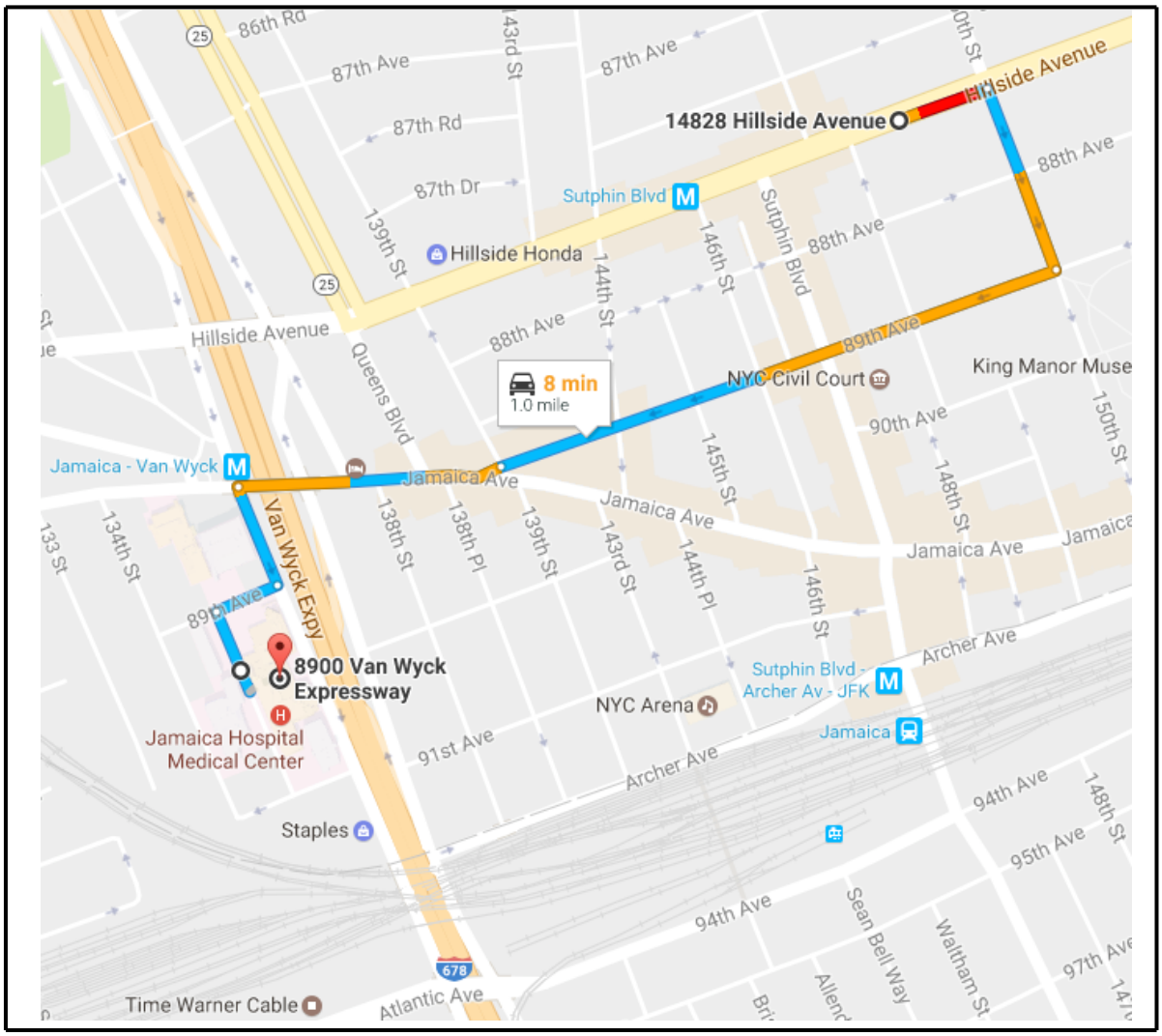
TABLE 1
NIOSH Exposure Limits (mg/m^3)[1]

Chemical	IDLH	TWA	STEL
Benzene	1625	1.63	8.13
Toluene	1900	375	560
Ethylbenzene	3530	435	545
Xylenes	3970	435	655
Naphthalene	1250	50	75
Acenaphthene	N.L.	N.L.	N.L.
Anthracene	N.L.	N.L.	N.L.
Pyrene	N.L.	N.L.	N.L.
Chrysene	N.L.	N.L.	N.L.
Benzo(b)Fluoranthene	N.L.	N.L.	N.L.
Benzo(a)Pyrene	N.L.	N.L.	N.L.
Benzo(ghi)Perylene	N.L.	N.L.	N.L.
Polychlorinated Biphenyl	5.0	0.5	N.L.
Aldrin	25	0.25	N.L.
Endrin	2	0.1	N.L.
Chlordane	100	0.5	N.L.
Toxaphene	200	0.5	N.L.
DDT	500	1	N.L.
Silver	10	0.01	N.L.
Barium	1100	0.5	N.L.
Cadmium	9	0.05	N.L.
Selenium	1	0.2	N.L.
Lead	100	0.05	N.L.
Mercury	10	0.05	N.L.
Arsenic	5	0.01	N.L.
Chromium	250	0.5	N.L.

[1] *All values taken from NIOSH International Chemical Safety Cards (Http://www.cdc.gov/niosh/ipcsneng/nengname.html)*
N.L..... None Listed

FIGURE 1

HOSPITAL ROUTE



Souce: Google Maps

N

Hospital Route

Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS
110 Main Street, Suite 103, Port Washington, New York 11050
Tel: 516-441-5800 Fax: 516-441-5511

Project No.: 8346-JANY	Figure No.: 1
Date: 12/27/2016	Scale: Not To Scale

Appendix A

Chemical Safety Cards

TETRACHLOROETHYLENE **ICSC: 0076 (April 2013)**

PER
Ethylene Tetrachloride
PERC
Tetracap
1,1,2,2-tetrachloroethene
1,1,2,2-Tetrachloroethylene
Perchloroethylene
Tetrachloroethene

CAS #: 127-18-4
UN #: 1897
EC Number: 204-825-9

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire. Risk of fire and explosion on contact with metals. See Chemical Dangers.	NO open flames, NO sparks and NO smoking. NO contact with hot surfaces or finely divided metals. NO contact with metals. See Chemical Dangers	In case of fire in the surroundings, use appropriate extinguishing media.

STRICT HYGIENE! PREVENT GENERATION OF MISTS!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation	Cough. Dizziness. Headache. Drowsiness. Nausea. Unconsciousness.	Use ventilation, local exhaust or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer immediately for medical attention.
Skin	Dry skin. Redness. Burning sensation.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Burning sensation. Pain.	Wear safety goggles or face shield.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion	Sore throat. Aspiration hazard! See Inhalation. Cardiac dysrhythmia. Respiratory arrest.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer immediately for medical attention.

SPILLAGE DISPOSAL

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance and complete protective clothing. Ventilation. Do NOT let this chemical enter the environment. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

STORAGE

Separated from metals, ignition sources and food and feedstuffs. See Chemical Dangers. Keep in the dark. Keep in a well-ventilated room. Dry. Cool.

PACKAGING

Do not transport with food and feedstuffs.
Marine pollutant.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

WARNING

Causes skin irritation
Suspected of causing cancer
May be harmful if swallowed and enters airways
May cause drowsiness or dizziness
Toxic to aquatic life with long lasting effects

Transportation
UN Classification
UN Hazard Class: 6.1; UN Pack Group: III

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

TETRACHLOROETHYLENE **ICSC: 0076**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
COLOURLESS LIQUID WITH CHARACTERISTIC ODOUR.

Physical dangers
The vapour is heavier than air and may accumulate in lowered spaces causing a deficiency of oxygen.

Chemical dangers
Decomposes on contact with hot surfaces or flames. This produces toxic and corrosive fumes of hydrogen chloride, phosgene and chlorine. Decomposes slowly on contact with moisture. This produces trichloroacetic acid and hydrochloric acid. Reacts violently with finely divided metals. This generates fire and explosion hazard.

Formula: C_2Cl_4 / $Cl_2C=CCl_2$
Molecular mass: 165.8
Boiling point: 121°C
Melting point: -22°C
Density (at 20°C): 1.62 g/cm³
Solubility in water, g/100ml at 20°C: 0.015
Vapour pressure, kPa at 20°C: 1.9
Relative vapour density (air = 1): 5.7
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.09
Octanol/water partition coefficient as log Pow: 3.4
Auto-ignition temperature: > 650°C

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation, by ingestion and through the skin.

Effects of short-term exposure
The substance is irritating to the eyes, skin and respiratory tract. If swallowed the substance may cause vomiting and could result in aspiration pneumonitis. The substance may cause effects on the central nervous system. Exposure at high levels could cause unconsciousness.

Inhalation risk
A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

Effects of long-term or repeated exposure
Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the liver, kidneys and central nervous system. This substance is probably carcinogenic to humans.

OCCUPATIONAL EXPOSURE LIMITS

TLV: 25 ppm as TWA; 100 ppm as STEL; A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued.

MAK: 69 mg/m^3, 10 ppm; peak limitation category: II(2); skin absorption (H); carcinogen category: 3; pregnancy risk group: C.

EU-OEL: 138 mg/m^3, 20 ppm as TWA; 275 mg/m^3, 40 ppm as STEL; (skin)

ENVIRONMENT

The substance is toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment. It is strongly advised not to let the chemical enter into the environment.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested.
The odour warning when the exposure limit value is exceeded is insufficient.
Do NOT use in the vicinity of a fire or a hot surface, or during welding.
Use of alcoholic beverages enhances the harmful effect.

ADDITIONAL INFORMATION

EC Classification
Symbol: Xn, N; R: 40-51/53; S: (2)-23-36/37-61

TRICHLOROETHYLENE **ICSC: 0081 (April 2013)**

1,1,2-Trichloroethylene
Trichloroethene
Ethylene trichloride
Acetylene trichloride
Tri
Chlorylen
TCE
Trilene
Trichlor

CAS #: 79-01-6
UN #: 1710
EC Number: 201-167-4

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Combustible under specific conditions. See Notes. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks and NO smoking. NO contact with hot surfaces, strong bases or finely divided metals. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire in the surroundings, use appropriate extinguishing media. In case of fire: keep drums, etc., cool by spraying with water.

PREVENT GENERATION OF MISTS! AVOID ALL CONTACT!

	SYMPTOMS	PREVENTION	FIRST AID
Inhalation	Dizziness. Drowsiness. Headache. Weakness. Nausea. Unconsciousness.	Use closed system.	Fresh air, rest. Artificial respiration may be needed. Refer immediately for medical attention.
Skin	Dry skin. Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Wear safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion	Sore throat. Aspiration hazard! See Inhalation. Cardiac dysrhythmia. Respiratory arrest.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer immediately for medical attention.

SPILLAGE DISPOSAL

Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance and complete protective clothing. Ventilation. Do NOT let this chemical enter the environment. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

STORAGE

Separated from metals, strong bases, food and feedstuffs, combustible substances and ignition sources. See Chemical Dangers. Dry. Keep in the dark. Keep in a well-ventilated room. Cool.

PACKAGING

Do not transport with food and feedstuffs.
Marine pollutant.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

DANGER

May be harmful if swallowed
Causes skin irritation
Causes serious eye irritation
Suspected of causing genetic defects
May cause cancer
May cause drowsiness or dizziness
May be harmful if swallowed and enters airways
Harmful to aquatic life with long lasting effects

Transportation
UN Classification
UN Hazard Class: 6.1; UN Pack Group: III

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

TRICHLOROETHYLENE **ICSC: 0081**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
COLOURLESS LIQUID WITH CHARACTERISTIC ODOUR.

Physical dangers
The vapour is heavier than air. As a result of flow, agitation, etc., electrostatic charges can be generated.

Chemical dangers
Decomposes on contact with hot surfaces or flames. This produces toxic and corrosive fumes of phosgene and hydrogen chloride. Decomposes on contact with strong alkali. This produces dichloroacetylene. This increases fire hazard. Reacts violently with finely divided metals. This generates fire and explosion hazard. Slowly decomposed by light in the presence of moisture. This produces corrosive hydrochloric acid.

Formula: C_2HCl_3 / $ClCH=CCl_2$
Molecular mass: 131.4
Boiling point: 87°C
Melting point: -86°C
Relative density (water = 1): 1.5 (20°C)
Solubility in water, g/100ml at 20°C: 0.1
Vapour pressure, kPa at 20°C: 7.8
Relative vapour density (air = 1): 4.5
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.3
Auto-ignition temperature: 410°C
Explosive limits, vol% in air: 7.9 - 100
Octanol/water partition coefficient as log Pow: 2.42
Electrical conductivity: 800 pS/m

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation, by ingestion and through the skin.

Effects of short-term exposure
The substance is irritating to the eyes, skin and respiratory tract. If swallowed the substance may cause vomiting and could result in aspiration pneumonitis. The substance may cause effects on the central nervous system, liver and kidneys. This may result in impaired functions. Exposure at high concentrations could cause unconsciousness.

Inhalation risk
A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

Effects of long-term or repeated exposure
Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the central nervous system. This may result in fatigue, irritability and mental and memory disturbances. The substance may have effects on the liver, kidneys and immune system. This substance is carcinogenic to humans. Causes toxicity to human reproduction or development.

OCCUPATIONAL EXPOSURE LIMITS

TLV: 10 ppm as TWA; 25 ppm as STEL; A2 (suspected human carcinogen); BEI issued.
MAK: skin absorption (H); carcinogen category: 1; germ cell mutagen group: 3B.
EU-OEL: 54.7 mg/m^3, 10 ppm as TWA; 164.1 mg/m^3, 30 ppm as STEL; (skin)

ENVIRONMENT

The substance is harmful to aquatic organisms. The substance may cause long-term effects in the aquatic environment. It is strongly advised not to let the chemical enter into the environment.

NOTES

Combustible vapour/air mixtures difficult to ignite, may be developed under certain conditions.
Use of alcoholic beverages enhances the harmful effect.
Depending on the degree of exposure, periodic medical examination is suggested.
The odour warning when the exposure limit value is exceeded is insufficient.
Do NOT use in the vicinity of a fire or a hot surface, or during welding.

ADDITIONAL INFORMATION

EC Classification
Symbol: T; R: 45-36/38-52/53-67; S: 53-45-61

VINYLIDENE CHLORIDE **ICSC: 0083 (April 2014)**

1,1-Dichloroethene
1,1-Dichloroethylene
VDC

CAS #: 75-35-4
UN #: 1303 (stabilized)
EC Number: 200-864-0

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Extremely flammable. Gives off irritating or toxic fumes (or gases) in a fire. Vapour/air mixtures are explosive.	NO open flames, NO sparks and NO smoking. Closed system, ventilation, explosion-proof electrical equipment and lighting. Use non-sparking handtools.	Use water spray, powder, foam, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water.

PREVENT GENERATION OF MISTS!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation	Cough. Dizziness. Drowsiness. Unconsciousness.	Use ventilation, local exhaust or breathing protection.	Fresh air, rest. Refer immediately for medical attention.
Skin		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness.	Wear safety spectacles or eye protection in combination with breathing protection.	Rinse with plenty of water (remove contact lenses if easily possible).
Ingestion	Abdominal pain. Further see Inhalation.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention .

SPILLAGE DISPOSAL

Evacuate danger area! Remove all ignition sources. Consult an expert! Personal protection: filter respirator for organic vapours of low boiling point adapted to the airborne concentration of the substance. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

STORAGE

Store only if stabilized. Fireproof. Keep in the dark. Cool. Separated from incompatible materials. See Chemical Dangers. Store in an area without drain or sewer access. Provision to contain effluent from fire extinguishing.

PACKAGING

Airtight.
Unbreakable packaging.
Put breakable packaging into closed unbreakable container.
Marine pollutant.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

DANGER

Extremely flammable liquid and vapour
Toxic if swallowed
May be harmful if inhaled
May cause drowsiness or dizziness
May cause damage to liver and kidneys through prolonged or repeated exposure
Harmful to aquatic life

Transportation
UN Classification
UN Hazard Class: 3; UN Pack Group: I

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

VINYLIDENE CHLORIDE **ICSC: 0083**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
VOLATILE COLOURLESS LIQUID WITH CHARACTERISTIC ODOUR.

Physical dangers
The vapour is heavier than air and may travel along the ground; distant ignition possible. Vapours are uninhibited and may polymerize, causing blockage of vents.

Chemical dangers
The substance can readily form explosive peroxides. The substance readily polymerizes due to heating or under the influence of oxygen, sunlight, copper or aluminium. This generates fire or explosion hazard. May explode on heating or on contact with flames. Decomposes on burning. This produces toxic and corrosive fumes of hydrogen chloride and phosgene. Reacts violently with oxidants.

Formula: $C_2H_2Cl_2$ / $H_2C=CCl_2$
Molecular mass: 97.0
Boiling point: 32°C
Melting point: -122°C
Relative density (water = 1): 1.2
Solubility in water, g/100ml at 25°C: 0.25 (very poor)
Vapour pressure, kPa at 20°C: 66.5
Relative vapour density (air = 1): 3.3
Relative density of the vapour/air-mixture at 20°C (air = 1): 2.5
Flash point: -25°C c.c.
Auto-ignition temperature: 530°C
Explosive limits, vol% in air: 5.6-16
Octanol/water partition coefficient as log Pow: 2.41

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation and by ingestion.

Effects of short-term exposure
The substance is mildly irritating to the eyes and upper respiratory tract. Exposure far above the OEL could cause lowering of consciousness.

Inhalation risk
A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

Effects of long-term or repeated exposure
The substance may have effects on the kidneys and liver. This may result in liver function impairment and kidney impairment. Tumours have been detected in experimental animals but may not be relevant to humans.

OCCUPATIONAL EXPOSURE LIMITS

TLV: 5 ppm as TWA; A4 (not classifiable as a human carcinogen).

MAK: 8.0 mg/m^3, 2 ppm; peak limitation category: II(2); carcinogen category: 3; pregnancy risk group: C.

EU-OEL: 8 mg/m^3, 2 ppm as TWA; 20 mg/m^3, 5 ppm as STEL

ENVIRONMENT

The substance is harmful to aquatic organisms.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested.
An added stabilizer or inhibitor can influence the toxicological properties of this substance, consult an expert.
The odour warning when the exposure limit value is exceeded is insufficient.
Do NOT use in the vicinity of a fire or a hot surface, or during welding.

ADDITIONAL INFORMATION

EC Classification
Symbol: F+, Xn; R: 12-20-40; S: (2)-7-16-29-36/37-46; Note: D

BENZO(a)PYRENE **ICSC: 0104 (April 2014)**

Benz(a)pyrene
3,4-Benzopyrene
Benzo(d,e,f)chrysene

CAS #: 50-32-8
UN #: 3077
EC Number: 200-028-5

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings, use appropriate extinguishing media.

See Notes. AVOID ALL CONTACT! PREVENT DISPERSION OF DUST!

	SYMPTOMS	PREVENTION	FIRST AID
Inhalation		Use closed system and ventilation.	Fresh air, rest.
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Wear safety spectacles or eye protection in combination with breathing protection.	Rinse with plenty of water (remove contact lenses if easily possible).
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Do NOT wash away into sewer. Sweep spilled substance into covered sealable containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

STORAGE

Provision to contain effluent from fire extinguishing. Separated from strong oxidants. Store in an area without drain or sewer access. Cool. Dry.

PACKAGING

Marine pollutant.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

DANGER

May cause an allergic skin reaction
May cause cancer
May cause genetic defects
May damage fertility or the unborn child
Very toxic to aquatic life with long lasting effects

Transportation
UN Classification
UN Hazard Class: 9; UN Pack Group: III

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

BENZO(a)PYRENE **ICSC: 0104**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
PALE YELLOW CRYSTALS.

Physical dangers

Chemical dangers
Reacts with strong oxidants. Decomposes on heating. This produces toxic fumes.

Formula: $C_{20}H_{12}$
Molecular mass: 252.3
Boiling point: 496°C
Melting point: 178.1°C
Density (at 20°C): 1.4 g/cm³
Solubility in water, g/100ml at 20°C: < 0.1 (poor)
Vapour pressure at 20°C: negligible
Octanol/water partition coefficient as log Pow: 6.04

EXPOSURE & HEALTH EFFECTS

Routes of exposure
Exposure mainly occurs via inhalation.

Effects of short-term exposure
See Notes.

Inhalation risk
A harmful concentration of airborne particles can be reached quickly when dispersed.

Effects of long-term or repeated exposure
Repeated or prolonged contact may cause skin sensitization. This substance is carcinogenic to humans. May cause heritable genetic damage to human germ cells. May cause toxicity to human reproduction or development.

OCCUPATIONAL EXPOSURE LIMITS

TLV: A2 (suspected human carcinogen); BEI issued.
MAK: skin absorption (H); carcinogen category: 2; germ cell mutagen group: 2

ENVIRONMENT

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish, plants and molluscs. The substance may cause long-term effects in the aquatic environment. It is strongly advised not to let the chemical enter into the environment.

NOTES

Do NOT take working clothes home.
Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.
Benzo(a)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAHs) in the environment, usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.

ADDITIONAL INFORMATION

EC Classification
Symbol: T, N; R: 45-46-60-61-43-50/53; S: 53-45-60-61

BENZ(a)ANTHRACENE **ICSC: 0385 (November 2016)**

1,2-Benzoanthracene
Benzo(a)anthracene
2,3-Benzphenanthrene
Naphthanthracene

CAS #: 56-55-3
UN #: 3077
EC Number: 200-280-6

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Combustible. Finely dispersed particles form explosive mixtures in air.	NO contact with oxidizing agents. NO open flames. Closed system, dust explosion-proof electrical equipment and lighting. Prevent deposition of dust.	Use water spray, powder, carbon dioxide, foam. In case of fire in the surroundings, use appropriate extinguishing media.

See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE. AVOID ALL CONTACT! IN ALL CASES CONSULT A DOCTOR!

	SYMPTOMS	PREVENTION	FIRST AID
Inhalation		Use local exhaust or breathing protection.	Fresh air.
Skin	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Wear safety goggles, face shield or eye protection in combination with breathing protection.	Rinse with plenty of water (remove contact lenses if easily possible).
Ingestion		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Seek medical attention if you feel unwell.

SPILLAGE DISPOSAL

Personal protection: complete protective clothing including self-contained breathing apparatus. Wet powder to prevent dusting and ignition. Do NOT let this chemical enter the environment. Vacuum spilled material with specialist equipment. Sweep spilled substance into sealable containers. Then store and dispose of according to local regulations.

STORAGE

Separated from oxidizing materials. Store in an area without drain or sewer access. Well closed.

PACKAGING

Marine pollutant.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

DANGER

May cause cancer
Very toxic to aquatic life with long lasting effects

Transportation
UN Classification
UN Hazard Class: 9; UN Pack Group: III

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

BENZ(a)ANTHRACENE **ICSC: 0385**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
COLOURLESS-TO-YELLOW-BROWN FLUORESCENT FLAKES OR POWDER.

Physical dangers
Dust explosion possible if in powder or granular form, mixed with air.

Chemical dangers
Reacts with oxidizing substances.

Formula: $C_{18}H_{12}$
Molecular mass: 228.3
Sublimation point: 435°C
Melting point: 162°C
Relative density (water = 1): 1.274
Solubility in water: none
Vapour pressure, Pa at 20°C: 292
Octanol/water partition coefficient as log Pow: 5.61

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation, through the skin, by ingestion and through the eyes.

Effects of short-term exposure
See Notes.

Inhalation risk
A nuisance-causing concentration of airborne particles can be reached quickly when dispersed.

Effects of long-term or repeated exposure
This substance is probably carcinogenic to humans.

OCCUPATIONAL EXPOSURE LIMITS

TLV: A2 (suspected human carcinogen); BEI issued.
MAK skin absorption (H).
MAK: carcinogen category: 2; germ cell mutagen group: 3A

ENVIRONMENT

The substance is very toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment. Bioaccumulation of this chemical may occur in aquatic organisms. It is strongly advised not to let the chemical enter into the environment.

NOTES

Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.
Do NOT take working clothes home.

ADDITIONAL INFORMATION

EC Classification
Symbol: T, N; R: 45-50/53; S: 53-45-60-61

DIBENZO(a,h)ANTHRACENE **ICSC: 0431 (November 2016)**

1,2:5,6-Dibenzanthracene

CAS #: 53-70-3
UN #: 3077
EC Number: 200-181-8

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Combustible.	NO open flames.	Use water spray, powder.

See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE. AVOID ALL CONTACT!

	SYMPTOMS	PREVENTION	FIRST AID
Inhalation		Use local exhaust or breathing protection.	Fresh air, rest. Seek medical attention if you feel unwell.
Skin	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness.	Wear face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Seek medical attention if you feel unwell.

SPILLAGE DISPOSAL

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into sealable containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations. Do NOT let this chemical enter the environment.

STORAGE

Well closed. Store in an area without drain or sewer access. Provision to contain effluent from fire extinguishing.

PACKAGING

Marine pollutant.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

DANGER

May cause cancer
Very toxic to aquatic life with long lasting effects

Transportation
UN Classification
UN Hazard Class: 9; UN Pack Group: III

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

DIBENZO(a,h)ANTHRACENE **ICSC: 0431**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
COLOURLESS CRYSTALLINE POWDER.

Physical dangers

Chemical dangers

Formula: $C_{22}H_{14}$
Molecular mass: 278.4
Boiling point: 524°C
Melting point: 267°C
Relative density (water = 1): 1.28
Solubility in water: none
Octanol/water partition coefficient as log Pow: 6.5

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

Effects of short-term exposure
See Notes.

Inhalation risk
A nuisance-causing concentration of airborne particles can be reached quickly when dispersed.

Effects of long-term or repeated exposure
The substance may have effects on the skin. This may result in photosensitization. This substance is probably carcinogenic to humans.

OCCUPATIONAL EXPOSURE LIMITS

MAK: carcinogen category: 2; germ cell mutagen group: 3A; skin absorption (H)

ENVIRONMENT

The substance is very toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment. Bioaccumulation of this chemical may occur along the food chain. It is strongly advised not to let the chemical enter into the environment.

NOTES

Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.
Do NOT take working clothes home.

ADDITIONAL INFORMATION

EC Classification
Symbol: T, N; R: 45-50/53; S: 53-45-60-61

1,2-DICHLOROETHYLENE **ICSC: 0436 (July 2003)**

Acetylene dichloride
symmetrical Dichloroethylene
1,2-Dichloroethene

CAS #: 540-59-0
UN #: 1150
EC Number: 208-750-2

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Highly flammable. Gives off irritating or toxic fumes (or gases) in a fire. Vapour/air mixtures are explosive.	NO open flames, NO sparks and NO smoking. Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling.	Use water spray, powder, foam, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water.

STRICT HYGIENE!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation	Cough. Sore throat. Dizziness. Nausea. Drowsiness. Weakness. Unconsciousness. Vomiting.	Use ventilation, local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Dry skin.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Wear safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion	Abdominal pain. Further see Inhalation.	Do not eat, drink, or smoke during work.	Rinse mouth. Give one or two glasses of water to drink. Refer for medical attention .

SPILLAGE DISPOSAL

Personal protection: complete protective clothing including self-contained breathing apparatus. Ventilation. Remove all ignition sources. Do NOT wash away into sewer. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in dry sand or inert absorbent. Then store and dispose of according to local regulations.

STORAGE

Fireproof. Well closed. See Chemical Dangers.

PACKAGING

CLASSIFICATION & LABELLING

According to UN GHS Criteria

Transportation
UN Classification
UN Hazard Class: 3; UN Pack Group: II

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

1,2-DICHLOROETHYLENE **ICSC: 0436**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
COLOURLESS LIQUID WITH CHARACTERISTIC ODOUR.

Physical dangers
The vapour is heavier than air and may travel along the ground; distant ignition possible.

Chemical dangers
Decomposes on heating and under the influence of air, light and moisture. This produces toxic and corrosive fumes including hydrogen chloride (see ICSC 0163). Reacts with strong oxidants. Reacts with copper, copper alloys and bases. This produces toxic chloroacetylene which is spontaneously flammable in contact with air. Attacks plastics.

Formula: $C_2H_2Cl_2$ / ClCH=CHCl
Molecular mass: 96.95
Boiling point: 55°C
Relative density (water = 1): 1.28
Solubility in water: poor
Relative vapour density (air = 1): 3.34
Flash point: 2°C c.c.
Auto-ignition temperature: 460°C
Explosive limits, vol% in air: 9.7-12.8
Octanol/water partition coefficient as log Pow: 2

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

Effects of short-term exposure
The substance is irritating to the eyes and respiratory tract. The substance may cause effects on the central nervous system at high levels. This may result in lowering of consciousness.

Inhalation risk
A harmful contamination of the air will be reached quickly on evaporation of this substance at 20°C; on spraying or dispersing, however, much faster.

Effects of long-term or repeated exposure
The substance defats the skin, which may cause dryness or cracking. The substance may have effects on the liver.

OCCUPATIONAL EXPOSURE LIMITS

TLV: 200 ppm as TWA.
MAK: 800 mg/m^3, 200 ppm; peak limitation category: II(2)

ENVIRONMENT

NOTES

Depending on the degree of exposure, periodic medical examination is suggested.

ADDITIONAL INFORMATION

EC Classification
Symbol: F, Xn; R: 11-20-52/53; S: (2)-7-16-29-61; Note: C

BENZO(b)FLUORANTHENE **ICSC: 0720 (March 1999)**

Benz(e)acephenanthrylene
2,3-Benzofluoroanthene
Benzo(e)fluoranthene
3,4-Benzofluoranthene

CAS #: 205-99-2

EC Number: 205-911-9

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION			In case of fire in the surroundings, use appropriate extinguishing media.

AVOID ALL CONTACT!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation		Use local exhaust or breathing protection.	Fresh air, rest.
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Wear safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention .

SPILLAGE DISPOSAL	CLASSIFICATION & LABELLING
Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations. Do NOT let this chemical enter the environment.	**According to UN GHS Criteria**
STORAGE	**Transportation** **UN Classification**
Provision to contain effluent from fire extinguishing. Well closed.	
PACKAGING	

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

BENZO(b)FLUORANTHENE **ICSC: 0720**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
COLOURLESS CRYSTALS.

Physical dangers

Chemical dangers
Upon heating, toxic fumes are formed. Decomposes on heating. This produces toxic fumes.

Formula: $C_{20}H_{12}$
Molecular mass: 252.3
Boiling point: 481°C
Melting point: 168°C
Solubility in water: none
Octanol/water partition coefficient as log Pow: 6.12

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

Effects of short-term exposure

Inhalation risk
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of long-term or repeated exposure
This substance is possibly carcinogenic to humans. May cause genetic damage in humans.

OCCUPATIONAL EXPOSURE LIMITS

MAK: skin absorption (H); carcinogen category: 2; germ cell mutagen group: 3B

ENVIRONMENT

This substance may be hazardous to the environment. Special attention should be given to air quality and water quality.

NOTES

Benzo(b)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.
ACGIH recommends environment containing benzo(b)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m³.
TLV Note: Exposure by all routes should be carefully controlled to levels as low as possible.
Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

EC Classification
Symbol: T, N; R: 45-50/53; S: 53-45-60-61

BENZO(k)FLUORANTHENE **ICSC: 0721 (March 1999)**

Dibenzo(b,jk)fluorene
8,9-Benzofluoranthene
11,12-Benzofluoranthene

CAS #: 207-08-9

EC Number: 205-916-6

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION			In case of fire in the surroundings, use appropriate extinguishing media.

AVOID ALL CONTACT!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation		Use local exhaust or breathing protection.	Fresh air, rest.
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Wear safety spectacles or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention .

SPILLAGE DISPOSAL

Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations. Do NOT let this chemical enter the environment.

STORAGE

Provision to contain effluent from fire extinguishing. Well closed.

PACKAGING

CLASSIFICATION & LABELLING

According to UN GHS Criteria

Transportation
UN Classification

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

BENZO(k)FLUORANTHENE **ICSC: 0721**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
YELLOW CRYSTALS.

Physical dangers

Chemical dangers
Upon heating, toxic fumes are formed. Decomposes on heating. This produces toxic fumes.

Formula: $C_{20}H_{12}$
Molecular mass: 252.3
Boiling point: 480°C
Melting point: 217°C
Solubility in water: none
Octanol/water partition coefficient as log Pow: 6.84

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

Effects of short-term exposure

Inhalation risk
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of long-term or repeated exposure
This substance is possibly carcinogenic to humans.

OCCUPATIONAL EXPOSURE LIMITS

MAK: skin absorption (H); carcinogen category: 2; germ cell mutagen group: 3B

ENVIRONMENT

This substance may be hazardous to the environment. Special attention should be given to air quality and water quality.
Bioaccumulation of this chemical may occur in crustacea and fish.

NOTES

Benzo(k)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.
ACGIH recommends environment containing benzo(k)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m³.
Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

EC Classification
Symbol: T, N; R: 45-50/53; S: 53-45-60-61

INDENO(1,2,3-cd)PYRENE o-Phenylenepyrene 2,3-Phenylenepyrene	**ICSC: 0730 (March 1999)**
CAS #: 193-39-5 **EC Number: 205-893-2**	

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION			In case of fire in the surroundings, use appropriate extinguishing media.

AVOID ALL CONTACT!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation		Use local exhaust or breathing protection.	Fresh air, rest.
Skin		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes		Wear safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention .

SPILLAGE DISPOSAL	CLASSIFICATION & LABELLING
Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations. Do NOT let this chemical enter the environment.	**According to UN GHS Criteria** **Transportation** **UN Classification**
STORAGE	
Provision to contain effluent from fire extinguishing. Well closed.	
PACKAGING	

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

INDENO(1,2,3-cd)PYRENE **ICSC: 0730**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
YELLOW CRYSTALS.

Physical dangers

Chemical dangers
Upon heating, toxic fumes are formed. Decomposes on heating. This produces toxic fumes.

Formula: $C_{22}H_{12}$
Molecular mass: 276.3
Boiling point: 536°C
Melting point: 164°C
Solubility in water: none
Octanol/water partition coefficient as log Pow: 6.58

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

Effects of short-term exposure

Inhalation risk
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

Effects of long-term or repeated exposure
This substance is possibly carcinogenic to humans.

OCCUPATIONAL EXPOSURE LIMITS

MAK: skin absorption (H); carcinogen category: 2

ENVIRONMENT

This substance may be hazardous to the environment. Special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in fish.

NOTES

Indeno(1,2,3-cd)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.
ACGIH recommends environment containing Indeno(1,2,3-c,d)pyrene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m³.
Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

EC Classification

POLYCHLORINATED BIPHENYL (AROCLOR 1254) **ICSC: 0939 (October 1999)**

Chlorobiphenyl (54% chlorine)
Chlorodiphenyl (54% chlorine)
PCB

CAS #: 11097-69-1
UN #: 2315
EC Number: 215-648-1

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings, use appropriate extinguishing media.

PREVENT GENERATION OF MISTS! STRICT HYGIENE!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation		Use ventilation.	Fresh air, rest. Refer for medical attention.
Skin	MAY BE ABSORBED! Dry skin. Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention .
Eyes		Wear safety goggles or face shield.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion	Headache. Numbness.	Do not eat, drink, or smoke during work.	Rest. Refer for medical attention .

SPILLAGE DISPOSAL

Consult an expert! Personal protection: complete protective clothing including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

STORAGE

Separated from food and feedstuffs. Cool. Dry. Keep in a well-ventilated room.

PACKAGING

Unbreakable packaging.
Put breakable packaging into closed unbreakable container.
Do not transport with food and feedstuffs.
Severe marine pollutant.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

Transportation
UN Classification
UN Hazard Class: 9; UN Pack Group: II

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

POLYCHLORINATED BIPHENYL (AROCLOR 1254) **ICSC: 0939**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
LIGHT YELLOW VISCOUS LIQUID.

Physical dangers
No data.

Chemical dangers
No data.

Molecular mass: 327 (average)
Relative density (water = 1): 1.5
Solubility in water: none
Vapour pressure, Pa at 25°C: 0.01
Octanol/water partition coefficient as log Pow: 6.30 (estimated)

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

Effects of short-term exposure

Inhalation risk
A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C.

Effects of long-term or repeated exposure
Repeated or prolonged contact with skin may cause dermatitis. May cause chloracne. The substance may have effects on the liver. Animal tests show that this substance possibly causes toxic effects upon human reproduction.

OCCUPATIONAL EXPOSURE LIMITS

TLV: 0.5 mg/m^3, as TWA; (skin); A3 (confirmed animal carcinogen with unknown relevance to humans)

ENVIRONMENT

Bioaccumulation of this chemical may occur in aquatic organisms. It is strongly advised not to let the chemical enter into the environment.

NOTES

Changes into a resinous state (pour point) at 10°C.
Distillation range: 365°-390°C.

ADDITIONAL INFORMATION

EC Classification
Symbol: Xn, N; R: 33-50/53; S: (2)-35-60-61; Note: C

1,2,4-TRIMETHYLBENZENE Pseudocumene	**ICSC: 1433 (June 2002)**
CAS #: 95-63-6 **UN #: 1993** **EC Number: 202-436-9**	

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Flammable. Above 44°C explosive vapour/air mixtures may be formed.	NO open flames, NO sparks and NO smoking. Above 44°C use a closed system, ventilation and explosion-proof electrical equipment. Prevent build-up of electrostatic charges (e.g., by grounding).	Use alcohol-resistant foam, dry powder, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water.

PREVENT GENERATION OF MISTS!			
	SYMPTOMS	**PREVENTION**	**FIRST AID**
Inhalation	Confusion. Cough. Dizziness. Drowsiness. Headache. Sore throat. Vomiting.	Use ventilation, local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness. Dry skin.	Protective gloves.	Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Wear safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.
Ingestion	See Inhalation.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention .

SPILLAGE DISPOSAL	**CLASSIFICATION & LABELLING**
Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent. Then store and dispose of according to local regulations. Do NOT wash away into sewer. Do NOT let this chemical enter the environment.	**According to UN GHS Criteria** **Transportation** **UN Classification** UN Hazard Class: 3; UN Pack Group: III
STORAGE	
Fireproof. Separated from strong oxidants. Well closed. Keep in a well-ventilated room.	
PACKAGING	

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

1,2,4-TRIMETHYLBENZENE **ICSC: 1433**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
COLOURLESS LIQUID WITH CHARACTERISTIC ODOUR.

Physical dangers

Chemical dangers
Decomposes on burning. This produces toxic and irritating fumes. Reacts violently with strong oxidants. This generates fire and explosion hazard.

Formula: C_9H_{12}
Molecular mass: 120,2
Boiling point: 169°C
Melting point: -44°C
Relative density (water = 1): 0.88
Solubility in water: very poor
Relative vapour density (air = 1): 4.1
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.01
Flash point: 44°C c.c.
Auto-ignition temperature: 500°C
Explosive limits, vol% in air: 0.9-6.4
Octanol/water partition coefficient as log Pow: 3.8

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation.

Effects of short-term exposure
The substance is irritating to the eyes, skin and respiratory tract. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. The substance may cause effects on the central nervous system.

Inhalation risk
A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C; on spraying or dispersing, however, much faster.

Effects of long-term or repeated exposure
The substance defats the skin, which may cause dryness or cracking. Repeated or prolonged inhalation may cause effects on the lungs. This may result in chronic bronchitis. The substance may have effects on the central nervous system and blood. See Notes.

OCCUPATIONAL EXPOSURE LIMITS

EU-OEL: 100 mg/m^3, 20 ppm as TWA.

MAK: 100 mg/m^3, 20 ppm; peak limitation category: II(2); pregnancy risk group: C

ENVIRONMENT

The substance is toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish.

NOTES

Use of alcoholic beverages enhances the harmful effect.
Depending on the degree of exposure, periodic medical examination is suggested.
See ICSCs 1155, 1362 and 1389.
1,3,5-Trimethylbenzene (Mesitylene) is classified as a marine pollutant.

ADDITIONAL INFORMATION

EC Classification
Symbol: Xn, N; R: 10-20-36/37/38-51/53; S: (2)-26-61

PERFLUOROOCTANOIC ACID **ICSC: 1613 (April 2017)**

Pentadecafluorooctanoic acid
Pentadecafluoro-n-octanoic acid
Perfluorocaprylic acid
PFOA

CAS #: 335-67-1
UN #: 3261
EC Number: 206-397-9

	ACUTE HAZARDS	PREVENTION	FIRE FIGHTING
FIRE & EXPLOSION	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire. Risk of fire and explosion on contact with bases, oxidants or reducing agents.	NO contact with incompatible substances. See Chemical Dangers.	Use water spray, carbon dioxide, dry powder, foam.

AVOID ALL CONTACT! IN ALL CASES CONSULT A DOCTOR!

	SYMPTOMS	PREVENTION	FIRST AID
Inhalation	Cough. Sore throat.	Use local exhaust or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
Skin	MAY BE ABSORBED! Redness. Pain.	Protective gloves. Protective clothing.	Wear protective gloves when administering first aid. Remove contaminated clothes. Rinse and then wash skin with water and soap.
Eyes	Redness. Pain.	Wear safety goggles or eye protection in combination with breathing protection if powder.	Rinse with plenty of water for several minutes (remove contact lenses if easily possible). Refer immediately for medical attention.
Ingestion	Abdominal pain. Nausea. Vomiting. Diarrhoea.	Do not eat, drink, or smoke during work.	Rinse mouth. Give one or two glasses of water to drink. Refer for medical attention .

SPILLAGE DISPOSAL

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Sweep spilled substance into covered non-metallic containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

STORAGE

Store only in original container. Separated from food and feedstuffs and incompatible materials. See Chemical Dangers.

PACKAGING

Do not transport with food and feedstuffs.
Unbreakable packaging.
Put breakable packaging into closed unbreakable container.

CLASSIFICATION & LABELLING

According to UN GHS Criteria

DANGER

Harmful if swallowed
Toxic if inhaled
Causes serious eye irritation
May cause damage to immune system and liver through prolonged or repeated exposure
May damage fertility or the unborn child
May cause harm to breast-fed children
Suspected of causing cancer

Transportation
UN Classification
UN Hazard Class: 8; UN Pack Group: III

Prepared by an international group of experts on behalf of ILO and WHO, with the financial assistance of the European Commission.

PERFLUOROOCTANOIC ACID **ICSC: 1613**

PHYSICAL & CHEMICAL INFORMATION

Physical State; Appearance
WHITE POWDER WITH PUNGENT ODOUR.

Physical dangers
No data.

Chemical dangers
Decomposes on heating above 300°C . This produces toxic and corrosive gases including hydrogen fluoride (See ICSC 0283). The solution is a weak acid. Reacts with bases, oxidants and reducing agents. This produces flammable/explosive gas (hydrogen - see ICSC 0001). Attacks many metals.

Formula: $C_8HF_{15}O_2$
Molecular mass: 414.1
Boiling point: 189°C
Melting point: 52-54°C
Density: 1.79 g/cm³
Solubility in water: none
Octanol/water partition coefficient as log Pow: 6.3

EXPOSURE & HEALTH EFFECTS

Routes of exposure
The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

Effects of short-term exposure
The substance is irritating to the eyes, skin and respiratory tract.

Inhalation risk
A harmful concentration of airborne particles can be reached quickly when dispersed.

Effects of long-term or repeated exposure
The substance may have effects on the liver and immune system. This substance is possibly carcinogenic to humans. May cause toxicity to human reproduction or development.

OCCUPATIONAL EXPOSURE LIMITS

MAK: (inhalable fraction): 0.005 mg/m^3; peak limitation category: II(8); skin absorption (H); carcinogen category: 4; pregnancy risk group: C

ENVIRONMENT

NOTES

ADDITIONAL INFORMATION

EC Classification
Symbol: T, Xn; R: 40-61-48/23-48/21/22-41-64; S: 53-45

International Chemical Safety Cards

BENZENE

ICSC: 0015

UNEP

National Institute for Occupational Safety and Health NIOSH

Cyclohexatriene
Benzol
C_6H_6
Molecular mass: 78.1

ICSC # 0015
CAS # 71-43-2
RTECS # CY1400000
UN # 1114
EC # 601-020-00-8
June 05, 2003 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable.	NO open flames. NO sparks, and NO smoking	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive. Risk of fire and explosion: see Chemical Dangers.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION	Dizziness. Drowsiness. Headache. Nausea. Shortness of breath. Convulsions. Unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED! Dry skin. Redness. Pain. (Further see Inhalation).	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
•EYES	Redness. Pain.	Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Sore throat. Vomiting. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING

Remove all ignition sources. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Personal protection: complete protective clothing including self-contained breathing apparatus.	Fireproof. Separated from food and feedstuffs oxidants halogens	Do not transport with food and feedstuffs. Note: E F symbol T symbol R: 45-46-11-36/38-48/23/24/25-65 S: 53-45 UN Hazard Class: 3 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0015

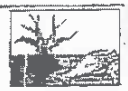
International Chemical Safety Cards

ICSC: 0015

BENZENE

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** COLOURLESS LIQUID , WITH CHARACTERISTIC ODOUR. **PHYSICAL DANGERS:** The vapour is heavier than air and may travel along the ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated. **CHEMICAL DANGERS:** Reacts violently with oxidants, nitric acid, sulfuric acid and halogens causing fire and explosion hazard. Attacks plastic and rubber. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.5 ppm as TWA 2.5 ppm as STEL (skin) A1 BEI (ACGIH 2004). MAK: H Carcinogen category: 1 Germ cell mutagen group: 3A (DFG 2004). OSHA PEL: 1910.1028 TWA 1 ppm ST 5 ppm See Appendix F NIOSH REL: Ca TWA 0.1 ppm ST 1 ppm See Appendix A NIOSH IDLH: Ca 500 ppm See: 71432	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation through the skin and by ingestion **INHALATION RISK:** A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance is irritating to the eyes the skin and the respiratory tract Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. The substance may cause effects on the central nervous system , resulting in lowering of consciousness Exposure far above the occupational exposure limit value may result in unconsciousness death **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The liquid defats the skin. The substance may have effects on the bone marrow immune system , resulting in a decrease of blood cells. This substance is carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 80°C Melting point: 6°C Relative density (water = 1): 0.88 Solubility in water, g/100 ml at 25°C: 0.18 Vapour pressure, kPa at 20°C: 10 Relative vapour density (air = 1): 2.7	Relative density of the vapour/air-mixture at 20°C (air = 1): 1.2 Flash point: -11°C c.c. Auto-ignition temperature: 498°C Explosive limits, vol% in air: 1.2-8.0 Octanol/water partition coefficient as log Pow:

2.13

ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. 

NOTES

Use of alcoholic beverages enhances the harmful effect. Depending on the degree of exposure, periodic medical examination is indicated. The odour warning when the exposure limit value is exceeded is insufficient.

Transport Emergency Card: TEC (R)-30S1114 / 30GF1-II
NFPA Code: H2; F3; R0

ADDITIONAL INFORMATION

ICSC: 0015 **BENZENE**

International Chemical Safety Cards

ICSC: 0078

TOLUENE

UNEP

National Institute for Occupational Safety and Health NIOSH

Methylbenzene
Toluol
Phenylmethane
$C_6H_5CH_3$ / C_7H_8
Molecular mass: 92.1

ICSC # 0078
CAS # 108-88-3
RTECS # XS5250000
UN # 1294
EC # 601-021-00-3
October 10, 2002 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Powder, AFFF, foam, carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding). Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools.	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION	Cough. Sore throat. Dizziness. Drowsiness. Headache. Nausea. Unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Dry skin. Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Burning sensation. Abdominal pain. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area in large spill! Consult an expert in large spill! Remove all ignition sources. Ventilation. Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Personal protection: self-contained breathing apparatus	Fireproof. Separated from strong oxidants.	F symbol Xn symbol R: 11-38-48/20-63-65-67 S: 2-36/37-46-62 UN Hazard Class: 3 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0078

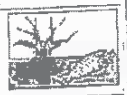
Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994 No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values

International Chemical Safety Cards

TOLUENE

ICSC: 0078

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** COLOURLESS LIQUID , WITH CHARACTERISTIC ODOUR. **PHYSICAL DANGERS:** The vapour mixes well with air, explosive mixtures are formed easily. As a result of flow, agitation, etc., electrostatic charges can be generated. **CHEMICAL DANGERS:** Reacts violently with strong oxidants causing fire and explosion hazard. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 50 ppm as TWA (skin) A4 BEI issued (ACGIH 2004). MAK: Pregnancy risk group: C (DFG 2004). EU OEL: 192 mg/m³ 50 ppm as TWA 384 mg/m³ 100 ppm as STEL (skin) (EU 2006). OSHA PEL†: TWA 200 ppm C 300 ppm 500 ppm (10-minute maximum peak) NIOSH REL: TWA 100 ppm (375 mg/m³) ST 150 ppm (560 mg/m³) NIOSH IDLH: 500 ppm See: 108883	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation, through the skin and by ingestion. **INHALATION RISK:** A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance is irritating to the eyes and the respiratory tract. The substance may cause effects on the central nervous system. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. Exposure at high levels may result in cardiac dysrhythmia and unconsciousness. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The liquid defats the skin. The substance may have effects on the central nervous system. Exposure to the substance may enhance hearing damage caused by exposure to noise. Animal tests show that this substance possibly causes toxicity to human reproduction or development.
PHYSICAL PROPERTIES	Boiling point: 111°C Melting point: -95°C Relative density (water = 1): 0.87 Solubility in water: none	Relative density of the vapour/air-mixture at 20°C (air = 1): 1.01 Flash point: 4°C c.c. Auto-ignition temperature: 480°C

	Vapour pressure, kPa at 25°C: 3.8 Relative vapour density (air = 1): 3.1	Explosive limits, vol% in air: 1.1-7.1 Octanol/water partition coefficient as log Pow: 2.69
ENVIRONMENTAL DATA	The substance is toxic to aquatic organisms.	

NOTES

Depending on the degree of exposure, periodic medical examination is suggested. Use of alcoholic beverages enhances the harmful effect. Card has been partly updated in October 2004: see sections Occupational Exposure Limits, EU classification, Emergency Response. Card has been partly updated in October 2006: see section Occupational Exposure Limits.

Transport Emergency Card: TEC (R)-30S1294
NFPA Code: H 2; F 3; R 0;

ADDITIONAL INFORMATION

ICSC: 0078 **TOLUENE**

International Chemical Safety Cards

ETHYLBENZENE

ICSC: 0268

Ethylbenzol
Phenylethane
EB
$C_8H_{10}/C_6H_5C_2H_5$
Molecular mass: 106.2

ICSC # 0268
CAS # 100-41-4
RTECS # DA0700000
UN # 1175
EC # 601-023-00-4
November 23, 2007 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable.	NO open flames, NO sparks, and NO smoking.	Dry powder. Foam. Carbon dioxide.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Do NOT use compressed air for filling, discharging or handling.	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT GENERATION OF MISTS!	
•INHALATION	Cough. Sore throat. Dizziness. Drowsiness. Headache.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain. crimation; deleted at update Nov 07 - only at very high levels.	Safety goggles	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Burning sensation in the throat and chest. (Further see inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: filter respirator for organic gases and vapours adapted to the airborne concentration of the substance. Ventilation. Collect leaking	Fireproof. Separated from strong oxidants. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.	F symbol Xn symbol R: 11-20

liquid in covered containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer Do NOT let this chemical enter the environment.		S: 2-16-24/25-29 UN Hazard Class: 3 UN Packing Group: II Signal: Danger Flame-Excl mark-Health haz Highly flammable liquid and vapour May be harmful if swallowed Harmful if inhaled vapour Causes mild skin irritation Causes eye irritation Suspected of causing cancer May cause respiratory irritation May cause drowsiness or dizziness May be harmful if swallowed and enters airways Toxic to aquatic life

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0268

International Chemical Safety Cards

ICSC: 0268

ETHYLBENZENE

I M P O R T A N T D A T A	**PHYSICAL STATE: APPEARANCE:** COLOURLESS LIQUID , WITH AROMATIC ODOUR. **PHYSICAL DANGERS:** The vapour mixes well with air, explosive mixtures are easily formed. **CHEMICAL DANGERS:** Reacts with strong oxidants. Attacks plastic and rubber. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 100 ppm as TWA 125 ppm as STEL A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued (ACGIH 2007). EU OEL: 442 mg/m³ 100 ppm as TWA 884 mg/m³ 200 ppm as STEL (skin) (EU 2006). OSHA PEL†: TWA 100 ppm (435 mg/m³) NIOSH REL: TWA 100 ppm (435 mg/m³) ST 125 ppm (545 mg/m³) NIOSH IDLH: 800 ppm 10%LEL See: 100414	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its vapour, and by ingestion. **INHALATION RISK:** A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance is irritating to the eyes the skin and the respiratory tract Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. The substance may cause effects on the central nervous system. Exposure above the OEL could cause lowering of consciousness. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans. The substance may have effects on the kidneys and liver , resulting in impaired functions Repeated contact with skin may cause dryness and cracking.
PHYSICAL PROPERTIES	Boiling point: 136°C Melting point: -95°C Relative density (water = 1): 0.9	Relative density of the vapour/air-mixture at 20°C (air = 1): 1.02 Flash point: 18°C c.c.

	Solubility in water, g/100 ml at 20°C: 0.015 Vapour pressure, kPa at 20°C: 0.9 Relative vapour density (air = 1): 3.7	Auto-ignition temperature: 432°C Explosive limits, vol% in air: 1.0-6.7 Octanol/water partition coefficient as log Pow: 3.1 Viscosity, mm^2/s at 25 °C: 0.6
ENVIRONMENTAL DATA	The substance is toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.	

NOTES

The odour warning when the exposure limit value is exceeded is insufficient.

Transport Emergency Card: TEC (R)-305 1135 or 30GF1- I+II
NFPA Code: H2; F3; R0

ADDITIONAL INFORMATION

ICSC: 0268 **ETHYLBENZENE**

International Chemical Safety Cards

ICSC: 0086

p-XYLENE

UNEP

National Institute for Occupational Safety and Health NIOSH

para-Xylene
1,4-Dimethylbenzene
p-Xylol
$C_6H_4(CH_3)_2$ / C_8H_{10}
Molecular mass: 106.2

ICSC # 0086
CAS # 106-42-3
RTECS # ZE2625000
UN # 1307
EC # 601-022-00-9
August 03, 2002 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Flammable.	NO open flames, NO sparks, and NO smoking.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Above 27°C explosive vapour/air mixtures may be formed.	Above 27°C use a closed system, ventilation, and explosion-proof electrical equipment. Prevent build-up of electrostatic charges (e.g., by grounding).	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION	Dizziness. Drowsiness. Headache. Nausea.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Dry skin. Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Burning sensation. Abdominal pain. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Ventilation. Remove all ignition sources. Collect leaking and spilled liquid in sealable containers as far as	Fireproof. Separated from strong oxidants and strong acids	Note: C Xn symbol

possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: filter respirator for organic gases and vapours.)	R: 10-20/21-38 S: 2-25 UN Hazard Class: 3 UN Packing Group: III

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0086

International Chemical Safety Cards

p-XYLENE

ICSC: 0086

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** COLOURLESS LIQUID , WITH CHARACTERISTIC ODOUR. **PHYSICAL DANGERS:** As a result of flow, agitation, etc., electrostatic charges can be generated. **CHEMICAL DANGERS:** Reacts with strong acids strong oxidants **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 100 ppm as TWA 150 ppm as STEL A4 (ACGIH 2001). BEI (ACGIH 2001). EU OEL: 50 ppm as TWA 100 ppm as STEL (skin) (EU 2000). OSHA PEL†: TWA 100 ppm (435 mg/m^3) NIOSH REL: TWA 100 ppm (435 mg/m^3) ST 150 ppm (655 mg/m^3) NIOSH IDLH: 900 ppm See: 95476	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation, through the skin and by ingestion. **INHALATION RISK:** A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance is irritating to the eyes and the skin The substance may cause effects on the central nervous system If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The liquid defats the skin. The substance may have effects on the central nervous system. Animal tests show that this substance possibly causes toxicity to human reproduction or development.
PHYSICAL PROPERTIES	Boiling point: 138°C Melting point: 13°C Relative density (water = 1): 0.86 Solubility in water: none Vapour pressure, kPa at 20°C: 0.9	Relative vapour density (air = 1): 3.7 Relative density of the vapour/air-mixture at 20°C (air = 1): 1.02 Flash point: 27°C c.c. Auto-ignition temperature: 528°C Explosive limits, vol% in air: 1.1-7.0 Octanol/water partition coefficient as log Pow: 3.15
ENVIRONMENTAL DATA	The substance is toxic to aquatic organisms.	

NOTES

Depending on the degree of exposure, periodic medical examination is indicated. The recommendations on this Card also apply to technical xylene. See ICSC 0084 o-Xylene and 0085 m-Xylene.

Transport Emergency Card: TEC (R)-30S1307-III
NFPA Code: H 2; F 3; R 0;

Card has been partially updated in January 2008: see Occupational Exposure Limits.

ADDITIONAL INFORMATION

ICSC: 0086 **p-XYLENE**

International Chemical Safety Cards

NAPHTHALENE

ICSC: 0667

Naphthene
$C_{10}H_8$
Molecular mass: 128.18

ICSC # 0667
CAS # 91-20-3
RTECS # QJ0525000
UN # 1334 (solid); 2304 (molten)
EC # 601-052-00-2
April 21, 2005 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Above 80°C explosive vapour/air mixtures may be formed. Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION	Headache. Weakness. Nausea. Vomiting. Sweating. Confusion. Jaundice. Dark urine.	Ventilation (not if powder), local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED! (Further see Inhalation).	Protective gloves.	Rinse skin with plenty of water or shower.
•EYES		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Diarrhoea. Convulsions. Unconsciousness. (Further see Inhalation).	Do not eat, drink, or smoke during work. Wash hands before eating.	Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: filter respirator for organic gases and vapours. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants, food and feedstuffs. Store in an area without drain or sewer access.	Do not transport with food and feedstuffs. Marine pollutant. Xn symbol N symbol R: 22-40-50/53 S: 2-36/37-46-60-61

UN Hazard Class: 4.1
UN Packing Group: III

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0667

International Chemical Safety Cards

NAPHTHALENE

ICSC: 0667

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** WHITE SOLID IN VARIOUS FORMS , WITH CHARACTERISTIC ODOUR. **PHYSICAL DANGERS:** Dust explosion possible if in powder or granular form, mixed with air. **CHEMICAL DANGERS:** On combustion, forms irritating and toxic gases. Reacts with strong oxidants **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 10 ppm as TWA 15 ppm as STEL (skin) A4 (not classifiable as a human carcinogen); (ACGIH 2005). MAK: skin absorption (H); Carcinogen category: 2; Germ cell mutagen group: 3B; (DFG 2004). OSHA PEL†: TWA 10 ppm (50 mg/m^3) NIOSH REL: TWA 10 ppm (50 mg/m^3) ST 15 ppm (75 mg/m^3) NIOSH IDLH: 250 ppm See: 91203	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation, through the skin and by ingestion. **INHALATION RISK:** A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C. See Notes. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance may cause effects on the blood , resulting in lesions of blood cells (haemolysis) See Notes. The effects may be delayed. Exposure by ingestion may result in death. Medical observation is indicated. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The substance may have effects on the blood , resulting in chronic haemolytic anaemia. The substance may have effects on the eyes , resulting in the development of cataract. This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 218°C Sublimation slowly at room temperature Melting point: 80°C Density: 1.16 g/cm^3 Solubility in water, g/100 ml at 25°C: none	Vapour pressure, Pa at 25°C: 11 Relative vapour density (air = 1): 4.42 Flash point: 80°C c.c. Auto-ignition temperature: 540°C Explosive limits, vol% in air: 0.9-5.9 Octanol/water partition coefficient as log Pow: 3.3
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment.	

NOTES

Some individuals may be more sensitive to the effect of naphthalene on blood cells.

Transport Emergency Card: TEC (R)-41S1334 (solid); 41GF 1 -II+III (solid); 4 1 S2304 (molten)
NFPA Code: H2; F2; R0;

ADDITIONAL INFORMATION	
ICSC: 0667	NAPHTHALENE

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

ACENAPHTHENE

ICSC: 1674

UNEP

National Institute for Occupational Safety and Health NIOSH

1,2-Dihydroacenaphthylene
1,8-Ethylenenaphthalene
$C_{12}H_{10}$
Molecular mass: 154.2

ICSC # 1674
CAS # 83-32-9
RTECS # AB1000000
UN # 3077
October 12, 2006 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray. Dry powder. Foam. Carbon dioxide.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE	See NOTES.	PREVENT DISPERSION OF DUST!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: P2 filter respirator for harmful particles. Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.	UN Hazard Class: 9 UN Packing Group: III Signal: Warning Enviro Very toxic to aquatic life with long lasting effects

SEE IMPORTANT INFORMATION ON BACK

ICSC: 1674

International Chemical Safety Cards

ACENAPHTHENE

ICSC: 1674

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** WHITE TO BEIGE CRYSTALS **PHYSICAL DANGERS:** Dust explosion possible if in powder or granular form, mixed with air. **CHEMICAL DANGERS:** On combustion, forms toxic gases including carbon monoxide. Reacts with strong oxidants **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established. MAK not established.	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion. **INHALATION RISK:** A harmful concentration of airborne particles can be reached quickly when dispersed **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** See Notes.
PHYSICAL PROPERTIES	Boiling point: 279°C Melting point: 95°C Density: 1.2 g/cm³ Solubility in water, g/100 ml at 25°C: 0.0004	Vapour pressure, Pa at 25°C: 0.3 Relative vapour density (air = 1): 5.3 Flash point: 135°C o.c. Auto-ignition temperature: >450 °C Octanol/water partition coefficient as log Pow: 3.9 - 4.5
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment. It is strongly advised that this substance does not enter the environment.	

NOTES

Acenaphthene occurs as a pure substance and also as a component of polyaromatic hydrocarbon (PAH) mixtures. Human population studies have associated PAH's exposure with cancer and cardiovascular diseases. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

Transport Emergency Card: TEC (R)-90GM7-III

ADDITIONAL INFORMATION

ICSC: 1674	ACENAPHTHENE
	(C) IPCS, CEC, 1994

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

ANTHRACENE

ICSC: 0825

Anthracin
Paranaphthalene
$C_{14}H_{10}$ / $(C_6H_4CH)_2$
Molecular mass: 178.2

ICSC # 0825
CAS # 120-12-7
RTECS # CA9350000
March 24. 1999 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION	Cough. Sore throat.	Ventilation (not if powder), local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain.	Safety spectacles, face shield, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain.	Do not eat, drink, or smoke during work.	Rinse mouth. Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: P2 filter respirator for harmful particles).	Separated from strong oxidants. Well closed.	

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0825

International Chemical Safety Cards

ANTHRACENE

ICSC: 0825

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
WHITE CRYSTALS OR FLAKES.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:
The substance decomposes on heating, under influence of strong oxidants producing acrid, toxic fume , causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV not established.

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance slightly irritates the skin and the respiratory tract.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis under the influence of UV light.

PHYSICAL PROPERTIES

Boiling point: 342°C
Melting point: 218°C
Density: 1.25-1.28 g/cm³
Solubility in water, g/100 ml at 20 °C: 0.00013
Vapour pressure, Pa at 25°C: 0.08

Relative vapour density (air = 1): 6.15
Flash point: 121°C
Auto-ignition temperature: 538°C
Explosive limits, vol% in air: 0.6-?
Octanol/water partition coefficient as log Pow: 4.5 (calculated)

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. The substance may cause long-term effects in the aquatic environment.

NOTES

Green oil, Tetra-olive N2G are trade names.

NFPA Code: H0; F1; R;

ADDITIONAL INFORMATION

ICSC: 0825 ANTHRACENE

IMPORTANT LEGAL NOTICE:

relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

PYRENE

ICSC: 1474

Benzo (d,e,f) phenanthrene
beta-Pyrene
$C_{16}H_{10}$
Molecular mass: 202.26

ICSC # 1474
CAS # 129-00-0
RTECS # UR2450000
November 27, 2003 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking.	Water spray, carbon dioxide, dry powder, alcohol-resistant foam, foam.
EXPLOSION			
EXPOSURE			
•INHALATION		Avoid inhalation of dust	Fresh air, rest.
•SKIN	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness.	Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Do NOT induce vomiting. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder. Do NOT let this chemical enter the environment. (Extra personal protection: P2 filter respirator for harmful particles.)	Separated from strong oxidants. Keep in a well-ventilated room.	Do not transport with food and feedstuffs.

SEE IMPORTANT INFORMATION ON BACK

International Chemical Safety Cards

PYRENE

ICSC: 1474

IMPORTANT DATA	**PHYSICAL STATE; APPEARANCE:** YELLOW COLOURLESS SOLID IN VARIOUS FORMS **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** The substance decomposes on heating producing irritating fumes **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established. MAK not established.	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation through the skin and by ingestion **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed. **EFFECTS OF SHORT-TERM EXPOSURE:** Exposure to sun may provoke an irritating effect of pyrene on skin and lead to chronic skin discoloration. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
PHYSICAL PROPERTIES	Boiling point: 404°C Melting point: 151°C Density: 1.27 g/cm³	Solubility in water: 0.135 mg/l at 25°C Vapour pressure, Pa at °C: 0.08 Octanol/water partition coefficient as log Pow: 4.88
ENVIRONMENTAL DATA	Bioaccumulation of this chemical may occur in crustacea, in fish, in milk, in algae and in molluscs. It is strongly advised that this substance does not enter the environment.	

NOTES

Pyrene is one of many polycyclic aromatic hydrocarbons - standards are usually established for them as mixtures, e.g., coal tar pitch volatiles. However, pyrene may be encountered as a laboratory chemical in its pure form. Health effects of exposure to the substance have not been investigated adequately. See ICSC 1415 Coal-tar pitch.

ADDITIONAL INFORMATION

ICSC: 1474 PYRENE

relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

CHRYSENE

ICSC: 1672

UNEP

NIOSH National Institute for Occupational Safety and Health

Benzoaphenanthrene
1,2-Benzophenanthrene
1,2,5,6-Dibenzonaphthalene
$C_{18}H_{12}$
Molecular mass: 228.3

ICSC # 1672
CAS # 218-01-9
RTECS # GC0700000
UN # 3077
EC # 601-048-00-0
October 12, 2006 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray. Dry powder. Foam. Carbon dioxide.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: P3 filter respirator for toxic particles. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.	T symbol N symbol R: 45-68-50/53 S: 53-45-60-61 UN Hazard Class: 9 UN Packing Group: III

		Signal: Warning Health haz-Enviro Suspected of causing cancer Very toxic to aquatic life Toxic to aquatic life with long lasting effects

SEE IMPORTANT INFORMATION ON BACK

ICSC: 1672

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values

International Chemical Safety Cards

ICSC: 1672

CHRYSENE

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** COLOURLESS TO BEIGE CRYSTALS OR POWDER **PHYSICAL DANGERS:** Dust explosion possible if in powder or granular form, mixed with air. **CHEMICAL DANGERS:** The substance decomposes on burning producing toxic fumes Reacts violently with strong oxidants. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: A3 (confirmed animal carcinogen with unknown relevance to humans); (ACGIH 2006). MAK: skin absorption (H); Carcinogen category: 2 (DFG 2007).	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion. **INHALATION RISK:** A harmful concentration of airborne particles can be reached quickly when dispersed **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 448°C Melting point: 254 - 256°C Density: 1.3 g/cm³	Solubility in water: very poor Octanol/water partition coefficient as log Pow: 5.9
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in seafood. It is strongly advised that this substance does not enter the environment.	

NOTES

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home. This substance does not usually occur as a pure substance but as a component of polyaromatic hydrocarbon (PAH) mixtures. Human population studies have associated PAH's exposure with cancer and cardiovascular diseases.

Transport Emergency Card: TEC (R)-90GM7-III
Card has been partially updated in January 2008: see Occupational Exposure Limits.

ADDITIONAL INFORMATION

ICSC: 1672 **CHRYSENE**

International Chemical Safety Cards

ICSC: 0720

BENZO(b)FLUORANTHENE

UNEP

National Institute for Occupational Safety and Health NIOSH

Benz(e)acephenanthrylene
2,3-Benzofluoroanthene
Benzo(e)fluoranthene
3,4-Benzofluoranthene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0720
CAS # 205-99-2
RTECS # CU1400000
EC # 601-034-00-4
March 25, 1999 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible). Then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers. if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0720

International Chemical Safety Cards

BENZO(b)FLUORANTHENE

ICSC: 0720

IMPORTANT DATA	**PHYSICAL STATE; APPEARANCE:** COLOURLESS CRYSTALS **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: A2 (suspected human carcinogen); (ACGIH 2004). MAK: Carcinogen category: 2; (DFG 2004).	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol and through the skin. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans. May cause genetic damage in humans.
PHYSICAL PROPERTIES	Boiling point: 481°C Melting point: 168°C Solubility in water: none	Octanol/water partition coefficient as log Pow: 6.12
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality.	

NOTES

Benzo(b)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing benzo(b)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m³. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

BENZO(a)PYRENE

ICSC: 0104

Benz(a)pyrene
3,4-Benzopyrene
Benzo(d,e,f)chrysene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0104
CAS # 50-32-8
RTECS # DJ3675000
EC # 601-032-00-3
October 17, 2005 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, foam, powder, carbon dioxide.
EXPLOSION			
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Personal protection: complete protective clothing including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder,	Separated from strong oxidants.	T symbol N symbol R: 45-46-60-61-43-50/53 S: 53-45-60-61

then remove to safe place.

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0104

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994 No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values

International Chemical Safety Cards

ICSC: 0104

BENZO(a)PYRENE

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** PALE-YELLOW CRYSTALS **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Reacts with strong oxidants causing fire and explosion hazard. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: Exposure by all routes should be carefully controlled to levels as low as possible A2 (suspected human carcinogen); (ACGIH 2005). MAK: Carcinogen category: 2; Germ cell mutagen group: 2; (DFG 2005).	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is carcinogenic to humans. May cause heritable genetic damage to human germ cells. Animal tests show that this substance possibly causes toxicity to human reproduction or development.
PHYSICAL PROPERTIES	Boiling point: 496°C Melting point: 178.1°C Density: 1.4 g/cm³	Solubility in water: none (<0.1 g/100 ml) Vapour pressure: negligible Octanol/water partition coefficient as log Pow: 6.04
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish, in plants and in molluscs. The substance may cause long-term effects in the aquatic environment.	

NOTES

Do NOT take working clothes home. Benzo(a)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAHs) in the environment, usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.

ADDITIONAL INFORMATION

ICSC: 0104	BENZO(a)PYRENE

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

BENZO(ghi)PERYLENE

ICSC: 0739

UNEP

National Institute for Occupational Safety and Health NIOSH

1,12-Benzoperylene
1,12-Benzperylene
$C_{22}H_{12}$
Molecular mass: 276.3

ICSC # 0739
CAS # 191-24-2
RTECS # DI6200500
October 18, 1999 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible under specific conditions.	NO open flames.	In case of fire in the surroundings: all extinguishing agents allowed.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Well closed.	

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0739

International Chemical Safety Cards

BENZO(ghi)PERYLENE

ICSC: 0739

IMPORTANT DATA	**PHYSICAL STATE; APPEARANCE:** PALE YELLOW-GREEN CRYSTALS. **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established.	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol and through the skin. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
PHYSICAL PROPERTIES	Boiling point: 550°C Melting point: 278°C Density: 1.3 g/cm³	Solubility in water: none Octanol/water partition coefficient as log Pow: 6.58
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air and water.	

NOTES

Benzo(ghi)perylene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco. Data are insufficiently available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0739 **BENZO(ghi)PERYLENE**

International Chemical Safety Cards

POLYCHLORINATED BIPHENYL (AROCLOR 1254)

ICSC: 0939

Chlorobiphenyl (54% chlorine)
Chlorodiphenyl (54% chlorine)
PCB
Molecular mass: 327 (average)

ICSC # 0939
CAS # 11097-69-1
RTECS # TQ1360000
UN # 2315
EC # 602-039-00-4
October 20, 1999 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: powder, carbon dioxide.
EXPLOSION			
EXPOSURE		PREVENT GENERATION OF MISTS! STRICT HYGIENE!	
•INHALATION		Ventilation.	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED! Dry skin. Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES		Safety goggles, face shield.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Headache. Numbness.	Do not eat, drink, or smoke during work.	Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Consult an expert! Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment. Personal protection: complete protective clothing including self-contained breathing apparatus.	Separated from food and feedstuffs. Cool. Dry. Keep in a well-ventilated room.	Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Severe marine pollutant. Note: C Xn symbol N symbol R: 33-50/53 S: 2-35-60-61 UN Hazard Class: 9 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0939

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

POLYCHLORINATED BIPHENYL (AROCLOR 1254)

ICSC: 0939

I M	PHYSICAL STATE; APPEARANCE: LIGHT YELLOW VISCOUS LIQUID.	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

P O R T A N T O A T A	**PHYSICAL DANGERS:** **CHEMICAL DANGERS:** The substance decomposes in a fire producing irritating and toxic gases **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.5 mg/m³ as TWA (skin) A3 (ACGIH 2004). MAK: 0.05 ppm 0.70 mg/m³ H Peak Limitation category: II(8) Carcinogen category: 3B Pregnancy risk group: B (DFG 2004). OSHA PEL: TWA 0.5 mg/m³ skin NIOSH REL*: Ca TWA 0.001 mg/m³ See Appendix A *Note The REL also applies to other PCBs. NIOSH IDLH: Ca 5 mg/m³ See: IDLH INDEX	**INHALATION RISK:** A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20°C **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the liver. Animal tests show that this substance possibly causes toxic effects upon human reproduction.
PHYSICAL PROPERTIES	Relative density (water = 1): 1.5 Solubility in water: none	Vapour pressure, Pa at 25°C: 0.01 Octanol/water partition coefficient as log Pow: 6.30 (estimated)
ENVIRONMENTAL DATA	In the food chain important to humans, bioaccumulation takes place, specifically in aquatic organisms. It is strongly advised not to let the chemical enter into the environment.	

NOTES

Changes into a resinous state (pour point) at 10°C. Distillation range: 365°-390°C.

Transport Emergency Card: TEC (R)-90GM2-II-L

ADDITIONAL INFORMATION

ICSC: 0939 **POLYCHLORINATED BIPHENYL (AROCLOR 1254)**

International Chemical Safety Cards

ALDRIN

ICSC: 0774

1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-exo-1,4-endo-5,8-dimethanonaphthalene
1,45,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4aß,5alpha,8alpha,8aß)
HHDN
$C_{12}H_8Cl_6$
Molecular mass: 364.9

ICSC # 0774
CAS # 309-00-2
RTECS # IO2100000
UN # 2761
EC # 602-048-00-3
March 26, 1998 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: all extinguishing agents allowed.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	
•INHALATION	(See Ingestion).	Ventilation (not if powder).	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED! See Ingestion.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES		Safety goggles, or face shield.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Convulsions. Dizziness. Headache. Nausea. Vomiting. Muscle twitching.	Do not eat, drink, or smoke during work. Wash hands before eating.	Give a slurry of activated charcoal in water to drink. Do NOT induce vomiting. Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Do NOT wash away into sewer. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. (Extra personal protection: chemical protection suit including self-contained breathing apparatus).	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs and incompatible materials: See Chemical Dangers. Well closed. Keep in a well-ventilated room. Store in an area without drain or sewer access.	Do not transport with food and feedstuffs. Severe marine pollutant. T symbol N symbol R: 24/25-40-48/24/25-50/53 S: 1/2-22-36/37-45-60-61 UN Hazard Class: 6.1 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0774

International Chemical Safety Cards

ALDRIN

ICSC: 0774

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** COLOURLESS CRYSTALS **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** The substance decomposes on heating producing toxic and corrosive fumes including hydrogen chloride. Reacts with acids and oxidants. Attacks many metals in presence of water. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.25 mg/m³ (as TWA), A3 (skin) (ACGIH 1997). MAK: (Inhalable fraction) 0.25 mg/m³ skin absorption (H); Peak limitation category: II(8) (DFG 2006). OSHA PEL: TWA 0.25 mg/m^3 skin NIOSH REL: Ca TWA 0.25 mg/m^3 skin See Appendix A NIOSH IDLH: Ca 25 mg/m^3 See: 309002	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body through the skin and by ingestion. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly on spraying. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance may cause effects on the central nervous system, resulting in convulsions. The effects may be delayed. Medical observation is indicated. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The substance accumulates in the human body. Cumulative effects are possible: see Acute Hazards/Symptoms.
PHYSICAL PROPERTIES	Boiling point at 0.27kPa: 145°C Melting point: 104-105°C Density: 1.6 g/cm³	Solubility in water: none Vapour pressure, Pa at 20°C: 0.009 Octanol/water partition coefficient as log Pow: 7.4
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. This substance may be hazardous to the environment; special attention should be given to birds, honey bees. In the food chain important to humans, bioaccumulation takes place, specifically in aquatic organisms. It is strongly advised not to let the chemical enter into the environment because it persists	

in the environment. The substance may cause long-term effects in the aquatic environment. Avoid release to the environment in circumstances different to normal use.

NOTES

Other melting points: 49-60°C (technical grade). Depending on the degree of exposure, periodic medical examination is indicated. If the substance is formulated with solvent(s) also consult the card(s) (ICSC) of the solvent(s). Carrier solvents used in commercial formulations may change physical and toxicological properties. Do NOT take working clothes home. The recommendations on this Card also apply to ICSC 0787 (dieldrin). Aldrec, Aldrex, Aldrite, Aldron, Aldrosol, Algran, Altox, Drinox, Octalene, Seedrin, and Toxadrin are trade names.

Transport Emergency Card: TEC (R)-61G41b.
NFPA Code: H2; F0; R0;

Card has been partially updated in August 2007: see Storage, Occupational Exposure Limits.

ADDITIONAL INFORMATION

ICSC: 0774 **ALDRIN**

International Chemical Safety Cards

ENDRIN

ICSC: 1023

UNEP

National Institute for Occupational Safety and Health NIOSH

$C_{12}H_8Cl_6O$
Molecular mass: 380.9

ICSC # 1023
CAS # 72-20-8
RTECS # IO1575000
UN # 2761
EC # 602-051-00-X
March 10, 2000 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: all extinguishing agents allowed.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	(See Ingestion).	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES		Face shield or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Dizziness. Weakness. Headache. Nausea. Vomiting. Convulsions.	Do not eat, drink, or smoke during work. Wash hands before eating.	Give a slurry of activated charcoal in water to drink. Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Do NOT wash away into sewer. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection:	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs Well closed. Keep in a well-ventilated room.	Do not transport with food and feedstuffs. Severe marine pollutant. T+ symbol N symbol R: 24-28-50/53

chemical protection suit including self-contained breathing apparatus).		S: 1/2-22-36/37-45-60-61 UN Hazard Class: 6.1 UN Packing Group: I

SEE IMPORTANT INFORMATION ON BACK

ICSC: 1023

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values

International Chemical Safety Cards

ICSC: 1023

ENDRIN

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** WHITE CRYSTALS **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** The substance decomposes on heating above 245°C, producing hydrogen chloride phosgene **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.1 mg/m³ (skin) (ACGIH 2000). OSHA PEL: TWA 0.1 mg/m^3 skin NIOSH REL: TWA 0.1 mg/m^3 skin NIOSH IDLH: 2 mg/m^3 See: 72208	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation, through the skin and by ingestion. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly on spraying or when dispersed, especially if powdered. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance may cause effects on the central nervous system , resulting in convulsions and death. The effects may be delayed. Medical observation is indicated. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
PHYSICAL PROPERTIES	Decomposes below boiling point at 245°C Melting point: 200°C Density: 1.7 g/cm³	Solubility in water, g/100 ml at 25°C: none Vapour pressure, Pa at 25°C: negligible Octanol/water partition coefficient as log Pow: 5.34
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. This substance may be hazardous to the environment; special attention should be given to honey bees birds mammals It is strongly advised not to let the chemical enter into the environment because it persists in the environment. In the food chain important to humans, bioaccumulation takes place, specifically in fish seafood Avoid release to the environment in circumstances different to normal use.	

NOTES

If the substance is formulated with solvent(s) also consult the card(s) (ICSC) of the solvent(s). Carrier solvents used in commercial formulations may change physical and toxicological properties. Do NOT take working clothes home.

Transport Emergency Card: TEC (R)-61G41a

NFPA Code: H3; F0; R; 0

ADDITIONAL INFORMATION	

ICSC: 1023 **ENDRIN**

International Chemical Safety Cards

CHLORDANE (TECHNICAL PRODUCT)

ICSC: 0740

1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene
1,2,4,5,6,7,8,8-Octachloro-2.3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene
$C_{10}H_6Cl_8$
Molecular mass: 409.8

ICSC # 0740
CAS # 57-74-9
UN # 2996
EC # 602-047-00-8
March 26, 1998 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames.	Alcohol-resistant foam, powder, carbon dioxide.
EXPLOSION			
EXPOSURE		PREVENT GENERATION OF MISTS! STRICT HYGIENE! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	(See Ingestion).	Breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain.	Safety goggles face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Confusion. Convulsions. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer. Personal protection: chemical protection suit	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs bases and incompatible materials See Chemical Dangers. Well closed. Keep in a well-ventilated room.	Do not transport with food and feedstuffs. Severe marine pollutant. Xn symbol N symbol

including self-contained breathing apparatus.		R: 21/22-40-50/53 S: 2-36/37-60-61 UN Hazard Class: 6.1 UN Packing Group: III

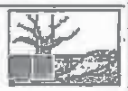
SEE IMPORTANT INFORMATION ON BACK

ICSC: 0740

International Chemical Safety Cards

CHLORDANE (TECHNICAL PRODUCT)

ICSC: 0740

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** TECHNICAL: LIGHT YELLOW TO AMBER VISCOUS LIQUID **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** The substance decomposes on burning, on contact with bases producing toxic fumes including phosgene hydrogen chloride Attacks iron, zinc, plastic, rubber and coatings. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.5 mg/m³ as TWA (skin) A3 (confirmed animal carcinogen with unknown relevance to humans); (ACGIH 2004). MAK: (inhalable fraction) 0.5 mg/m³ Peak limitation category: II(8); skin absorption (H); Carcinogen category: 3B; (DFG 2004). OSHA PEL: TWA 0.5 mg/m^3 skin NIOSH REL: Ca TWA 0.5 mg/m^3 skin See Appendix A NIOSH IDLH: Ca 100 mg/m^3 See: 57749	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation, through the skin and by ingestion. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly on spraying. **EFFECTS OF SHORT-TERM EXPOSURE:** Exposure at high levels may result in disorientation, tremors, convulsions, respiratory failure and death. Medical observation is indicated. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The substance may have effects on the liver immune system , resulting in tissue lesions and liver impairment. This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point at 0.27kPa: 175°C Relative density (water = 1): 1.59-1.63 Solubility in water: none	Vapour pressure, Pa at 25°C: 0.0013 Octanol/water partition coefficient as log Pow: 2.78
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. This substance may be hazardous to the environment; special attention should be given to soil organisms, honey bees. It is strongly advised that this substance does not enter the environment. The substance may cause long-term effects in the aquatic environment.	

NOTES

If the substance is formulated with solvents also consult the ICSCs of these materials. Carrier solvents used in commercial formulations may change physical and toxicological properties. Belt, Chlor Kil, Chlortox, Corodan, Gold Crest, Intox,

Kypchlor, Niran, Octachlor, Sydane, Synklor, Termi-Ded, Topiclor, and Toxichlor are trade names. Also consult ICSC 0743 Heptachlor.

Transport Emergency Card: TEC (R)-61GT6-III

ADDITIONAL INFORMATION

ICSC: 0740 **CHLORDANE (TECHNICAL PRODUCT)**

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September 2005

NIOSH Pocket Guide to Chemical Hazards

NPG Home | Introduction | Synonyms & Trade Names | Chemical Names | CAS Numbers | RTECS Numbers | Appendices | Search

Chlorinated camphene

CAS 8001-35-2

$C_{10}H_{10}Cl_8$

RTECS XW5250000

Synonyms & Trade Names
Chlorocamphene, Octachlorocamphene, Polychlorocamphene, Toxaphene

DOT ID & Guide
2761 151

Exposure Limits
NIOSH REL: Ca [skin] See Appendix A
OSHA PEL†: TWA 0.5 mg/m^3 [skin]

IDLH Ca [200 mg/m^3] See: 8001352

Conversion

Physical Description
Amber, waxy solid with a mild, piney, chlorine- and camphor-like odor. [insecticide]

MW: 413.8	BP: Decomposes	MLT: 149-194°F	Sol: 0.0003%
VP(77°F): 0.4 mmHg	IP: ?		Sp.Gr: 1.65
Fl.P: NA	UEL: NA	LEL: NA	

Noncombustible Solid, but may be dissolved in flammable liquids.

Incompatibilities & Reactivities
Strong oxidizers [Note: Slightly corrosive to metals under moist conditions.]

Measurement Methods
NIOSH 5039
See: NMAM or OSHA Methods

Personal Protection & Sanitation (See protection codes)
Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated/Daily
Remove: When wet or contaminated
Change: Daily
Provide: Eyewash, Quick drench

First Aid (See procedures)
Eye: Irrigate immediately
Skin: Soap wash promptly
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations NIOSH
At concentrations above the NIOSH REL, or where there is no REL, at any detectable concentration
(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure- demand or other positive-pressure mode
(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
Escape:
(APF = 50) Any air-purifying, full-facepiece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister having an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters./Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

Exposure Routes inhalation, skin absorption, ingestion, skin and/or eye contact

Symptoms Nausea, confusion, agitation, tremor, convulsions, unconsciousness; dry, red skin; [potential occupational carcinogen]

Target Organs central nervous system, skin

Cancer Site [in animals: liver cancer]

International Chemical Safety Cards

DDT

ICSC: 0034

Dichlorodiphenyltrichloroethane
1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane
1,1'-(2,2,2-Trichloroethylidene)bis(4-chlorobenzene)
p,p'-DDT
$C_{14}H_9Cl_5$
Molecular mass: 354.5

ICSC # 0034
CAS # 50-29-3
RTECS # KJ3325000
UN # 2761
EC # 602-045-00-7
April 20, 2004 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible. Liquid formulations containing organic solvents may be flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames	Powder, water spray, foam, carbon dioxide.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION	Cough.	Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness	Safety goggles, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Tremors. Diarrhoea. Dizziness. Headache. Vomiting. Numbness. Paresthesias. Hyperexcitability. Convulsions.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give a slurry of activated charcoal in water to drink. Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Do NOT let this chemical enter the environment. Sweep spilled substance into sealable non-metallic containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: P3 filter respirator for toxic particles.	Provision to contain effluent from fire extinguishing. Separated from iron, aluminum and its salts, food and feedstuffs. See Chemical Dangers.	Do not transport with food and feedstuffs. Severe marine pollutant. T symbol N symbol R: 25-40-48/25-50/53 S: 1/2-22-36/37-45-60-61 UN Hazard Class: 6.1 UN Packing Group: III

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0034

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994 No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values

International Chemical Safety Cards

DDT

ICSC: 0034

See also: INTRODUCTION See ICSC CARD: 0843

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I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** COLOURLESS CRYSTALS WHITE POWDER, TECHNICAL PRODUCT IS WAXY SOLID. **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** On combustion, forms toxic and corrosive fumesincludinghydrogen chloride. Reacts with aluminium and iron. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 1 mg/m³ as TWA A3 (ACGIH 2004). MAK: 1 mg/m³ H Peak limitation category: II(8) (DFG 2003). OSHA PEL: TWA 1 mg/m³ skin NIOSH REL: Ca TWA 0.5 mg/m³ See Appendix A NIOSH IDLH: Ca 500 mg/m³ See: 50293	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by ingestion. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly especially if powdered. **EFFECTS OF SHORT-TERM EXPOSURE:** May cause mechanical irritation. The substance may cause effects on the central nervous system , resulting in convulsions and respiratory depression Exposure at high levels may result in death. Medical observation is indicated. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The substance may have effects on the central nervous system and liver. This substance is possibly carcinogenic to humans Animal tests show that this substance possibly causes toxicity to human reproduction or development.
PHYSICAL PROPERTIES	Boiling point: 260°C Melting point: 109°C Density: 1.6 g/cm³	Solubility in water: poor Octanol/water partition coefficient as log Pow: 6.36
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. This substance may be hazardous to the environment; special attention should be given to birds. Bioaccumulation of this chemical may occur along the food chain, for example in milk and aquatic organisms. This substance does enter the environment under normal use. Great care, however, should be given to avoid any additional release, e.g. through inappropriate disposal.	

NOTES

Depending on the degree of exposure, periodic medical examination is indicated. Carrier solvents used in commercial formulations may change physical and toxicological properties. Do NOT take working clothes home. Consult national legislation. Agritan, Aztox, Anofex, Inodex, Gesapon, Gesarex, Gesarol, Guesapon, Clofenotane, Zeidane, Dicophane, Neocid are trade names.

Transport Emergency Card: TEC (R)-61GT7-III

ADDITIONAL INFORMATION

DDT

ICSC: 0034

International Chemical Safety Cards

SILVER

ICSC: 0810

Argentium
C.I. 77820
Ag

ICSC # 0810
CAS # 7440-22-4
RTECS # VW3500000
September 10, 1997 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible, except as powder.		
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Rinse skin with plenty of water or shower.
•EYES		Safety spectacles, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Separated from ammonia, strong hydrogen peroxide solutions, strong acids.	

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0810

International Chemical Safety Cards

ICSC: 0810

SILVER

IMPORTANT	**PHYSICAL STATE; APPEARANCE:** WHITE METAL, TURNS DARK ON EXPOSURE TO OZONE, HYDROGEN SULFIDE OR SULFUR.
	PHYSICAL DANGERS:
	CHEMICAL DANGERS: Shock-sensitive compounds are formed with acetylene. Reacts with acids causing fire hazard. Contact with strong hydrogen peroxide solution will cause violent decomposition to oxygen gas. Contact with ammonia may cause formation of compounds that are explosive when dry.
	OCCUPATIONAL EXPOSURE LIMITS: TLV (metal): 0.1 mg/m³ (ACGIH 1997). EU OEL: 0.1 mg/m³ as TWA (EU 2000). OSHA PEL: TWA 0.01 mg/m^3 NIOSH REL: TWA 0.01 mg/m^3 NIOSH IDLH: 10 mg/m^3 (as Ag) See: IDLH INDEX
	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation and by ingestion.
	INHALATION RISK: Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.
	EFFECTS OF SHORT-TERM EXPOSURE: Inhalation of high amounts of metallic silver vapours may cause lung damage with pulmonary oedema.
	EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: The substance may cause a grey-blue discoloration of the eyes, nose, throat and skin (argyria/argyrosis).

PHYSICAL PROPERTIES	Boiling point: 2212°C Melting point: 962°C Relative density (water = 1): 10.5 Solubility in water: none
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to aquatic organisms.

NOTES

Card has been partially updated in March 2008: see Occupational Exposure Limits.

ADDITIONAL INFORMATION

ICSC: 0810 SILVER

International Chemical Safety Cards

BARIUM

ICSC: 1052

Ba
Atomic mass: 137.3

ICSC # 1052
CAS # 7440-39-3
RTECS # CQ8370000
UN # 1400
October 20, 1999 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Flammable. Many reactions may cause fire or explosion.	NO open flames, NO sparks, and NO smoking. NO contact with water.	Special powder, dry sand, NO hydrous agents. NO water.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
•INHALATION	Cough. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Redness.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
•EYES	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into sealable containers. Carefully collect remainder, then remove to safe place. Chemical protection suit including self-contained breathing apparatus. Do NOT wash away into sewer.	Separated from halogenated solvents, strong oxidants, acids. Dry. Keep under inert gas, oil or oxygen-free liquid.	UN Hazard Class: 4.3 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 1052

International Chemical Safety Cards

BARIUM

ICSC: 1052

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** YELLOWISH TO WHITE LUSTROUS SOLID IN VARIOUS FORMS. **PHYSICAL DANGERS:** Dust explosion possible if in powder or granular form, mixed with air. **CHEMICAL DANGERS:** The substance may spontaneously ignite on contact with air (if in powder form). The substance is a strong reducing agent and reacts violently with oxidants and acids. Reacts violently with halogenated solvents. Reacts with water, forming flammable/explosive gas (hydrogen - see ICSC0001), causing fire and explosion hazard. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.5 mg/m³ (as TWA) (ACGIH 1999).	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by ingestion. **INHALATION RISK:** **EFFECTS OF SHORT-TERM EXPOSURE:** The substance irritates the eyes, the skin and the respiratory tract. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
PHYSICAL PROPERTIES	Boiling point: 1640°C Melting point: 725°C Density: 3.6 g/cm³	Solubility in water: reaction
ENVIRONMENTAL DATA		

NOTES

Reacts violently with fire extinguishing agents such as water, bicarbonate, powder, foam, and carbon dioxide. Rinse contaminated clothes (fire hazard) with plenty of water.

Transport Emergency Card: TEC (R)-43G12

ADDITIONAL INFORMATION

IMPORTANT LEGAL Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views

NOTICE:	of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

ICSC: 0020

CADMIUM

UNEP

National Institute for Occupational Safety and Health NIOSH

Cd
Atomic mass: 112.4

ICSC # 0020
CAS # 7440-43-9
RTECS # EU9800000
UN # 2570
EC # 048-002-00-0
April 22, 2005 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Flammable in powder form and spontaneously combustible in pyrophoric form. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking. NO contact with heat or acid(s).	Dry sand. Special powder. NO other agents.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system. dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Cough. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain.	Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Diarrhoea. Headache. Nausea. Vomiting.	Do not eat, drink, or smoke during work.	Rest. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Personal protection: chemical protection suit including self-contained breathing apparatus. Remove all ignition sources. Sweep spilled substance into containers. Carefully collect remainder, then remove to safe place.	Fireproof. Dry. Keep under inert gas. Separated from ignition sources, oxidants acids, food and feedstuffs	Airtight. Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Note: E. T+ symbol N symbol

	R: 45-26-48/23/25-62-63-68-50/53 S: 53-45-60-61 UN Hazard Class: 6.1

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0020	Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994 No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values

International Chemical Safety Cards

CADMIUM

ICSC: 0020

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
SOFT BLUE-WHITE METAL LUMPS OR GREY POWDER. MALLEABLE. TURNS BRITTLE ON EXPOSURE TO 80°C AND TARNISHES ON EXPOSURE TO MOIST AIR.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:
Reacts with acids forming flammable/explosive gas (hydrogen - see ICSC0001). Dust reacts with oxidants, hydrogen azide, zinc, selenium or tellurium , causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: (Total dust) 0.01 mg/m³ (Respirable fraction)
0.002 mg/m³ as TWA A2 (suspected human carcinogen); BEI issued (ACGIH 2005).
MAK: skin absorption (H);
Carcinogen category: 1; Germ cell mutagen group: 3A;
(DFG 2004).
OSHA PEL*: 1910.1027 TWA 0.005 mg/m^3
*Note: The PEL applies to all Cadmium compounds (as Cd).
NIOSH REL*: Ca See Appendix A *Note: The REL applies to all Cadmium compounds (as Cd).
NIOSH IDLH: Ca 9 mg/m^3 (as Cd) See: IDLH INDEX

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

INHALATION RISK:
A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

EFFECTS OF SHORT-TERM EXPOSURE:
The fume is irritating to the respiratory tract Inhalation of fume may cause lung oedema (see Notes). Inhalation of fumes may cause metal fume fever. The effects may be delayed. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Lungs may be affected by repeated or prolonged exposure to dust particles. The substance may have effects on the kidneys , resulting in kidney impairment This substance is carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 765°C
Melting point: 321°C
Density: 8.6 g/cm³

Solubility in water: none
Auto-ignition temperature: (cadmium metal dust) 250°C

ENVIRONMENTAL DATA

NOTES

Reacts violently with fire extinguishing agents such as water,foam,carbon dioxideand halons. Depending on the degree of exposure, periodic medical examination is indicated. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Do NOT take working clothes home. Cadmium also exists in a pyrophoric form (EC No. 048-011-00-X), which bears the additional EU labelling symbol F, R phrase 17, and S phrases 7/8 and 43. UN numbers and packing group will vary according to the physical form of the substance.

ADDITIONAL INFORMATION

ICSC: 0020 **CADMIUM**

International Chemical Safety Cards

SELENIUM

ICSC: 0072

Se
(powder)

ICSC # 0072
CAS # 7782-49-2
RTECS # VS7700000
EC # 034-001-00-2
April 26, 1993 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames. NO contact with oxidants.	Powder, AFFF, foam, carbon dioxide. NO water
EXPLOSION	Risk of fire and explosion on contact with oxidants.		
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
•INHALATION	Irritation of nose. Cough. Dizziness. Headache. Laboured breathing. Nausea. Sore throat. Vomiting. Weakness. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Redness. Skin burns. Pain. Discolouration.	Protective gloves. Protective clothing.	Rinse skin with plenty of water or shower. Refer for medical attention. Remove and isolate contaminated clothes.
•EYES	Redness. Pain. Blurred vision.	Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Metallic taste. Diarrhoea. Chills. Fever. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Do NOT wash away into sewer. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: P3 filter respirator for toxic particles.	Fireproof. Separated from strong oxidants, strong acids, food and feedstuffs Dry.	Airtight. Do not transport with food and feedstuffs. T symbol R: 23/25-33-53 S: 1/2-20/21-28-45-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0072

International Chemical Safety Cards

SELENIUM

ICSC: 0072

IMPORTANT

PHYSICAL STATE; APPEARANCE:
ODOURLESS SOLID IN VARIOUS FORMS. DARK RED-BROWN TO BLUISH-BLACK AMORPHOUS SOLID OR RED TRANSPARENT CRYSTALS OR METALLIC GREY TO BLACK CRYSTALS.

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. Reacts violently with oxidants strong acids Reacts withwater at 50°C forming flammable/explosive gas (hydrogen - see ICSC0001) and selenious acids. Reacts with incandescence on gentle heating with phosphorous and metals such as nickel, zinc, sodium, potassium, platinum.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 0.2 mg/m³ as TWA (ACGIH 2004).
MAK: (Inhalable fraction) 0.05 mg/m³
Peak limitation category: II(4): Carcinogen category: 3B; Pregnancy risk group: C; (DFG 2004).
OSHA PEL*: TWA 0.2 mg/m^3 *Note: The PEL also applies to other selenium compounds (as Se) except Selenium hexafluoride.
NIOSH REL*: TWA 0.2 mg/m^3 *Note: The REL also applies to other selenium compounds (as Se) except Selenium hexafluoride.
NIOSH IDLH: 1 mg/m^3 (as Se) See: 7782492

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance is irritating to the eyes and the respiratory tract Inhalation of dust may cause lung oedema (see Notes). Inhalation of fume may cause symptoms of asphyxiation, chills and fever and bronchitis. The effects may be delayed.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the respiratory tract, gastrointestinal tract, and skin, resulting in nausea, vomiting, cough, yellowish skin discolouration, loss of nails, garlic breath and bad teeth.

PHYSICAL PROPERTIES

Boiling point: 685°C
Melting point: 170-217°C
Relative density (water = 1): 4.8
Solubility in water: none
Vapour pressure, Pa at 20°C: 0.1

ENVIRONMENTAL DATA

NOTES

Do NOT take working clothes home.

ADDITIONAL INFORMATION

ICSC: 0072	SELENIUM

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

LEAD

ICSC: 0052

UNEP

National Institute for Occupational Safety and Health NIOSH

Lead metal
Plumbum
Pb
(powder)

ICSC # 0052
CAS # 7439-92-1
RTECS # OF7525000
August 10, 2002 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	PREVENT DISPERSION OF DUST! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. Personal protection: P3 filter respirator for toxic particles.	Separated from food and feedstuffs incompatible materials See Chemical Dangers.	

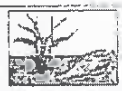
SEE IMPORTANT INFORMATION ON BACK

ICSC: 0052

International Chemical Safety Cards

LEAD

ICSC: 0052

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** BLUISH-WHITE OR SILVERY-GREY SOLID IN VARIOUS FORMS. TURNS TARNISHED ON EXPOSURE TO AIR. **PHYSICAL DANGERS:** Dust explosion possible if in powder or granular form, mixed with air. **CHEMICAL DANGERS:** On heating, toxic fumes are formed. Reacts with oxidants. Reacts with hot concentrated nitric acid, boiling concentrated hydrochloric acid and sulfuric acid. Attacked by pure water and by weak organic acids in the presence of oxygen. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.05 mg/m³ as TWA A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued (ACGIH 2004). MAK: Carcinogen category: 2; Germ cell mutagen group: 3A; (DFG 2006). EU OEL: as TWA 0.15 mg/m³ (EU 2002). OSHA PEL*: 1910.1025 TWA 0.050 mg/m^3 See Appendix C *Note: The PEL also applies to other lead compounds (as Pb) – see Appendix C. NIOSH REL*: TWA 0.050 mg/m^3 See Appendix C *Note: The REL also applies to other lead compounds (as Pb) – see Appendix C. NIOSH IDLH: 100 mg/m^3 (as Pb) See: 7439921	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation and by ingestion. **INHALATION RISK:** A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The substance may have effects on the blood bone marrow central nervous system peripheral nervous system kidneys , resulting in anaemia, encephalopathy (e.g., convulsions), peripheral nerve disease, abdominal cramps and kidney impairment. Causes toxicity to human reproduction or development. This substance is probably carcinogenic to humans. fast track change Oct 06 - IARC 2A.
PHYSICAL PROPERTIES	Boiling point: 1740°C Melting point: 327.5°C	Density: 11.34 g/cm³ Solubility in water: none
ENVIRONMENTAL DATA	Bioaccumulation of this chemical may occur in plants and in mammals. It is strongly advised that this substance does not enter the environment.	

NOTES

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home. Card has been partly updated in April 2005. See section Occupational Exposure Limits. Card has been partly updated in October 2006: see section Occupational Exposure Limits, Effects Long Tem Exposure.

ADDITIONAL INFORMATION	
ICSC: 0052	LEAD

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

MERCURY

ICSC: 0056

Quicksilver
Liquid silver
Hg

ICSC # 0056
CAS # 7439-97-6
RTECS # OV4550000
UN # 2809
EC # 080-001-00-0
April 22, 2004 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Risk of fire and explosion.		In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Abdominal pain. Cough. Diarrhoea. Shortness of breath. Vomiting. Fever or elevated body temperature.	Local exhaust or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
•SKIN	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES		Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work. Wash hands before eating.	Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area in case of a large spill! Consult an expert! Ventilation. Collect leaking and spilled liquid in	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Well closed.	Special material. Do not transport with food and feedstuffs. T symbol

sealable non-metallic containers as far as possible. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.		N symbol R: 23-33-50/53 S: 1/2-7-45-60-61 UN Hazard Class: 8 UN Packing Group: III

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0056

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

MERCURY

ICSC: 0056

I M P O R T A N T D A T A	**PHYSICAL STATE; APPEARANCE:** ODOURLESS, HEAVY AND MOBILE SILVERY LIQUID METAL. **PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. Reacts violently with ammonia and halogens causing fire and explosion hazard. Attacks aluminium and many other metals forming amalgams. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.025 mg/m³ as TWA (skin) A4 BEI issued (ACGIH 2004). MAK: 0.1 mg/m³ Sh Peak limitation category: II(8) Carcinogen category: 3B (DFG 2003). OSHA PEL†: C 0.1 mg/m³ NIOSH REL: Hg Vapor: TWA 0.05 mg/m³ skin Other: C 0.1 mg/m³ skin NIOSH IDLH: 10 mg/m³ (as Hg) See: 7439976
	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its vapour and through the skin, also as a vapour! **INHALATION RISK:** A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C. **EFFECTS OF SHORT-TERM EXPOSURE:** The substance is irritating to the skin. Inhalation of the vapours may cause pneumonitis. The substance may cause effects on the central nervous systemandkidneys. The effects may be delayed. Medical observation is indicated. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** The substance may have effects on the central nervous system kidneys, resulting in irritability, emotional instability, tremor, mental and memory disturbances, speech disorders. Danger of cumulative effects. Animal tests show that this substance possibly causes toxic effects upon human reproduction.
PHYSICAL PROPERTIES	Boiling point: 357°C Melting point: -39°C Relative density (water = 1): 13.5 Solubility in water: none Vapour pressure, Pa at 20°C: 0.26 Relative vapour density (air = 1): 6.93 Relative density of the vapour/air-mixture at 20°C (air = 1): 1.009
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms. In the food chain important to humans, bioaccumulation takes place, specifically in fish.

NOTES

Depending on the degree of exposure, periodic medical examination is indicated. No odour warning if toxic concentrations are present. Do NOT take working clothes home.

Transport Emergency Card: TEC (R)-80GC9-II+III

ADDITIONAL INFORMATION

ICSC: 0056 **MERCURY**

International Chemical Safety Cards

ICSC: 0013

ARSENIC

UNEP

NIOSH National Institute for Occupational Safety and Health

Grey arsenic
As
Atomic mass: 74.9

ICSC # 0013
CAS # 7440-38-2
RTECS # CG0525000
UN # 1558
EC # 033-001-00-X
October 18, 1999 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames. NO contact with strong oxidizers. NO contact with hot surfaces.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Risk of fire and explosion is slight when exposed to hot surfaces or flames in the form of fine powder or dust.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST! AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Cough. Sore throat. Shortness of breath. Weakness. See Ingestion.	Closed system and ventilation.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
•SKIN	Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
•EYES	Redness.	Face shield or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Diarrhoea. Nausea. Vomiting. Burning sensation in the throat and chest. Shock or collapse. Unconsciousness.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING

Evacuate danger area! Sweep spilled substance into sealable containers. Carefully collect remainder, then remove to safe place. Chemical protection suit including self-contained breathing apparatus. Do NOT let this chemical enter the environment.	Separated from strong oxidants, acids, halogens, food and feedstuffs. Well closed.	Do not transport with food and feedstuffs. Marine pollutant. T symbol N symbol R: 23/25-50/53 S: 1/2-20/21-28-45-60-61 UN Hazard Class: 6.1 UN Packing Group: II

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0013

International Chemical Safety Cards

ARSENIC

ICSC: 0013

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PHYSICAL STATE; APPEARANCE:
ODOURLESS, BRITTLE, GREY, METALLIC-LOOKING CRYSTALS.

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. Reacts violently with strong oxidants and halogens, causing fire and explosion hazard. Reacts with acids to produce

OCCUPATIONAL EXPOSURE LIMITS:
OSHA PEL: 1910.1018 TWA 0.010 mg/m^3
NIOSH REL: Ca C 0.002 mg/m^3 15-minute See Appendix A
NIOSH IDLH: Ca 5 mg/m^3 (as As) See: 7440382
TLV: 0.01 mg/m^3 as TWA A1 (confirmed human carcinogen); BEI issued (ACGIH 2004).
MAK:
Carcinogen category: 1; Germ cell mutagen group: 3A;
(DFG 2004).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly, when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance is irritating to the eyes the skin and the respiratory tract. The substance may cause effects on the gastrointestinal tract cardiovascular system central nervous system kidneys , resulting in severe gastroenteritis, loss of fluid, and electrolytes, cardiac disorders shock convulsions and kidney impairment Exposure above the OEL may result in death. The effects may be delayed. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the mucous membranes, skin, peripheral nervous system liver bone marrow , resulting in pigmentation disorders, hyperkeratosis, perforation of nasal septum, neuropathy, liver impairment anaemia This substance is carcinogenic to humans. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES		
	Sublimation point: 613°C Density: 5.7 g/cm^3	Solubility in water: none

ENVIRONMENTAL DATA	The substance is toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.

NOTES

The substance is combustible but no flash point is available in literature. Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home. Refer also to cards for specific arsenic compounds, e.g., Arsenic pentoxide (ICSC 0377), Arsenic trichloride (ICSC 0221), Arsenic trioxide (ICSC 0378), Arsine (ICSC 0222).

Transport Emergency Card: TEC (R)-61GT5-II

ADDITIONAL INFORMATION

ICSC: 0013 **ARSENIC**

International Chemical Safety Cards

CHROMIUM

ICSC: 0029

Chrome
Cr
Atomic mass: 52.0
(powder)

ICSC # 0029
CAS # 7440-47-3
RTECS # GB4200000
October 27, 2004 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible under specific conditions.	No open flames if in powder form.	In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION		Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION	Cough.	Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
•EYES	Redness.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Personal protection: P2 filter respirator for harmful particles.		

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0029

International Chemical Safety Cards

ICSC: 0029

CHROMIUM

I M P O R T A N T D A T A	**PHYSICAL STATE: APPEARANCE:** GREY POWDER **PHYSICAL DANGERS:** Dust explosion possible if in powder or granular form, mixed with air. **CHEMICAL DANGERS:** Chromium is a catalytic substance and may cause reaction in contact with many organic and inorganic substances , causing fire and explosion hazard. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: (as Cr metal, Cr(III) compounds) 0.5 mg/m³ as TWA A4 (ACGIH 2004). MAK not established. OSHA PEL*: TWA 1 mg/m³ See Appendix C *Note: The PEL also applies to insoluble chromium salts. NIOSH REL: TWA 0.5 mg/m³ See Appendix C NIOSH IDLH: 250 mg/m³ (as Cr) See: 7440473	**ROUTES OF EXPOSURE:** **INHALATION RISK:** A harmful concentration of airborne particles can be reached quickly when dispersed. **EFFECTS OF SHORT-TERM EXPOSURE:** May cause mechanical irritation to the eyes and the respiratory tract. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:**
PHYSICAL PROPERTIES	Boiling point: 2642°C Melting point: 1900°C Density: 7.15 g/cm³	Solubility in water: none
ENVIRONMENTAL DATA		

NOTES

The surface of the chromium particles is oxidized to chromium(III)oxide in air. See ICSC 1531 Chromium(III) oxide.

ADDITIONAL INFORMATION

IMPORTANT LEGAL NOTICE: Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

Appendix B

Respirator Fit Test Procedures

Appendix A to Sec. 1910.120--Personal Protective Equipment Test Methods

This appendix sets forth the non-mandatory examples of tests which may be used to evaluate compliance with Sec. 1910.120 (g)(4) (ii) and (iii). Other tests and other challenge agents may be used to evaluate compliance.

A. Totally-encapsulating chemical protective suit pressure test

1.0--Scope

1.1 This practice measures the ability of a gas tight totally-encapsulating chemical protective suit material, seams, and closures to maintain a fixed positive pressure. The results of this practice allow the gas tight integrity of a totally-encapsulating chemical protective suit to be evaluated.

1.2 Resistance of the suit materials to permeation, penetration, and degradation by specific hazardous substances is not determined by this test method.

2.0--Definition of terms

2.1 Totally-encapsulated chemical protective suit (TECP suit) means a full body garment which is constructed of protective clothing materials; covers the wearer's torso, head, arms, legs and respirator; may cover the wearer's hands and feet with tightly attached gloves and boots; completely encloses the wearer and respirator by itself or in combination with the wearer's gloves and boots.

2.2 Protective clothing material means any material or combination of materials used in an item of clothing for the purpose of isolating parts of the body from direct contact with a potentially hazardous liquid or gaseous chemicals.

2.3 Gas tight means, for the purpose of this test method, the limited flow of a gas under pressure from the inside of a TECP suit to atmosphere at a prescribed pressure and time interval.

3.0--Summary of test method

3.1 The TECP suit is visually inspected and modified for the test. The test apparatus is attached to the suit to permit inflation to

the pre-test suit expansion pressure for removal of suit wrinkles and creases. The pressure is lowered to the test pressure and monitored for three minutes. If the pressure drop is excessive, the TECP suit fails the test and is removed from service. The test is repeated after leak location and repair.

4.0--Required Supplies

4.1 Source of compressed air.

4.2 Test apparatus for suit testing, including a pressure measurement device with a sensitivity of at least \1/4\ inch water gauge.

4.3 Vent valve closure plugs or sealing tape.

4.4 Soapy water solution and soft brush.

4.5 Stop watch or appropriate timing device.

5.0--Safety Precautions

5.1 Care shall be taken to provide the correct pressure safety devices required for the source of compressed air used.

6.0--Test Procedure

6.1 Prior to each test, the tester shall perform a visual inspection of the suit. Check the suit for seam integrity by visually examining the

8.1.4 Records shall be kept for each pressure test even if repairs are being made at the test location.

Caution

Visually inspect all parts of the suit to be sure they are positioned correctly and secured tightly before putting the suit back into service. Special care should be taken to examine each exhaust valve to make sure it is not blocked.

Care should also be exercised to assure that the inside and outside of the suit is completely dry before it is put into storage.

B. Totally-encapsulating chemical protective suit qualitative leak test

1.0--Scope

1.1 This practice semi-qualitatively tests gas tight totally-encapsulating chemical protective suit integrity by detecting inward leakage of ammonia vapor. Since no modifications are made to the suit to carry out

this test, the results from this practice provide a realistic test for the integrity of the entire suit.

1.2 Resistance of the suit materials to permeation, penetration, and degradation is not determined by this test method. ASTM test methods are available to test suit materials for these characteristics and the tests are usually conducted by the manufacturers of the suits.

2.0--Definition of terms

2.1 Totally-encapsulated chemical protective suit (TECP suit) means a full body garment which is constructed of protective clothing materials; covers the wearer's torso, head, arms, legs and respirator; may cover the wearer's hands and feet with tightly attached gloves and boots; completely encloses the wearer and respirator by itself or in combination with the wearer's gloves, and boots.

2.2 Protective clothing material means any material or combination of materials used in an item of clothing for the purpose of isolating parts of the body from direct contact with a potentially hazardous liquid or gaseous chemicals.

2.3 Gas tight means, for the purpose of this test method, the limited flow of a gas under pressure from the inside of a TECP suit to atmosphere at a prescribed pressure and time interval.

2.4 Intrusion Coefficient means a number expressing the level of protection provided by a gas tight totally-encapsulating chemical protective suit. The intrusion coefficient is calculated by dividing the test room challenge agent concentration by the concentration of challenge agent found inside the suit. The accuracy of the intrusion coefficient is dependent on the challenge agent monitoring methods. The larger the intrusion coefficient the greater the protection provided by the TECP suit.

3.0--Summary of recommended practice

3.1 The volume of concentrated aqueous ammonia solution (ammonia hydroxide NH<INF>4</INF> OH) required to generate the test atmosphere is determined using the directions outlined in 6.1. The suit is donned by a person wearing the appropriate respiratory equipment (either a positive pressure self-contained breathing apparatus or a positive pressure supplied air respirator) and worn inside the enclosed test room. The

exhaust of the ammonia test atmosphere after the test(s) are completed.

5.5 Individuals shall be medically screened for the use of respiratory protection and checked for allergies to ammonia before participating in this test procedure.

6.0--Test procedure

6.1.1 Measure the test area to the nearest foot and calculate its volume in cubic feet. Multiply the test area volume by 0.2 milliliters of concentrated aqueous ammonia solution per cubic foot of test area volume to determine the approximate volume of concentrated aqueous ammonia required to generate 1000 ppm in the test area.

6.1.2 Measure this volume from the supply of concentrated aqueous ammonia and place it into a closed plastic container.

6.1.3 Place the container, several high range ammonia detector tubes, and the pump in the clean test pan and locate it near the test area entry door so that the suited individual has easy access to these supplies.

6.2.1 In a non-contaminated atmosphere, open a pre-sealed ammonia indicator strip and fasten one end of the strip to the inside of the suit face shield lens where it can be seen by the wearer. Moisten the indicator strip with distilled water. Care shall be taken not to contaminate the detector part of the indicator paper by touching it. A small piece of masking tape or equivalent should be used to attach the indicator strip to the interior of the suit face shield.

6.2.2 If problems are encountered with this method of attachment, the indicator strip can be attached to the outside of the respirator face piece lens being used during the test.

6.3 Don the respiratory protective device normally used with the suit, and then don the TECP suit to be tested. Check to be sure all openings which are intended to be sealed (zippers, gloves, etc.) are completely sealed. DO NOT, however, plug off any venting valves.

6.4 Step into the enclosed test room such as a closet, bathroom, or test booth, equipped with an exhaust fan. No air should be exhausted from the chamber during the test because this will dilute the ammonia challenge concentrations.

6.5 Open the container with the pre-measured volume of concentrated aqueous ammonia within the enclosed test room, and pour the liquid into the empty plastic test pan. Wait two minutes to allow for adequate volatilization of the concentrated aqueous ammonia. A small mixing fan can be used near the evaporation pan to increase the evaporation rate of the ammonia solution.

6.6 After two minutes a determination of the ammonia concentration within the chamber should be made using the high range colorimetric detector tube. A concentration of 1000 ppm ammonia or greater shall be generated before the exercises are started.

6.7 To test the integrity of the suit the following four minute exercise protocol should be followed:

6.7.1 Raising the arms above the head with at least 15 raising motions completed in one minute.

6.7.2 Walking in place for one minute with at least 15 raising motions of each leg in a one-minute period.

6.7.3 Touching the toes with a least 10 complete motions of the arms from above the head to touching of the toes in a one-minute period.

6.7.4 Knee bends with at least 10 complete standing and squatting motions in a one-minute period.

6.8 If at any time during the test the colorimetric indicating paper should change colors, the test should be stopped and section 6.10 and 6.12 initiated (See] 4.2).

Visually inspect all parts of the suit to be sure they are positioned correctly and secured tightly before putting the suit back into service. Special care should be taken to examine each exhaust valve to make sure it is not blocked.

Care should also be exercised to assure that the inside and outside of the suit is completely dry before it is put into storage.

Appendix B

Community Air Monitoring Plan

New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

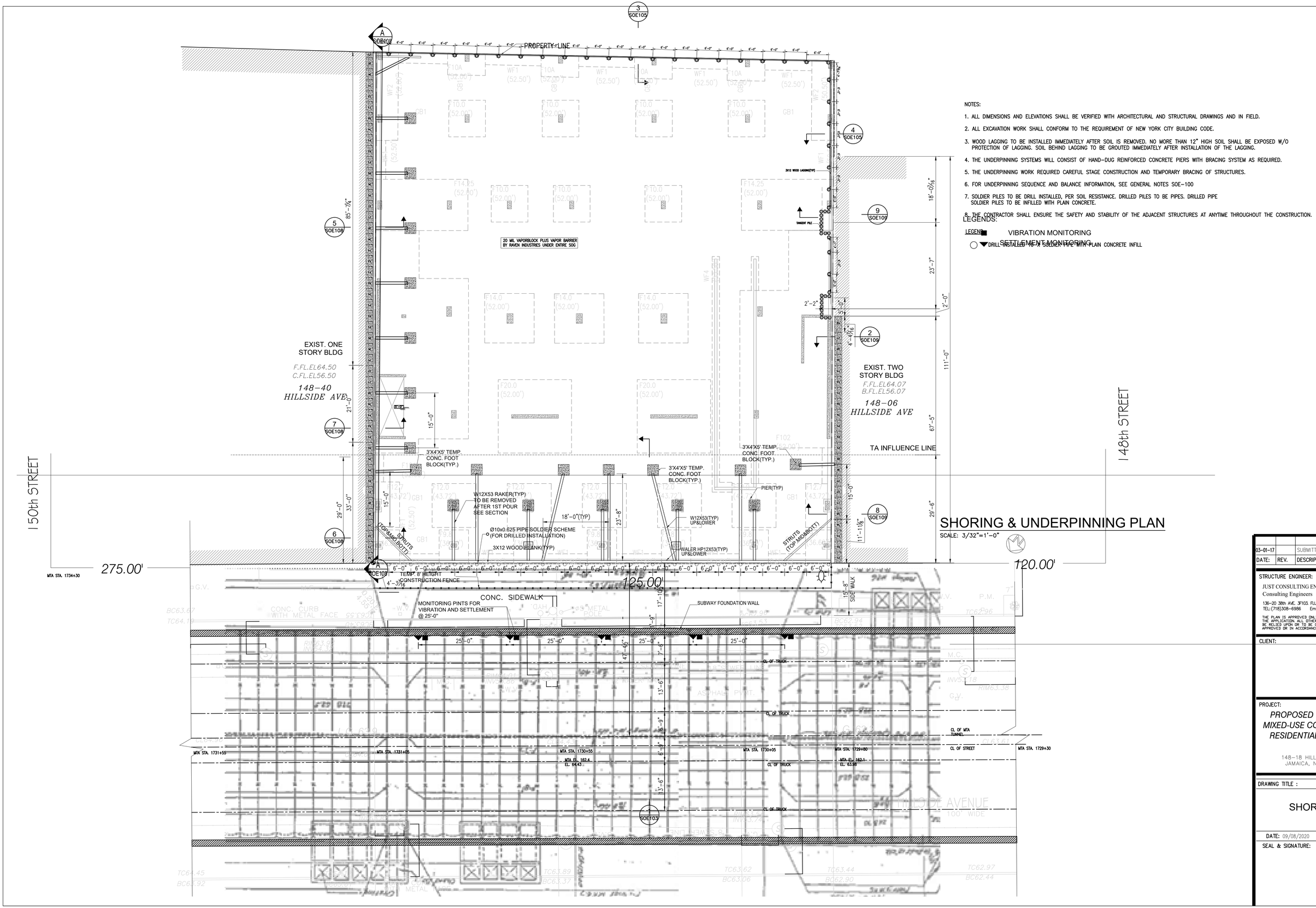
December 2009

Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals Structures

- When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.
- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.

Appendix C

Shoring Plan



NOTES:

1. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS AND IN FIELD.
2. ALL EXCAVATION WORK SHALL CONFORM TO THE REQUIREMENT OF NEW YORK CITY BUILDING CODE.
3. WOOD LAGGING TO BE INSTALLED IMMEDIATELY AFTER SOIL IS REMOVED. NO MORE THAN 12" HIGH SOIL SHALL BE EXPOSED W/O PROTECTION OF LAGGING. SOIL BEHIND LAGGING TO BE GROUTED IMMEDIATELY AFTER INSTALLATION OF THE LAGGING.
4. THE UNDERPINNING SYSTEMS WILL CONSIST OF HAND-DUG REINFORCED CONCRETE PIERS WITH BRACING SYSTEM AS REQUIRED.
5. THE UNDERPINNING WORK REQUIRED CAREFUL STAGE CONSTRUCTION AND TEMPORARY BRACING OF STRUCTURES.
6. FOR UNDERPINNING SEQUENCE AND BALANCE INFORMATION, SEE GENERAL NOTES SOE-100
7. SOLDIER PILES TO BE DRILL INSTALLED, PER SOIL RESISTANCE. DRILLED PILES TO BE PIPES. DRILLED PIPE SOLDIER PILES TO BE INFILLED WITH PLAIN CONCRETE.
8. THE CONTRACTOR SHALL ENSURE THE SAFETY AND STABILITY OF THE ADJACENT STRUCTURES AT ANYTIME THROUGHOUT THE CONSTRUCTION.

LEGENDS:

LEGEND: VIBRATION MONITORING

SETTLEMENT MONITORING

DRILL INSTALLED HS-N SOLDIER PILE WITH PLAIN CONCRETE INFILL

SHORING & UNDERPINNING PLAN

SCALE: 3/32"=1'-0"

03-01-17		SUBMITTED TO DOB/ FILING
DATE:	REV.	DESCRIPTION:

STRUCTURE ENGINEER:

JUST CONSULTING ENGINEERING, PLLC
Consulting Engineers

136-20 38th AVE. 3F103, FLUSHING, NY 11354
TEL: (718)308-6986 Email: info@jceplic.com

CLIENT:

PROJECT:

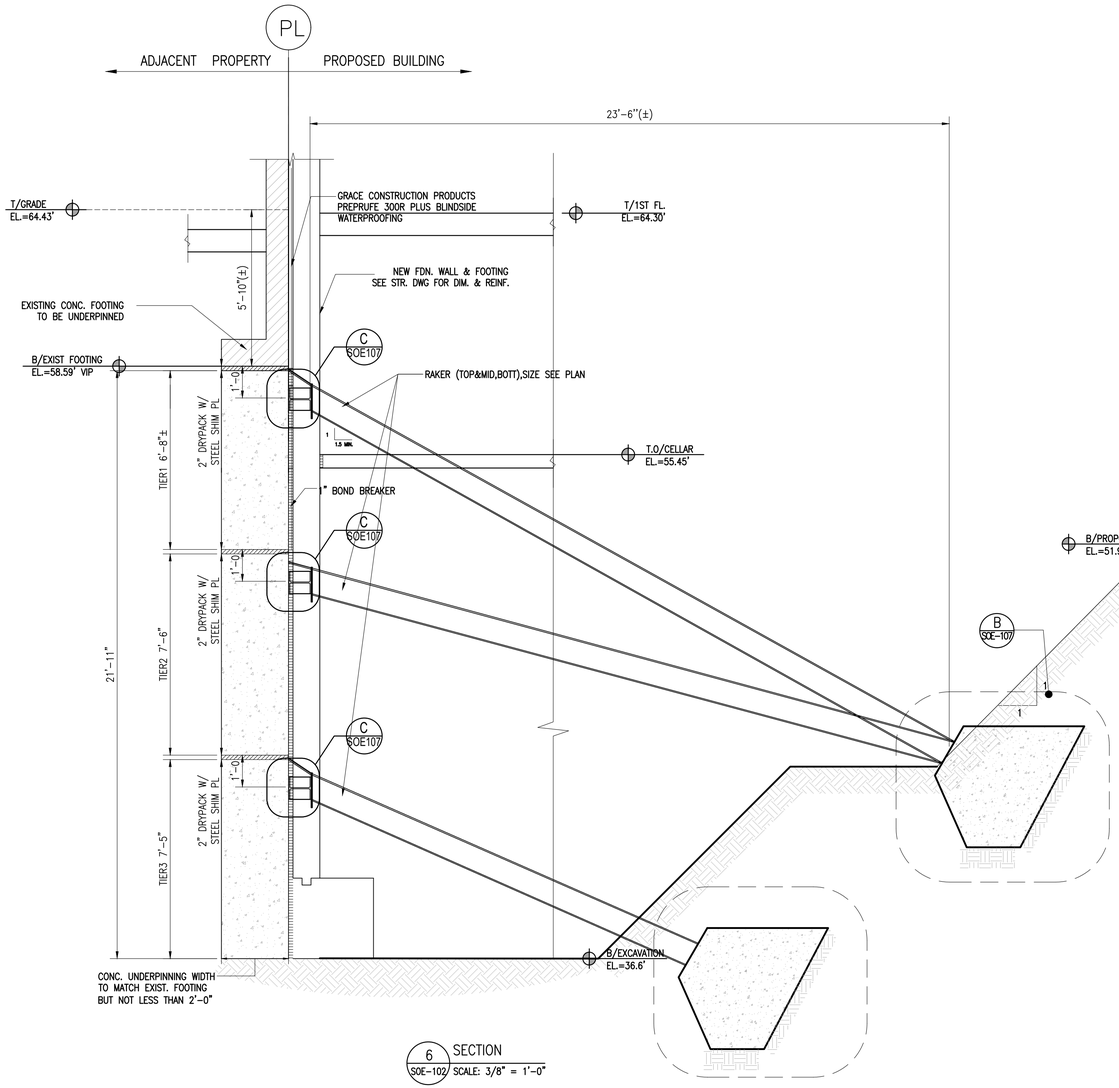
PROPOSED A 9-STORY MIXED-USE COMMERCIAL& RESIDENTIAL BUILDING

148-18 HILLSIDE AVE,
JAMAICA, NY 11435

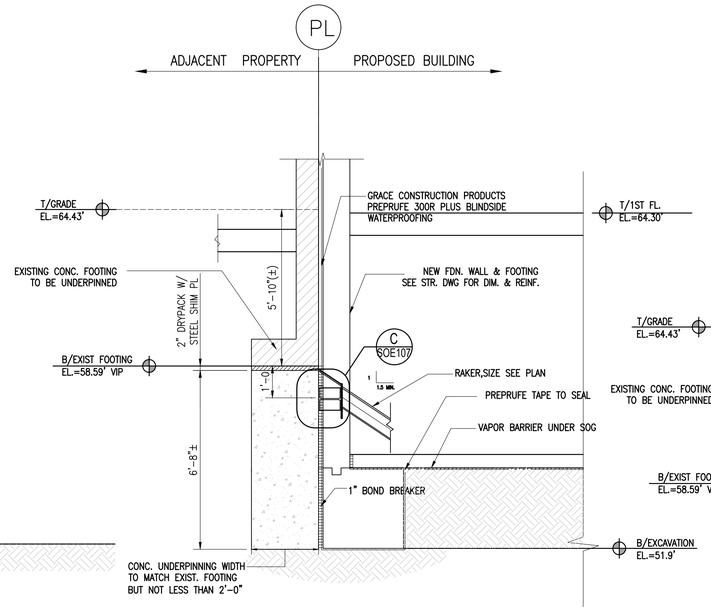
DRAWING TITLE :

SHORING PLAN

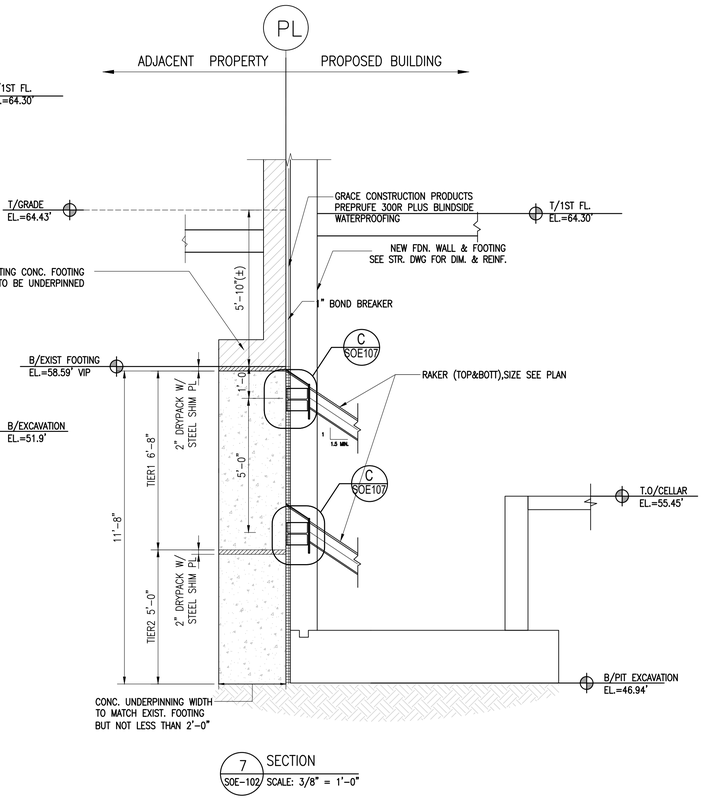
DATE: 09/08/2020	PROJECT #: 20170105
SEAL & SIGNATURE:	DRAWN BY: LM
	CHKD. BY: XW
	DRAWING #: SOE-102.00



6 SECTION
SOE-102 SCALE: 3/8" = 1'-0"



5 SECTION
SOE-102 SCALE: 3/8" = 1'-0"



7 SECTION
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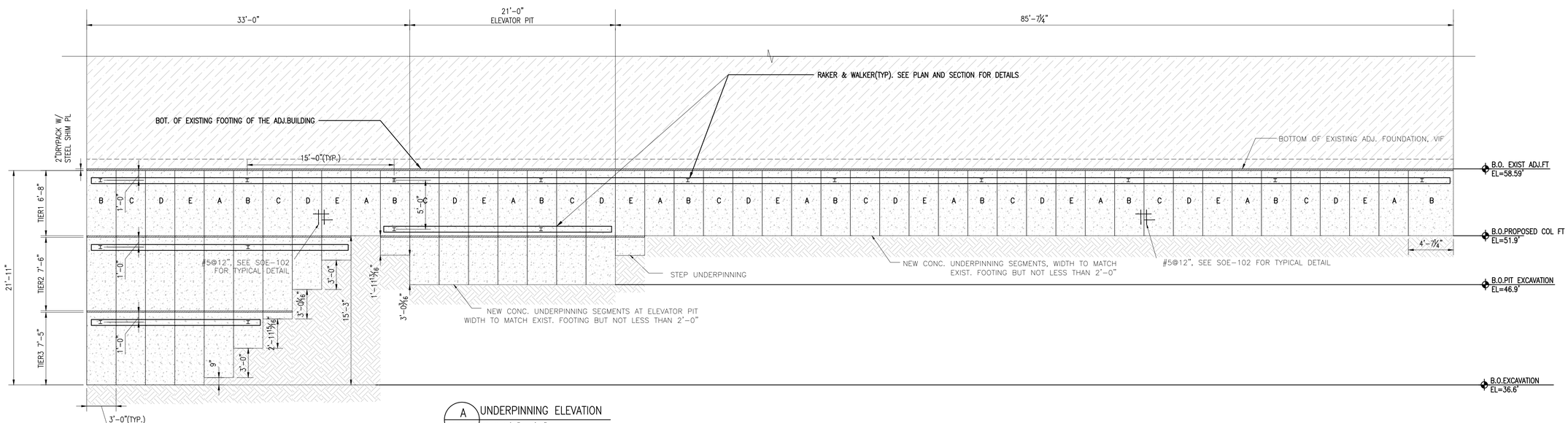
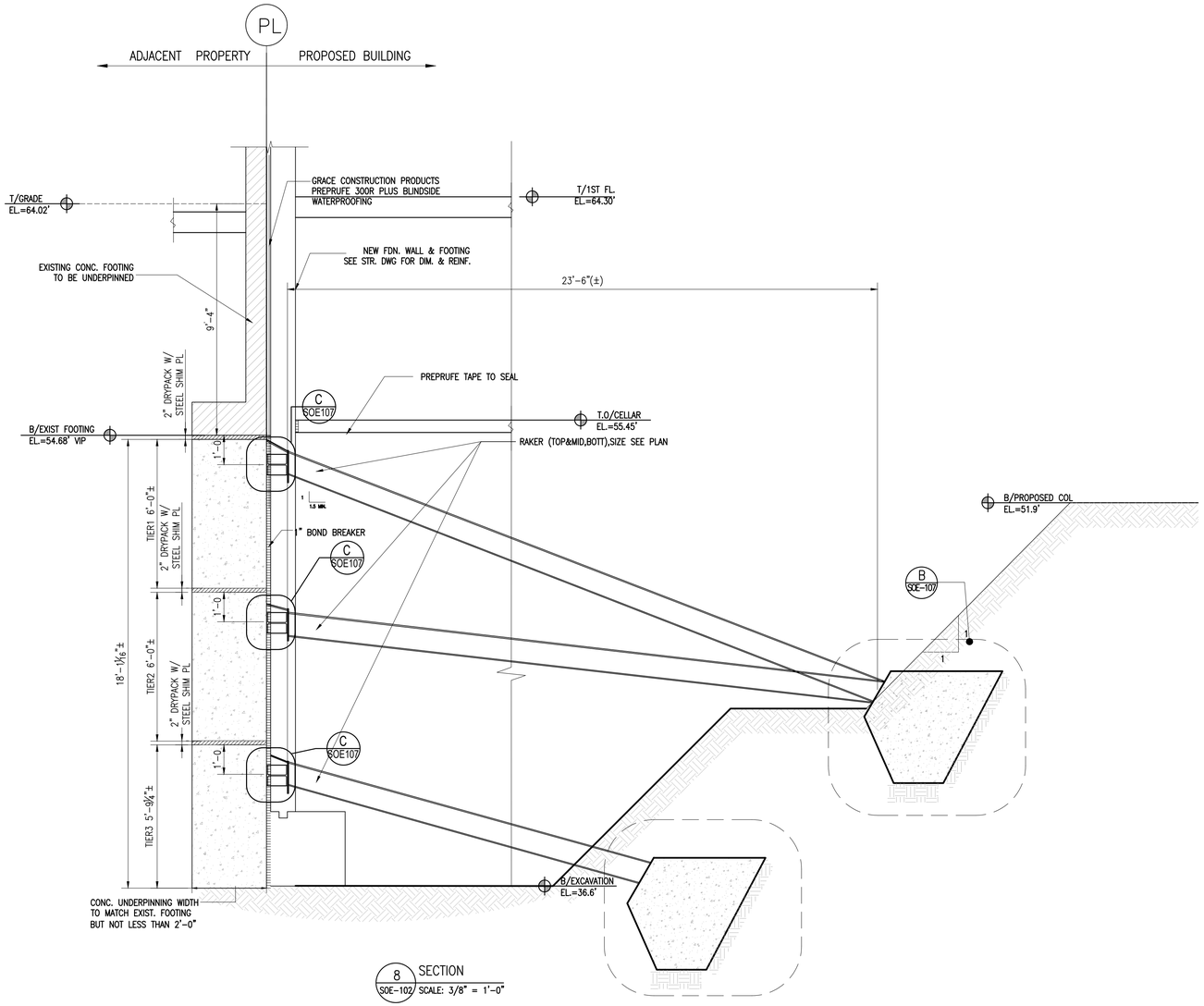
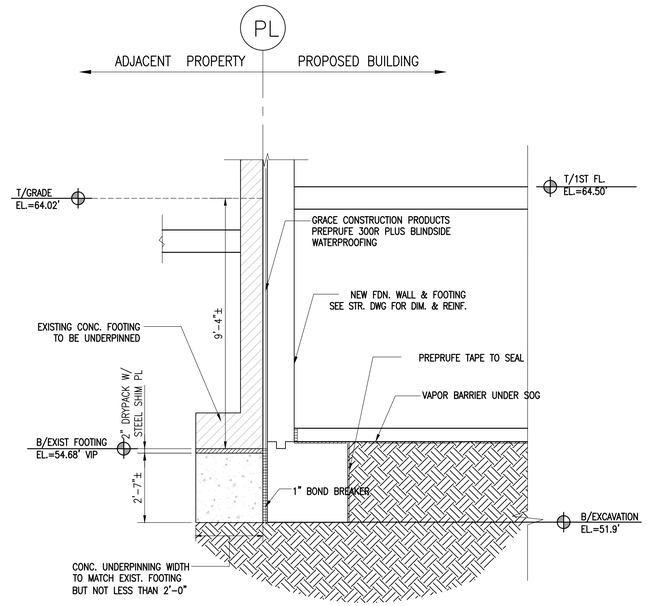


A UNDERPINNING ELEVATION
SOE-102 SCALE: 3/16" = 1'-0"

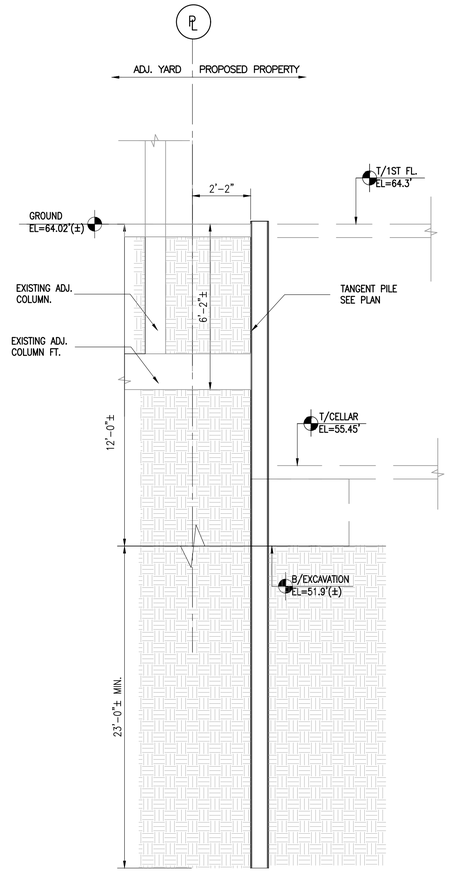
PROPOSED SHORING SECTIONS AT THE SUPERMARKET (EXP#2)



8 SECTION
SOE-102 SCALE: 3/8" = 1'-0"

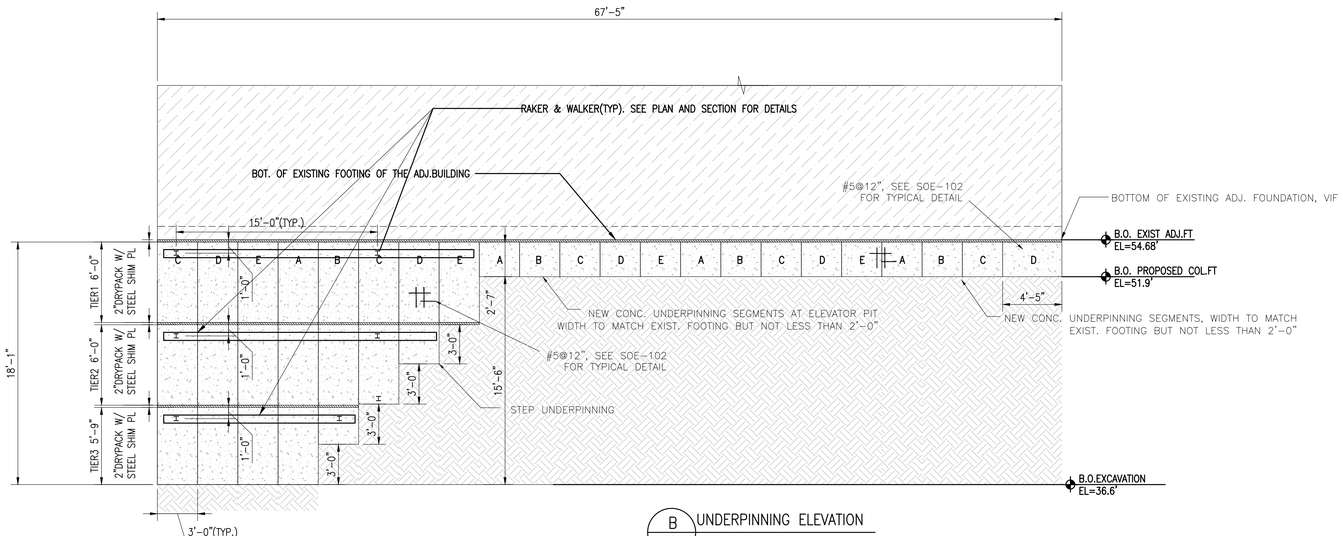


2 SECTION
SOE-102 SCALE: 3/8" = 1'-0"



9 SECTION
SOE-102 SCALE: 3/8" = 1'-0"

SEE NOTES



B UNDERPINNING ELEVATION
SOE-102 SCALE: 3/16" = 1'-0"

PROPOSED SHORING SECTIONS AT UNION (EXP#4)

Appendix D NYSDEC

Request to Import/Reuse

Fill or Soil

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is: Choose an item

Have Ecological Resources been identified? Choose an item

Is this soil originating from the site? Choose an item

How many cubic yards of soil will be imported/reused? Choose an item

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone? Choose an item

Does it contain less than 10%, by weight, material that would pass a size 10 sieve? Choose an item

Does it contain less than 10%, by weight, material that would pass a size 100 sieve? Choose an item

Is this virgin material from a permitted mine or quarry? Choose an item

Is this material recycled concrete or brick from a DEC registered processing facility? Choose an item

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

_____ _____

Signature Date

_____

Print Name

_____

Firm

Revised August 2014