

**11-28 31<sup>st</sup> Drive  
Queens, New York  
Block 502 Lot 22**

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# **Final Engineering Report**

**NYSDEC Site Number: C241159**

*Program Volunteer:*

GBT Real Estate LLC  
1083 Maple Lane  
New Hyde Park, NY 11040  
212-625-0820



**AMC Engineering PLLC**  
18-36 42<sup>nd</sup> Street  
Astoria, NY 11105

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**DECEMBER 2018**



## CERTIFICATIONS

I, Ariel Czemerinski certify that I am currently a NYS registered professional engineer, I had primary direct responsibility for the implementation of the subject construction program, and I certify that the Remedial Action Work Plan was implemented and that all construction activities were completed in substantial conformance with the DER-approved Remedial Action Work Plan.

I certify that this Final Engineering Report 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).

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

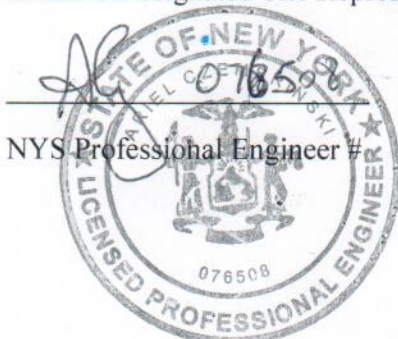
I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603,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

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department

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

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

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Ariel Czemerinski, of AMC Engineering, PLLC, am certifying as Owner's Designated Site Representative for the site.



NYS Professional Engineer #

12/20/18  
Date

A. Czemerinski  
Signature



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## LIST OF ACRONYMS

Acronym	Definition
AMC	AMC Engineering PLLC
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CQMP	Construction Quality Management Plan
FER	Final Engineering Report
IRM	Interim Remedial Measure
NYC	New York City
NYCDEP	New York City Department of Environmental Protection
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
EP	Qualified Environmental Professional
RAO	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RE	Remedial Engineer
RI	Remedial Investigation
SCG	Standards, Criteria, and Guidelines
SCO	Soil Cleanup Objectives
SMMP	Soil/Materials Management Plan
SSO	Site Safety Officer
SWPPP	Stormwater Pollution Prevention Plan
SVOCs	Semi-Volatile Organic Compounds
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds



## 1.0 BACKGROUND AND SITE DESCRIPTION

### 1.1 SITE BACKGROUND

GBT Real Estate LLC (the Volunteer) entered into a Brownfield Cleanup Agreement with the New York State Department of Environmental Conservation (NYSDEC) in June of 2014 and amended in March 2017 to remediate a 0.055-acre (2,400 sf) property located in Queens County, New York (Site No. C241159). The Site was remediated to restricted residential use and is in the process of being redeveloped with a multi-unit residential building. An electronic copy of this FER with all supporting documentation is included as **Attachment A**.

### 1.2 SITE LOCATION

The address for the Site is listed as 11-28 31<sup>st</sup> Drive Queens NY, 11106. The Site is located in the City of New York and Borough and County of Queens as shown on **Figure 1**. The Site is located on the south side of 31<sup>st</sup> Drive, between 12<sup>th</sup> Street and Vernon Boulevard, and is designated as Block 502, Lot 22 on the Queens Tax Map. The site is an approximately 0.055-acre area (2,400 square feet), and is bounded by 31<sup>st</sup> Drive to the north-northeast, vacant land and a 1-story manufacturing building to the south-southwest, a 1-story cabinet manufacturing facility to the east-southeast and a vacant 1-story warehouse to the west-northwest (see **Figure 2** – Site Layout Map). The boundaries of the Site are fully described in **Attachment B: Easement, Survey Map, Metes and Bounds**.

The property has an elevation of approximately 11 feet above mean sea level. The depth to groundwater beneath the Site, as determined from field measurements during the RI, ranges from 8.7 to 9.17 feet below grade. Based upon regional groundwater contour maps and site-specific measurements, the groundwater flow was found to generally be from northeast to southwest.

### 1.3 FORMER SITE USE

Historical property use and ownership were obtained from NYC records and Sanborn Fire Insurance Maps. Current ownership information was collected from online property records maintained by the NYC Department of Finance Office of the City Register under its Automated



City Register Information System (ACRIS). GBT Real Estate LLC purchased the property in 2012.

The Phase I investigation was completed in March 2013 by Hydro Tech Environmental, Corp. The report indicates that the Site was used as an auto repair shop between 1934 and 1936. From 1945 to 1970, the Site was used as a machine shop. Between 1977 and 2006, the Site was used as a commercial facility. Most recently, the Site was used as a manufacturing facility of wood cabinets; it became vacant during the last quarter of 2012.

After completing a Remedial Investigation, Hydro Tech determined that the contaminants of concern at the Site included Volatile Organic Compounds (VOCs) in the groundwater and soil vapor (particularly trichloroethylene, or TCE, and tetrachloroethylene, or PCE) and metals in the soil (particularly copper, lead, zinc, mercury, chromium trivalent, and chromium hexavalent). TCE, PCE, and BTEX (that is, benzene, toluene, ethylbenzene, and xylene) derivatives were found in soil vapor samples collected on and off site. The highest concentrations of chlorinated hydrocarbons were found in groundwater located near an underground storage tank (UST) situated in the northeastern portion of the property.



## **2.0 SUMMARY OF SITE REMEDY**

### **2.1 REMEDIAL ACTION OBJECTIVES**

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for this Site.

#### **2.1.1 Groundwater**

RAOs for Public Health Protection

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

RAOs for Environmental Protection

- Restore groundwater aquifer to pre-disposal/pre-release conditions to the extent practicable.
- Remove the source of groundwater or surface water contamination.

#### **2.1.2 Soil Vapor**

RAOs for Public Health Protection

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



## 2.2 DESCRIPTION OF IMPLEMENTED REMEDY

The Site was remediated in accordance with the remedy selected by the Remedial Action Work Plan dated September 2016 and the Decision Document dated September 2016. The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8.

The following are the elements of the implemented remedy:

1. Removal of and underground storage tank (UST), piping, and other structures associated with the UST;
2. Collection and analysis of end-point samples from around the vicinity of the excavated UST;
3. Excavation of soil/fill exceeding Track 2 restricted residential SCOs as listed in **Table 1** to a depth of 3 feet below grade throughout the Site and 6.6 feet below grade for an elevator pit.
4. Installation of a sub-slab depressurization system (SSDS) to mitigate the migration of vapors into the building from groundwater;
5. Treatment of groundwater contamination via in-situ chemical oxidant (ISCO) injections;
6. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
7. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
8. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in Table 1, (2) all Federal, State and local rules and regulations for handling and transport of material;
9. Implementation of a Site Management Plan (SMP) for operation, monitoring and maintenance of the Engineering Controls, including the SSDS and potential on-going chemical injections; and,
10. An Environmental Easement will be filed against the Site to ensure implementation of the SMP.



All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, were addressed in accordance with all applicable Federal, State and local rules and regulations.

Details on each of the remedial elements listed above are provided in **Sections 4.3** through **4.7**.



### **3.0 INTERIM REMEDIAL MEASURES**

#### **3.1 INTERIM REMEDIAL MEASURES WORK PLAN (IRM)**

The remedy for this Site was performed in one phase as a single project, and no interim remedial measures, operable units or separate construction contracts were performed.



## **4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED**

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Remedial Action Work Plan (RAWP) for the site (September, 2016) All deviations from the RAWP are noted below.

### **4.1 GOVERNING DOCUMENTS**

#### **4.1.1 Site Specific Health & Safety Plan (HASP)**

The Health and Safety Plan for the implementation of remedial actions at 11-28 31<sup>st</sup> Drive was included as an appendix (9) of the Remedial Action Work Plan (RAWP) approved by the NYSDEC.

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA. The Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

#### **4.1.2 Quality Assurance Project Plan (QAPP)**

The QAPP was included as an appendix (4) of the Remedial Action Work Plan (RAWP) approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/ quality control activities designed to achieve the project data quality objectives. The QAPP was revised after the RAWP was approved, and the revised QAPP was approved in 2018. The purpose of the revision was to change the method of groundwater sampling for PCE and TCE analysis from EPA Low Flow sampling to Passive Diffusion Bag (PDB) sampling and to include details and procedures for sampling and analysis of the emerging contaminants PFCs and 1,4 dioxane.

#### **4.1.3 Construction Quality Assurance Plan (CQAP)**

The Construction Quality Assurance Plan(s) (CQAPs) managed performance of the Remedial Action tasks through designed and documented QA/QC methodologies applied in the field and in



the lab. The CQAP provided a detailed description of the observation and testing activities that were used to monitor construction quality and confirm that remedial construction was in conformance with the remediation objectives and specifications. A revised copy of the plan was submitted on July 12, 2017.

The following organizations and key personnel were involved in the implementation of the remedy:

<b>Name</b>	<b>Title</b>	<b>Organization</b>
Mark Robbins	Qualified Environmental Professional	Hydro Tech Environmental Corp.
Paul Matli	Environmental Project Manager/Environmental Project Director/Health and Safety Officer	Hydro Tech Environmental Corp.
Rachel Ataman	Project Coordinator	Hydro Tech Environmental Corp.
Morgan Violette	Project Geologist/Health and Safety Officer (Alternate)	Hydro Tech Environmental Corp.
Ariel Czemerinski P.E.	Remedial Engineer	AMC Engineering, PLLC
George Man	General Contractor/Construction Manager/Site Foreman/Supervisor	Morgan Construction
Timothy Li	Architect of Record	TLI Architect, PLLC
Donald Anné	Data Validator/Quality Assurance Officer	Alpha Geoscience

All intrusive and soil disturbance activities were monitored by a Qualified Environmental Professional (QEP) who recorded observations in the Site field book and kept a photographic log of the daily activities. The QEP provided daily updates to the Remedial Engineer (RE) who both made periodic visits to the Site as needed to assure construction quality.



Soil samples were collected by the QEP who was on-Site daily during all soil disturbance activities. Chemical injections were performed under the direction of AMC Engineering, PLLC. Sample collection, analysis and frequency were made in accordance with the requirements of the disposal facilities: Clean Earth of Carteret and Evergreen Recycling of Corona. Corrective measures, if required, were to be made in direct consultation with the representative of the selected disposal facility. No corrective action was taken. Project coordination meetings were generally held on-Site on a weekly basis and supplemented as conditions required. Meeting attendees over the course of the project varied according to need and may have included the following personnel:

- Construction Manager
- QEP/SSO
- Site Foreman / Supervisor
- Architect of Record
- Environmental Project Manager
- Environmental Project Director
- Remedial Engineer

Daily status reports were prepared by Hydro Tech and distributed to the project contact list via email. Photographic documentation was performed on a daily basis and periodically uploaded to the digital project file at the Hydro Tech office.

#### **4.1.4 Soil/Materials Management Plan (S/MMP)**

A Soil/Materials Management Plan (S/MMP) was included in the RAWP for excavation, handling, storage, transport and disposal of all soils/materials that were disturbed at the Site. The S/MMP provided detailed plans for managing all soils/materials that were disturbed at the Site, including excavation, handling, storage, transport and disposal. It also included all of the controls that were applied to these efforts to assure effective, nuisance-free performance in compliance with all applicable Federal, State and local laws and regulations.

The S/MMP specified the following methods to meet the performance objectives:



- Soil Screening Methods - Visual, olfactory and PID soil screening and assessment was performed by an EP during all remedial and development excavations into known or potentially contaminated material (Residual Contamination Zone).
- Stockpile Methods - Stockpiles were kept covered at all times with appropriately anchored tarps and were inspected daily to ensure the covers were maintained and fugitive dust emissions did not occur. Stockpiles were also inspected after every storm event. Hay bales were used as needed near catch basins, surface waters, and other discharge points, and the stockpiles were encircled with silt fences.
- Materials Excavation and Load Out - The EP under the supervision of the RE was on-Site on a daily basis to oversee all invasive work and the excavation and load-out of all excavated material. Loaded vehicles leaving the Site were appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State and local requirements. A truck wash was operated on-Site and all outbound trucks were inspected and cleaned, as required to remove loose soils before leaving the Site. The adjacent streets were inspected and cleaned as needed with respect to Site-derived materials.
- Materials Transport Off-Site - All transport of materials was performed by licensed haulers in accordance with appropriate local, State, and Federal regulations. Truck transport routes were determined prior to construction and a map of the route was posted at the egress points of the Site. All trucks loaded with Site materials exited the vicinity of the Site using the approved truck routes. The identified route was selected to limit transport through residential areas and past sensitive sites and comply with City-mapped truck routes.
- Materials Disposal Off-Site – All excavated historic fill was treated as a contaminated and regulated material and was disposed in accordance with all local, State and Federal regulations. Non-hazardous waste manifests were used to track and document the off-Site movement of non-hazardous wastes and contaminated soils. Waste characterization was performed for off-Site disposal in accordance with the requirements of the receiving



facility and in conformance with applicable permits. Waste characterization data was provided to the receiving facility and approved in writing by the facility prior to off-Site shipment. A summary of off-Site disposal is provided in **Table 2**. A summary of waste characterization sampling of nonhazardous historic fill, clean native soils, and nonhazardous VOC/SVOC impacted soils is provided in **Tables 3 to 8**, while a summary of waste characterization for the concrete (disposed of as C&D Waste) is provided in **Table 9**. **Attachment G** contains all documentation related to solid waste disposal, including waste characterization for excavated soil, waste characterization for concrete (disposed of as C&D waste), solid waste disposal manifests, disposal facility acceptance letters, and disposal and trucking facility permits.

- Clean Native Soil Reuse On-Site – According to the RAWP, soil was not planned to be reused on-Site. However, soil from the elevator pit excavation was reused to backfill the rear yard. The soil at this depth was known to be clean based on waste characterization that was performed in June of 2017. The waste characterization lab report, which also characterizes soil in other parts of the Site beyond the elevator pit, is included in **Attachment G**. A request was forwarded to the NYSDEC to reuse the stockpiled soil from the elevator pit, and a copy of this request is included in **Attachment H**.
- Fluids Management – All liquids to be removed from the Site were handled, transported, and disposed in accordance with applicable local, State, and Federal regulations. Dewatered fluids were not recharged back to the land surface or subsurface of the Site; any fluids generated were managed off-Site. The only liquid encountered at the Site came from the excavated UST. Liquid disposal manifests are included in **Attachment J**.
- Backfill from Off-Site Sources – Fourteen (14) loads of  $\frac{3}{4}$ -inch blue stone were imported to the Site from North Church Gravel, Inc and two (2) loads of 1.5-inch blue stone were imported from Impact Materials. A 6-inch layer of the  $\frac{3}{4}$ -inch stone was laid across the Site underneath the vapor barrier. A 6-inch layer was also used for the SSDS piping installed below the cellar slab. The remainder of the  $\frac{3}{4}$ -inch stone and all of the 1.5 inch stone was used to restore the Site elevation following excavation. No other off-Site material was imported to the Site. Documentation related to the use of blue stone,



including NYSDEC approval of blue stone and tickets from North Church Gravel and Impact Materials, are included in **Attachment I**.

- After the completion of soil removal and other invasive remedial activities and prior to backfilling, a land survey was performed by a New York State licensed surveyor. See **Attachment K**.
- Contingency Plan - The contingency plan specified procedures to document and notifies the NYSDEC in the event that underground tanks or other previously unidentified contaminant sources were found during on-Site remedial excavation or development related construction. A single tank removal and treatment was an initial action in the RAWP; no other tanks were found at the Site.
- Community Air Monitoring - The S/MMP specified air monitoring during implementation of each component of the Remedial Action to provide a measure of protection for the downwind community from potential airborne contaminant releases as a direct result of investigative or remedial work activities. As described in **Section 4.1.6**, the project EP performed daily monitoring around the perimeter of the property for volatile organic compounds and dust particulates. No exceedances in CAMP action levels were recorded during the remedial action. Air monitoring logs can be found in **Attachment C**.
- Odor, Dust and Nuisance Control - Dust control was accomplished by spraying water on exposed soil surfaces to ensure that perimeter action levels established in the CAMP were not exceeded. Continuous air monitoring revealed that there were no instances when the onsite VOCs levels exceeded the CAMP action levels.

#### **4.1.5 Storm-Water Pollution Prevention Plan (SWPPP)**

This document addressed requirements of New York State Storm-Water Management Regulations including physical methods to control and/or divert surface water flows and to limit the potential for erosion and migration of Site soils, via wind or water.



The erosion and sediment controls for all remedial construction were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control and the site-specific Storm Water Pollution Prevention Plan.

Typical measures that were utilized at various stages of the project to limit the potential for erosion and migration of soil included the use of silt fences and a temporary gravel construction entrance. Accumulated sediments were removed as required to keep the silt fence functional.

#### **4.1.6 Community Air Monitoring Plan (CAMP)**

The Community Air Monitoring Plan (CAMP) provided measures for the protection of the surrounding and downwind community (i.e., off-Site receptors including residences, businesses, and on-Site workers not directly involved in the remedial work) from potential airborne contaminant releases resulting from remedial activities. The action levels specified required increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial work did not spread contamination off-Site through the air. The primary concerns for this Site were VOC vapors, nuisance odors and dust particulates.

To comply with the requirements of the CAMP, the EP performed daily monitoring around the perimeter of the property for volatile organic compounds and dust particulates. Instruments used for CAMP monitoring included one MiniRAE 2000 photoionization detector (PID) and one PDR 1500 aerosol monitor. No exceedances in CAMP action levels were recorded during the remedial action. However, there were three instances on 1/26/2018 where there was visible dust in the job Site (although the CAMP action levels were not exceeded during any of these instances). During these periods, water was sprayed in the area to mitigate the dust in the air. Daily CAMP monitoring data sheets are included in **Attachment C**.

#### **4.1.7 Site Operations Plan (SOP)**

The Remedial Engineer reviewed all plans and submittals for this remedial project (i.e. those listed above plus contractor and subcontractor submittals) and confirmed that they were in



compliance with the RAWP. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

#### **4.1.8 Citizen Participation Plan (CPP)**

The approved Citizen Participation Plan for this project specified the following document repositories for all applicable project documents for the duration of the project:

**Queens Library**

Astoria Branch

14-01 Astoria Boulevard

Astoria, NY 11102

(718) 278-2220

**Queens Community Board 1**

45-02 Ditmars Boulevard

LL Suite 125

Astoria, NY 11105

(718) 626-1072

**NYSDEC Region 2 Office**

Hunter's Point Plaza

47-40 21st Street

Long Island City, NY 11101

(718) 482-4900

Fact sheets notifying the public of project milestones and of the availability of documents for review and comment were sent to the site contact list in accordance with the Citizen Participation requirements of the NYS Brownfield Cleanup Program.

Remaining citizen participation elements will include the distribution of a fact sheet to the site contact list when the Certificate of Completion (COC) is issued.



## **4.2 REMEDIAL PROGRAM ELEMENTS**

### **4.2.1 Contractors and Consultants**

- Morgan Construction
  - General Contractor for the Site
  - Supervise, schedule and coordinate subcontractors
  - Project Budgeting
- Shulman Industries Inc.
  - Subcontractor
  - Performed all excavation work
  - Installed SSDS and Vapor Barrier
- Mercury Tank and Pump Service, Inc.
  - Tank Removal
  - Removal of oil and fluids within tanks
- Hydro Tech Environmental, Corp.
  - Environmental Consultant
  - Qualified Environmental Professional
  - Perform Health and Safety and CAMP Monitoring
  - Perform Soil Screening and Waste Characterization Sampling
  - Document Remedial Program
  - Reporting (Daily, Monthly)
- AMC Engineering, PLLC
  - Remedial Engineer
  - Perform Periodic Inspections of Work / Methods
  - Certify Compliance with RAWP and Associated Plans
  - Design, inspect, and certify the SSD system
  - Design, inspect, and certify the In-Situ Chemical Oxidant procedure



- Certify Compliance with FER and Associated Plans

#### 4.2.2 Site Preparation

The Remedial Action Work Plan was approved by the NYSDEC in September 2016. Documentation of NYSDEC approvals is included in **Attachment D**. Other non-agency permits relating to the remediation project are provided in **Attachment L**. A pre-construction meeting was held with NYSDEC on April 24, 2017. The following permits were issued for this project.

<i>Permit</i>	<i>Permit Number</i>	<i>Originating Agency</i>	<i>Issued</i>	<i>Expires</i>
Construction Equipment/Fence	420605964-01-EQ-FN	NYCDOB	01/18/2018	01/18/2019
New Building	420605964-01-FO-EA	NYCDOB	05/03/2018	05/02/2019
New Building	420605964-01-FO	NYCDOB	05/03/2018	05/02/2019
New Building	420605964-01-AL	NYCDOB	05/03/2018	05/02/2019
Plumbing	420605964-01-PL	NYCDOB	02/21/2018	02/21/2019
Sidewalk Shed	421546580-01-EQ-SH	NYCDOB	08/07/2018	08/07/2019
Place Equipment Other Than Crane or Shovel	Q02-2018221-B52	NYCDOT	08/09/2018	11/08/2018
Occupancy of Roadway	Q02-2018221-B50	NYCDOT	08/09/2018	11/08/2018
Occupancy of Sidewalk	Q02-2018221-B51	NYCDOT	08/09/2018	11/08/2018
Crossing Sidewalk	Q02-2018221-B49	NYCDOT	08/09/2018	11/08/2018

All SEQRA/CEQR requirements and all substantive compliance requirements for attainment of applicable permits were achieved during this Remedial Action.

Site preparation began with the erection of a construction fence in preparation for demolition work. The construction fence was installed along the northern property line on 31<sup>st</sup> Drive on September 1, 2017. Demolition of the building on the Site was completed on September 15, 2017. Mobilization for remedial work subsequently began in September 2017. A new NYSDEC-approved project sign was erected at the project entrance and remained in place during all phases of the Remedial Action. Excavation was fully completed in December 2017.

#### 4.2.3 General Site Controls

Security of the Site was maintained by a construction fence erected around the perimeter of the Site with a gate at the site entrance/egress point, which was locked at the end of each work day. Job Site record keeping included a daily sign-in sheet, daily air monitoring logs, waste manifests,



accident reports, field notes and photographic documentation. All project forms, logs and receipts were filed on-Site, in dedicated binders kept in the construction trailer. Field notes and observations were recorded in a project-dedicated field book which remained in the construction trailer. Photographic documentation was up-loaded on a daily basis to a laptop computer which remained in the possession of the EP.

Erosion and sediment controls included a silt fence, hay bales, and one truck wash. The purpose of the truck wash was to prevent soil from leaving the site. Furthermore, trucks leaving the site were secured with tight-fitting covers. All trucks were inspected before leaving the site.

Soil stockpiles were covered with appropriately anchored tarps until disposal facility arrangements were made and soil load out occurred. Soil stockpiles were inspected at least once per week and after every storm event.

#### **4.2.4 Odor, Dust and Nuisance Control Plan**

The S/MMP specified that dust would be controlled by wetting the work area as required. Dust generation was minimal during most excavation work, and water was sprayed in the areas of work on three occasions.

A temporary gravel construction entrance / exit was constructed to reduce the amount of sediment transported onto roads by construction vehicles and runoff. The road foundation was graded so that the entrance / exit sloped towards south of the entrance. After the trucks delivering materials to the Site and transporting excavated materials departed from the Site, the street and front of the Site were inspected and broom swept as needed to maintain a clean condition.

Nuisance odors, primarily related to temporarily stockpiled soils and loading operations, were minimized by covering stockpiled soils when such piles remained overnight or longer and by loading technique which minimized the vertical distance that soil were dumped within the truck bed. No odors were reported throughout the course of the project.



The selected truck route minimized traffic on neighborhood streets, and followed the NYCDOT-approved truck routes. The truck route map was enlarged and mounted at the Site access gate to notify all drivers.

#### **4.2.5 Community Air Monitoring Plan (CAMP) Results**

Air monitoring was performed on a daily basis at the site boundaries for dust and VOCs in accordance with the Community Air Monitoring Plan (CAMP). There were no exceedances of the CAMP action levels reported during the project. During one day, visible dust was reported in the air on three separate occasions. Each time this happened, the area was sprayed with water. On each of these three occasions, the concentration of dust in the air did not exceed the CAMP action levels.

Copies of all field data sheets relating to the CAMP are provided in **Attachment C**.

#### **4.2.6 Reporting**

In accordance with the approved RAWP, daily status reports were prepared and submitted to the NYSDEC and the project team. Daily reports included a listing of contractors, personnel and equipment on-Site, description of activities performed by contractors, CAMP monitoring results, materials imported/exported to/from the Site and planned activities for the following day.

Monthly project status reports were prepared by Hydro Tech Project and distributed to the NYSDEC and project team. Monthly reports included a summary of the activities performed during the month and those anticipated during the next month, a summary of materials transported on/off the Site during the month, sampling results and delays in the schedule.

All daily and monthly reports are included in **Attachment E**. The digital photo log required by the RAWP is included in electronic format in **Attachment F**.



### 4.3 CONTAMINATED MATERIALS REMOVAL

Materials removed from the Site during the remediation project included construction and demolition debris from the building walls and slab, structures associated with the former Site building, USTs, non-hazardous historic fill, non-hazardous (metal) contaminated soils, and clean native soils.

The approved Track 2 cleanup included remediation of all soil to Restricted Residential Use SCOs. The implemented remedy included the following:

- Demolition and excavation of the existing building slab;
- Disposal of approximately 145 tons of clean C&D waste at Evergreen Recycling of Corona from the demolition of the existing building slab;
- Removal of an UST and disposal of the UST as scrap metal;
- Disposal of approximately 100 gallons of rainwater (at Advanced Wastewater Treatment Corp.) that had seeped into the UST through an opening made on the tank shell during the RI;
- Excavation of all soil/fill exceeding Track 2 SCOs (which exceeds restricted residential soil cleanup objectives) listed in **Table 1** to a depth of 3 feet below grade throughout the property and a depth of 6.6 feet below grade for the elevator pit;
- Disposal of approximately 323.5 tons of nonhazardous contaminated historic fill / native soil at Clean Earth of Carteret;
- Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- Collection and analysis of five (5) end-point samples from the base and sidewalls of the UST excavation;
- Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
- Import of materials for use as backfill and cover in compliance with: (1) chemical limits and other specifications included in **Table 1**, (2) all Federal, State and local rules and regulations for handling and transport of material;



- Implementation of a Site Management Plan (SMP) to ensure maintenance of the Engineering Controls; and
- Recording of an Environmental Easement against the Site to ensure implementation of the SMP.

A list of the Track 2 soil cleanup objectives (SCOs) and groundwater protection for the contaminants of concern for this project is provided in **Table 1**. Refer to **Section 4.3.5** for a tabulated summary of the material removed from the Site.

#### 4.3.1 Waste Characterization Sampling

##### *Historic Fill and Native Soil*

According to the soil probe logs in **Attachment G**, historic fill was present from 0-2' below grade across the Site. Soil borings were taken at the Site on June 20, 2017 for the purpose of collecting waste characterization samples. The waste characterization samples are required by soil disposal facilities to obtain soil disposal approval. From a total of four (4) borings, Hydro Tech obtained a total of five (5) grab samples. The borings extended from 0-3' below grade across the entire Site and from 3-7' beneath the proposed elevator pit. The sampling locations can be found in **Figure 3**. Five grab samples, designated WC-1\_SB-1 (1'-2'), WC-1\_SB-1 (3'-4'), WC-1\_SB-2 (3'-4'), WC-1\_SB-3 (4'-5'), and WC-1\_SB-4 (0-1'), were analyzed for VOCs. The five-point composite sample created from these grabs was analyzed for VOCs, TCLP VOCs Semi Volatile Organic Compounds (SVOCs), TCLP SVOCs, Pesticides, TCLP Pesticides, TCLP Herbicides, Polychlorinated Biphenyls (PCBs), TAL Metals, Corrosivity, Ignitability, and Reactivity for Cyanide and Sulfide. Grab sample WC-1\_SB-1 (3'-4') was analyzed for TCLP metals and paint filters.

Soil samples collected for waste characterization were placed in pre-cleaned laboratory supplied glassware, and were placed in a cooler packed with ice for transport to the laboratory. Analysis of the waste characterization samples was provided by York Analytical Laboratories of 132-02 89<sup>th</sup> Avenue, Richmond Hill, NY 11418, a New York State ELAP certified environmental



laboratory (ELAP Certification No. 12058). Each of the grab samples was submitted for laboratory analysis of VOCs via EPA Method 8260. The composite soil sample was submitted for laboratory analysis of the following:

<b>Analysis</b>	<b>Method</b>
Volatile Organic Compounds (VOCs)	EPA Method 8260
Semi-Volatile Organic Compounds (SVOCs)	EPA Method 8270
Pesticides/Herbicides/PCBs	EPA Method 8082/8081
Target Analyte Metals + Cr <sup>6</sup>	EPA Method 1311/6010
Mercury	EPA Method 7473
RCRA Characteristics	

Based on the laboratory results of the waste characterization, Clean Earth of Carteret accepted all of the contaminated soil and historic fill generated at the Site to their facility located at 24 Middlesex Avenue, Carteret, NJ 07008. A copy of the acceptance letter from Clean Earth of Carteret is provided in **Attachment G**. A copy of the laboratory report from York is also included in **Attachment G**, and a summary of the waste characterization data is included in **Tables 3-8**.

#### *Construction and Demolition (C&D) Waste*

Construction and Demolition (C&D) waste was generated from the demolition of the original concrete slab present on the Site. Samples of the C&D waste were taken on September 28, 2017; one sample consisted of washed concrete, while the other sample consisted of concrete in contact with soil.

Concrete samples collected for waste characterization were placed in pre-cleaned laboratory supplied glassware, and were placed in a cooler packed with ice for transport to the laboratory. Analysis of the waste characterization samples was provided by York Analytical Laboratories of 132-02 89<sup>th</sup> Avenue, Richmond Hill, NY 11418, a New York State ELAP certified environmental laboratory (ELAP Certification No. 12058). Both samples were analyzed for TAL Metals and Hexavalent Chromium by EPA Method 6010 as well as Mercury by EPA Method



7473.

Removal of the existing concrete slab was completed on September 20, 2017.

Based on the laboratory results of the waste characterization soil samples for C&D waste, Evergreen Recycling of Corona accepted the material to their facility located at 127-08 Willets Point Boulevard, Flushing, NY 11368. Copies of the waste acceptance letter from Evergreen and the waste characterization lab report are provided in **Attachment G**. A summary of the waste characterization data for the C&D waste can be found in **Table 9**.

#### **4.3.2 Excavation and Disposal of Historic Fill and Native Soils**

As per the soil boring logs in **Attachment G**, historic fill material has been identified across the Site from grade to approximately 2 feet below grade. All historic fill was removed from the Site in accordance with the procedures outlined under the approved Remedial Action Work Plan dated September 2016. The historic fill was underlain by native soils. Excavation of historic fill and native soil began in October 2017, and was completed in December 2017. Initially, no soil was to be reused on-Site. Soil from the excavated elevator pit was, however, reused to backfill the rear yard. NYSDEC permission to reuse this soil is provided in **Attachment H**. In accordance with the approved RAWP, a temporary gravel construction entrance was constructed where trucks/equipment entered the Site. The construction entrance was maintained, as needed, to the edge of the excavation / load-out area to minimize dust generation and the off-Site tracking of Site soil. Laborers inspected and brushed off the wheels and undercarriage of each truck before it exited the Site and periodically swept the street and the site ingress/egress.

#### *Disposal Details – Historic Fill and Native Soil to Clean Earth of Carteret*

All non-hazardous historic fill/soil excavated from the site was shipped to the Clean Earth of Carteret facility. A total of 323.5 tons of non-hazardous fill material was transported to Clean Earth of Carteret. This material came from between 0 and 3' below grade. Non-hazardous disposal manifests for the facility are provided in **Attachment G**. A summary of the waste streams and their destination is provided in **Table 2**.



### 4.3.3 Excavation and Disposal of C&D Waste

C&D waste was produced from the demolition of the original concrete slab present on the Site. All waste was removed from the Site in accordance to the procedures outlined under the approved RAWP dated September 2016. Excavation and removal of C&D waste was completed by October 2017.

#### *Disposal Details – C&D Waste to Evergreen Recycling of Corona*

All C&D waste was shipped to the Evergreen Recycling of Corona facility. A total of 145 tons of material was transported to Evergreen. Non-hazardous disposal manifests for the facility are provided **Attachment G**. A summary of the waste streams and their destination is provided in **Table 2**.

### 4.3.4 Excavation and Disposal of Underground Storage Tank

A 550 gallon UST was excavated in the northern portion of the Site, as shown in **Figure 4**. The tank was buried in dirt with no evidence of a spill. The tank was 5 feet wide, 9 feet long, and 6 feet deep, and no groundwater was encountered at the bottom of the pit. Approximately 100 gallons of rainwater had seeped into the tank through an opening that was made during a Remedial Investigation tank exploration exercise. The rainwater was removed via a vacuum truck, and was disposed of at Advanced Waste Water Treatment, Corp on October 16, 2017. The liquid disposal manifest is included as **Attachment J**. The tank also contained sediment that had fallen in during the building slab removal. This material was placed in a 55 gallon drum, and was sampled on October 27, 2017. The sample was placed in pre-cleaned laboratory supplied glassware, and was placed in a cooler packed with ice for transport to the laboratory. Analysis of the sample was provided by York Analytical Laboratories of 132-02 89<sup>th</sup> Avenue, Richmond Hill, NY 11418, a New York State ELAP certified environmental laboratory (ELAP Certification No. 12058). The sample was analyzed for the following:

<b>Analysis</b>	<b>Method</b>
Volatile Organic Compounds (VOCs)	EPA Method 8260
Semi-Volatile Organic Compounds (SVOCs)	EPA Method 8270
Pesticides/Herbicides/PCBs	EPA Method 8082/8081
Target Analyte Metals	EPA Method 1311/6010



Mercury

EPA Method 7473

RCRA Characteristics

Lab results showed that the sediment met Residential Use Soil Cleanup Objectives. The analytical report is provided in **Attachment P**, and the data is summarized in **Table 10**. The drum of sediment was disposed of on December 20, 2018. A waste manifest for the sediment disposal is provided in **Attachment P**.

After being cleaned out, the UST was removed from the ground and disposed of by Mercury Tank & Pump Service, Inc. on October 16, 2017. An affidavit from Mercury regarding the UST removal is provided in **Attachment P**.

#### 4.3.5 Disposal Summary

The table provided below shows the total quantities of each category of material removed from the Site and the disposal location.

**Off-Site Disposal Summary**

<b>Disposal Facility</b>	<b>Historic Fill / Native Soil (Tons)</b>	<b>C&amp;D Waste (Tons)</b>	<b>Liquid Waste From UST (Gallons)</b>	<b>550 Gallon UST</b>	<b>Sediment From UST (Pounds)</b>
Clean Earth of Carteret	323.5				
Evergreen Recycling of Corona		145			
Advanced Waste Water Treatment Corp.			100		
Mercury Tank & Pump Service, Inc.				Cleaned and disposed of as scrap metal	
Republic Environmental Systems (PA), LLC					20



#### 4.4 REMEDIAL PERFORMANCE SAMPLING

Endpoint sampling was not performed throughout the entire site because the remedial objective was to meet Track 2 SCOs, and all soil at a depth lower than 2 ft below grade was shown to meet Track 2 Restricted Use SCOs during the remedial investigations. Since the entire Site was excavated to a minimum of 3 ft below grade, all of the remaining soil meets Track 2 SCOs. Laboratory reports showing the analytical data from the remedial investigations (including soil data taken during the original RI) can be found in **Attachment M**. A summary of the RI and Supplemental RI soil analytical results can be found in **Table 11**. Endpoint samples were, however, taken from the area surrounding the UST that was removed, since there was a higher probability of the soil in that area being contaminated.

##### 4.4.1 UST Endpoint Sampling

After the removal of the UST from the northeastern portion of the site, five (5) endpoint samples were taken. Samples EP-1 through EP-4 were taken from the sides of the excavation at a depth of 5 ft below grade, while sample EP-5 was taken from the bottom of the excavation at a depth of 6.5 ft below grade. UST endpoint sampling locations are shown in **Figure 5**. The analytical results of the endpoint sampling are included in **Attachment N**, and a summary of the data is given in **Table 12**. The Data Usability Summary Report (DUSR) for the endpoint samples is included in **Attachment O**. All five endpoint samples met UUSCOs. All UST removal documentation can be found in **Attachment P**.

##### 4.4.2 Post ISCO Groundwater Sampling

Pre and post-injection groundwater sampling results can be found in **Tables 14a and 15**, respectively, while the lab reports containing pre and post-injection groundwater data are included in **Attachment Q**. Note that **Table 14b** shows historical groundwater data from the previous remedial investigations (2013 and 2015). Post-injection results indicate a general reduction in CVOC concentrations following the completion of the injection program.



## 4.5 IMPORTED MATERIALS FOR BACKFILL

### 4.5.1 Imported Blue Stone

A total of 1687.6 tons of blue stone were imported to the Site, 1622 tons of which were ¾-inch stone obtained from North Church Gravel, Inc., located in Franklin, New Jersey. The remaining 65.6 tons were 1.5-inch stone received from Impact Materials, Inc., located in Lyndhurst, New Jersey. This information is summarized in **Table 2**. The 1.5-inch stone was used to backfill the Site and restore it to its former elevation after all excavation activity was completed. Most of the ¾-inch stone also served this purpose. Some of the ¾-inch stone, however, was used for the SSDS and the vapor barrier. The SSDS was placed in a 6-inch layer of blue stone that was installed across the entire site; the vapor barrier was installed on top of a 6-inch layer of blue stone as well. All documentation relating to the import and use of blue stone from both North Church and Impact can be found in **Attachment I**. This includes all of the import tickets from both North Church and Impact Materials, as well as the permission from NYSDEC to use blue stone.

A table of all sources of imported backfill with quantities for each source is provided in the table below.

Source	Material Type	Quantity	Purpose
North Church Gravel	¾-inch blue stone	1622 tons	Onsite backfill to restore Site elevation; use in SSDS and vapor barrier system
Impact Materials	1.5-inch blue stone	65.6 tons	Onsite backfill to restore Site elevation

## 4.6 CONTAMINATION REMAINING AT THE SITE

The results of the soil sampling shown in **Table 11** indicate that the soil present at the Site meets Track 2 Residential Use SCOs, but exceeds Track 1 Unrestricted Use SCOs. The remaining soil contaminants are metals. **Table 13 and Figure 6** summarize the results of all soil samples remaining at the site after completion of Remedial Action that exceed the Track 1 (unrestricted)



SCOs. This data was taken during the remedial investigation and the supplemental remedial investigation. Furthermore, the UST endpoint sampling results shown in **Table 12** indicate that none of the soil surrounding the excavated UST exceeded UUSCOs.

Post-injection groundwater samples show groundwater at the site still contains elevated levels of PCE. Pre and post-injection groundwater sampling results can be found in **Tables 14a and 15**, respectively, and **Figure 7** while the lab reports containing pre and post-injection groundwater data are included in **Attachment Q**. Note that **Table 14b** shows historical groundwater data from the previous remedial investigations (2013 and 2015). Results indicate a general reduction in CVOC concentrations following the completion of the injection program.

Because contaminated groundwater remains on the site, contaminated soil vapor is likely also present.

Since contaminated groundwater and soil vapor remains beneath the site after completion of the Remedial Action, Institutional and Engineering Controls are required to protect human health and the environment. These Engineering and Institutional Controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under the Site Management Plan (SMP) approved by the NYSDEC.

## 4.7 ENGINEERING CONTROLS

The site has the following primary Engineering Controls, as described in the following subsections:

- Sub-Slab Depressurization (SSD) system
- In-situ chemical oxidant (ISCO) injections

### 4.7.1 Sub-Slab Depressurization System (SSDS)

A sub-slab depressurization system (SSDS) was designed in order to mitigate soil vapor intrusion into the new building. The SSDS was installed in August of 2018.



### SSD System Design and Installation

The SSDS consists of a system of horizontal, interconnected 4-inch diameter perforated PVC pipes with a 0.020-inch slotted screen placed in a 6-inch layer of  $\frac{3}{4}$ -inch stone. The stone underlies the vapor barrier, a 20 mil VaporBlock Plus (VBP20), that spans the Site. The 4-inch collector pipe is connected via a reducer to a 6-inch PVC tee. The tee is vertically connected to a 6-inch PVC riser pipe, which is in turn connected to a fan. The fan is a RadonAway RP265 model with a 6-inch diameter duct. It has a power requirement of 91 – 129 W. The maximum suction pressure achievable by the fan is 2.3 inches of water and is capable of flow rates ranging from 52 – 334 cubic feet per minute (CFM). The fan is connected to another 6-inch diameter pipe that exhausts from the top of the building. The exhaust stack is at least 10 feet away from any building air intake. The SSDS also contains a Magnehelic Differential Pressure Gage, manufactured by Dwyer, and an audio/visual system alarm. An as-built drawing of the SSDS is included as **Figure 8**.

The SSDS will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSDS may no longer be required, a proposal to discontinue the system will be submitted by the remedial party.

### System Startup and Testing

The SSDS will be started up prior to occupancy of the building. Prior to startup, an inspection will be performed to confirm that all system components are in place. All equipment will then be started in accordance with the procedures outlined in the SMP. One monitoring point will be installed at each of the four corners of the building. A vacuum gauge will be used to measure the pressure at each monitoring point to verify that a vacuum extends throughout the entire sub-slab. While the system operates, smoke tubes will be used to check for leaks through concrete cracks, floor joints, and at the suction points. Any leaks identified will be properly sealed. The alarm indicating fan malfunction will also be tested to confirm proper operation.



### System Operation and Maintenance

Procedures for monitoring, operating and maintaining the SSDS are provided in the Operation and Maintenance Plan in Section 5 and Attachment H of the Site Management Plan (SMP).

#### **4.7.2 In-Situ Chemical Oxidant Injections**

Remediation of dissolved phase VOCs in groundwater is on-going through a chemical oxidant injection program. The areas of injections are the northeastern portion of the Site as well as the sidewalk just outside the northeastern portion of the site. The ISCO treatment program utilizes six injection points (IW1-IW6) for oxidant application. Injection points IW1-IW3 are located along a line on the sidewalk just outside the Site, and IW4-IW6 are located just inside the Site near the sidewalk. Furthermore, IW6 is located directly adjacent to the excavated UST. **Figure 9** shows the injection point locations, and **Figure 7** shows the monitoring well locations.

### ISCO Design and Installation

Prior to the injection events, groundwater samples were taken from monitoring wells MW1-MW4 and MW6. Note that MW5 could not be located, and was presumed to be destroyed by construction activity near the Site. The sampling established the baseline levels of PCE and TCE, the main contaminants of concern, in the groundwater. DUSRs for both the pre and post-injection groundwater data are included in **Attachment O**.

The ISCO treatment program utilized six injection points (IW1-IW6) for oxidant application and five monitoring wells (MW1-MW4 and MW6) for groundwater monitoring. AMC and Hydro Tech field inspectors (under the direct supervision of the Remedial Engineer) inspected and photographed the injection procedures. Monitoring well construction logs can be found in **Attachment R**. Note that the original MW1 – MW3 were constructed in 2013, but were later destroyed. They were subsequently rebuilt in 2018. The first three monitoring well construction logs in **Attachment R** show the construction details for the original MW1 – MW3, while the next three logs show the construction details for the rebuilt MW1 – MW3. Note also that the only wells actually used for groundwater monitoring are MW1-MW4 and MW6. The other wells were used in earlier parts of the investigation.



### ISCO Injection Events

Chemical injections were performed on May 28 and 29, 2018. A total of 1,186 pounds of sodium persulfate (Klozur®) and 117 pounds of iron-EDTA activator (FeEDTA) were injected into the six injection points. On both days, dry sodium persulfate powder was mixed with water to create a 9.3 lb/gal solution. Approximately 34 gallons of activated persulfate solution were injected at each injection point. The ISCO design document is included as **Attachment S**.

### Sampling and Post-Injection Analysis

A round of pre-injection baseline groundwater samples was obtained on February 19, 2018 from five (5) monitoring wells (MW1-4 and MW6) to establish the initial groundwater conditions. On July 24, 2018, the first round of post-injection groundwater samples was collected and tested for TCE and PCE via EPA method 8260. The results indicate that PCE is still present in the groundwater at levels that exceed the class GA Standards and Guidance Values. However, the PCE concentration did decrease after injections. In MW-4 and MW-6, the two most heavily contaminated wells, the pre-injection PCE concentrations were 70 and 75 µg/L, respectively; the post-injection PCE concentrations were 13 and 43 µg/L, respectively. TCE no longer exceeds the class GA Standards and Guidance Values in any of the five monitoring wells. Before injections, the TCE concentration in MW-6 was 15 µg/L; the TCE concentration in MW-6 decreased to 0.46 µg/L. The post-injection sample was also tested for sodium persulfate using Persulfate Field Test Kits from Peroxychem. MW-1 and MW-6 had persulfate concentrations of 0 g/L, while MW-2, MW-3, and MW-4 had persulfate concentrations of 28.74 g/L, 34.68 g/L, and 40.62 g/L, respectively, indicating that the chemical was still active in those three wells. Information regarding the test kits can be found in the attached ISCO design document.

Results of the pre-injection baseline sampling can be found in **Table 14a**, and results of the post-injection sampling can be found in **Table 15**. Laboratory reports showing the pre and post-injection results are included in **Attachment Q**.

Authorization to inject was granted by the EPA on November 17, 2017. The authorization is included in **Attachment T**.



Maintenance and monitoring of the ISCO injection program will be performed on an as-needed basis under the Site Management Plan. Results and observations will be published in the annual Period Review Report.

#### **4.8 INSTITUTIONAL CONTROLS**

The Site remedy requires that an environmental easement be placed on the property to (1) implement, maintain and monitor the Engineering Controls; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to restricted residential, commercial or industrial uses only.

The environmental easement for the Site was executed by the Department on July 26, 2016, and filed with the Queens County Office of the City Register on August 12, 2016. The County Recording Identifier number for this filing is 2016000278636. A copy of the easement and proof of filing is provided in **Attachment B**.



#### **4.9 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN**

The only deviation from the RAWP is the fact that the first groundwater sample was taken two months after the injection event. The original RAWP requirement was that the first groundwater sample would be taken six (6) weeks after injections. This deviation occurred because Hydro Tech had to wait for approval of the revised QAPP before taking the sample. As discussed in **Section 4.1.2**, the revised QAPP changed the groundwater sampling method from Low Flow to PDB sampling. The change had no effect on the remedial action.



# **TABLES**



11-28 31st Drive, Queens, NY  
Soil Cleanup Objectives (SCOs)

Contaminant	CAS Number	Restricted-Residential Use (mg/kg)
<b>Metals</b>		
Arsenic	7440-38-2	16
Barium	7440-39-3	400
Beryllium	7440-41-7	72
Cadmium	7440-43-9	4.3
Chromium, hexavalent	18540-29-9	110
Chromium, trivalent	16065-83-1	180
Copper	7440-50-8	270
Total Cyanide		27
Lead	7439-92-1	400
Manganese	7439-96-5	2,000
Total Mercury		0.81
Nickel	7440-02-0	310
Selenium	7782-49-2	180
Silver	7440-22-4	180
Zinc	7440-66-6	10,000
<b>PCBs/Pesticides</b>		
2,4,5-TP Acid (Silvex)	93-72-1	100
4,4'-DDE	72-55-9	8.9
4,4'-DDT	50-29-3	7.9
4,4'-DDD	72-54-8	13
Aldrin	309-00-2	0.097
alpha-BHC	319-84-6	0.48
beta-BHC	319-85-7	0.36
Chlordane (alpha)	5103-71-9	4.2
delta-BHC	319-86-8	100
Dibenzofuran	132-64-9	59
Dieldrin	60-57-1	0.2
Endosulfan I	959-98-8	24
Endosulfan II	33213-65-9	24
Endosulfan sulfate	1031-07-8	24
Endrin	72-20-8	11
Heptachlor	76-44-8	2.1
Lindane	58-89-9	1.3
Polychlorinated biphenyls	1336-36-3	1

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS = Not Specified.  
See Technical Support Document (TSD). Footnotes:

Contaminant	CAS Number	Restricted-Residential Use (mg/kg)
<b>Semivolatile organic compounds</b>		
Acenaphthene	83-32-9	100
Acenaphthylene	208-96-8	100
Anthracene	120-12-7	100
Benz(a)anthracene	56-55-3	1
Benzo(a)pyrene	50-32-8	1
Benzo(b)fluoranthene	205-99-2	1
Benzo(g,h,i)perylene	191-24-2	100
Benzo(k)fluoranthene	207-08-9	3.9
Chrysene	218-01-9	3.9
Dibenz(a,h)anthracene	53-70-3	0.33
Fluoranthene	206-44-0	100
Fluorene	86-73-7	100
Indeno(1,2,3-cd)pyrene	193-39-5	0.5
m-Cresol	108-39-4	100
Naphthalene	91-20-3	100
o-Cresol	95-48-7	100
p-Cresol	106-44-5	100
Pentachlorophenol	87-86-5	6.7
Phenanthrene	85-01-8	100
Phenol	108-95-2	100
Pyrene	129-00-0	100
<b>Volatile organic compounds</b>		
1,1,1-Trichloroethane	71-55-6	100
1,1-Dichloroethane	75-34-3	26
1,1-Dichloroethene	75-35-4	100
1,2-Dichlorobenzene	95-50-1	100
1,2-Dichloroethane	107-06-2	3.1
cis -1,2-Dichloroethene	156-59-2	100
trans-1,2-Dichloroethene	156-60-5	100
1,3-Dichlorobenzene	541-73-1	49
1,4-Dichlorobenzene	106-46-7	13
1,4-Dioxane	123-91-1	13
Acetone	67-64-1	100
Benzene	71-43-2	4.8
n-Butylbenzene	104-51-8	100
Carbon tetrachloride	56-23-5	2.4
Chlorobenzene	108-90-7	100
Chloroform	67-66-3	49
Ethylbenzene	100-41-4	41
Hexachlorobenzene	118-74-1	1.2
Methyl ethyl ketone	78-93-3	100
Methyl tert-butyl ether	1634-04-4	100
Methylene chloride	75-09-2	100
n - Propylbenzene	103-65-1	100
sec-Butylbenzene	135-98-8	100
tert-Butylbenzene	98-06-6	100
Tetrachloroethene	127-18-4	19
Toluene	108-88-3	100
Trichloroethene	79-01-6	21
1,2,4-Trimethylbenzene	95-63-6	52
1,3,5-Trimethylbenzene	108-67-8	52
Vinyl chloride	75-01-4	0.9
Xylene (mixed)	1330-20-7	100



**Table 2**

## Off-Site Disposal and Materials Import Summary

## Off-Site Disposal Summary

Disposal Facility	Historic Fill/Native Soil (Tons)	C&D Waste (Tons)	Liquid Waste From UST (Gallons)	550 Gallon UST	Sediment From UST (Pounds)
Clean Earth of Carteret	323.5				
Evergreen Recycling of Corona		145			
Advanced Waste Water Treatment, Corp.			100		
Mercury Tank & Pump Service, Inc.				Cleaned and disposed of as scrap metal	
Republic Environmental Systems (PA), LLC					20

## Imported Materials Summary

Source	Material Type	Quantity	Purpose
North Church Gravel	3/4-inch Blue Stone	1622 tons	Backfill to restore Site elevation; used for SSDS and vapor barrier
Impact Materials	1.5-inch Blue stone	65.6 tons	Backfill to restore Site elevation



**Table 3**  
**Waste Characterization Analytical Results for VOCs**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1-SB-2 (2-3) Grab		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result				
Units	mg/kg	Q	mg/Kg	mg/kg	mg/kg
<b>Volatile Organics, 8260 - Comprehensive</b>					
1,1,1,2-Tetrachloroethane	0.00280	U	~	18	18
1,1,1-Trichloroethane	0.00280	U	0.68	7.2	7.2
1,1,2,2-Tetrachloroethane	0.00280	U	~	0.0093	0.0093
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.00280	U	~	26000	53000
1,1,2-Trichloroethane	0.00280	U	~	0.15	7.2
1,1-Dichloroethane	0.00280	U	0.27	0.65	2.7
1,1-Dichloroethylene	0.00280	U	0.33	0.19	0.19
1,1-Dichloropropylene	0.00280	U	~	~	~
1,2,3-Trichlorobenzene	0.00280	U	~	~	~
1,2,3-Trichloropropane	0.00280	U	~	1.6	0.82
1,2,4-Trichlorobenzene	0.00280	U	~	27	27
1,2,4-Trimethylbenzene	0.00280	U	3.6	9	20
1,2-Dibromo-3-chloropropane	0.00280	U	~	0.0092	0.0092
1,2-Dibromoethane	0.00280	U	~	0.0012	0.0012
1,2-Dichlorobenzene	0.00280	U	1.1	59	59
1,2-Dichloroethane	0.00280	U	0.02	0.1	0.1
1,2-Dichloropropane	0.00280	U	~	0.11	0.11
1,3,5-Trimethylbenzene	0.00280	U	8.4	2.8	6.2
1,3-Dichlorobenzene	0.00280	U	2.4	61	61
1,3-Dichloropropane	0.00280	U	~	~	~
1,4-Dichlorobenzene	0.00280	U	1.8	10	10
1,4-Dioxane	0.0570	U	0.1	0.073	0.31
2,2-Dichloropropane	0.00280	U	~	~	~
2-Butanone	0.00280	U	0.12	54	110
2-Chlorotoluene	0.00280	U	~	20	20
2-Hexanone	0.00280	U	~	~	~
4-Chlorotoluene	0.00280	U	~	~	~
4-Methyl-2-pentanone	0.00280	U	~	2.9	6.3
Acetone	0.00570	U	0.05	41	110
Acrolein	0.00570	U	~	0.00062	0.0014
Acrylonitrile	0.00280	U	~	0.0087	0.037
Benzene	0.00280	U	0.06	0.13	0.13
Bromobenzene	0.00280	U	~	~	~
Bromochloromethane	0.00280	U	~	1.6	1.6
Bromodichloromethane	0.00280	U	~	3.4	3.4
Bromoform	0.00280	U	~	4.4	4.4
Bromomethane	0.00280	U	~	0.54	0.54
Carbon disulfide	0.00280	U	~	160	350
Carbon tetrachloride	0.00280	U	0.76	0.26	0.26
Chlorobenzene	0.00280	U	1.1	6.1	6.1
Chloroethane	0.00280	U	~	5	19
Chloroform	0.00280	U	0.37	2.5	2.5
Chloromethane	0.00280	U	~	0.038	0.038
cis-1,2-Dichloroethylene	0.00280	U	0.25	1.6	1.6
cis-1,3-Dichloropropylene	0.00280	U	~	0.12	0.46
Cyclohexane	0.00280	U	~	~	~
Dibromochloromethane	0.00280	U	~	3.2	3.2
Dibromomethane	0.00280	U	~	3.7	7.7
Dichlorodifluoromethane	0.00280	U	~	100	2.6
Ethyl Benzene	0.00280	U	1	46	46
Hexachlorobutadiene	0.00280	U	~	1.2	1.2
Isopropylbenzene	0.00280	U	~	780	1600
Methyl acetate	0.00280	U	~	690	1900
Methyl tert-butyl ether (MTBE)	0.00280	U	0.93	0.28	0.28
Methylcyclohexane	0.00280	U	~	~	~
Methylene chloride	0.0400		0.05	0.076	0.038
n-Butylbenzene	0.00280	U	12	950	2600
n-Propylbenzene	0.00280	U	3.9	290	780
o-Xylene	0.00280	U	~	~	~
p- & m- Xylenes	0.00570	U	~	~	~
p-Isopropyltoluene	0.00280	U	~	~	~
sec-Butylbenzene	0.00280	U	11	350	960
Styrene	0.00280	U	~	24	24
tert-Butyl alcohol (TBA)	0.00280	U	~	~	24
tert-Butylbenzene	0.00280	U	5.9	270	740
Tetrachloroethylene	0.00280	U	1.3	0.43	0.43
Toluene	0.00280	U	0.7	44	44
trans-1,2-Dichloroethylene	0.00280	U	0.19	2.3	2.3
trans-1,3-Dichloropropylene	0.00280	U	~	0.12	0.046
Trichloroethylene	0.00280	U	0.47	0.17	0.17
Trichlorofluoromethane	0.00280	U	~	87	87
Vinyl acetate	0.00280	U	~	~	14
Vinyl Chloride	0.00280	U	0.02	0.03	0.027
Xylenes, Total	0.00850	U	0.26	990	990
<b>Volatile Organics, Tentatively Identified Cmpds.</b>					
Hexane isomer	0.0140	JN	~	~	~

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B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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

      "= sample exceeds PA Regulated Fill Limits



**Table 4**  
**Waste Characterization Analytical Results for SVOCs**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-7) Composite		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result				
Units	mg/kg	Q	mg/Kg	mg/kg	mg/kg
Semi-Volatiles, 8270 - Comprehensive					
1,1-Biphenyl	0.0477	U	~	790	2200
1,2,4,5-Tetrachlorobenzene	0.0952	U	~	~	14
1,2,4-Trichlorobenzene	0.0477	U	~	27	27
1,2-Dichlorobenzene	0.0477	U	1.1	59	59
1,2-Diphenylhydrazine (as Azobenzene)	0.0477	U	~	0.15	0.58
1,3-Dichlorobenzene	0.0477	U	2.4	61	61
1,4-Dichlorobenzene	0.0477	U	1.8	10	10
2,3,4,6-Tetrachlorophenol	0.0952	U	~	~	~
2,4,5-Trichlorophenol	0.0477	U	~	2300	6100
2,4,6-Trichlorophenol	0.0477	U	~	3.1	8.9
2,4-Dichlorophenol	0.0477	U	~	1	1
2,4-Dimethylphenol	0.0477	U	~	32	87
2,4-Dinitrophenol	0.0952	U	~	0.21	0.46
2,4-Dinitrotoluene	0.0477	U	~	0.05	0.2
2,6-Dinitrotoluene	0.0477	U	~	1.1	3
2-Chloronaphthalene	0.0477	U	~	6200	18000
2-Chlorophenol	0.0477	U	~	4.4	4.4
2-Methylnaphthalene	0.0477	U	~	2900	8000
2-Methylphenol	0.0477	U	0.33	64	180
2-Nitroaniline	0.0952	U	~	0.038	0.091
2-Nitrophenol	0.0477	U	~	5.9	17
3- & 4-Methylphenols	0.0477	U	~	4.2	12
3,3-Dichlorobenzidine	0.0477	U	~	8.3	32
3-Nitroaniline	0.0952	U	~	0.033	0.1
4,6-Dinitro-2-methylphenol	0.0952	U	~	~	~
4-Bromophenyl phenyl ether	0.0477	U	~	~	~
4-Chloro-3-methylphenol	0.0477	U	~	37	110
4-Chloroaniline	0.0477	U	~	19	52
4-Chlorophenyl phenyl ether	0.0477	U	~	~	~
4-Nitroaniline	0.0952	U	~	0.031	0.066
4-Nitrophenol	0.0952	U	~	4.1	4.1
Acenaphthene	0.0477	U	20	2700	4700
Acenaphthylene	0.0477	U	100	2500	6900
Acetophenone	0.0477	U	~	200	540
Aniline	0.191	U	~	0.16	0.34
Anthracene	0.0477	U	100	350	350
Atrazine	0.0477	U	~	0.13	0.13
Benzaldehyde	0.0477	U	~	~	~
Benzidine	0.191	U	~	0.078	0.34
Benzo(a)anthracene	0.0477	U	1	25	110
Benzo(a)pyrene	0.0477	U	1	2.5	11
Benzo(b)fluoranthene	0.0477	U	1	25	110
Benzo(g,h,i)perylene	0.0477	U	100	180	180
Benzo(k)fluoranthene	0.0477	U	0.8	250	610
Benzoic acid	0.0477	U	~	2900	7800
Benzyl alcohol	0.0477	U	~	400	1100
Benzyl butyl phthalate	0.0477	U	~	10000	10000
Bis(2-chloroethoxy)methane	0.0477	U	~	~	~
Bis(2-chloroethyl)ether	0.0477	U	~	0.0039	0.017
Bis(2-chloroisopropyl)ether	0.0477	U	~	8	8
Bis(2-ethylhexyl)phthalate	0.0477	U	~	130	130
Caprolactam	0.0952	U	~	~	~
Carbazole	0.0477	U	~	21	0.83
Chrysene	0.0477	U	1	230	230
Dibenzo(a,h)anthracene	0.0477	U	0.33	2.5	11
Dibenzofuran	0.0477	U	7	~	~
Diethyl phthalate	0.0477	U	~	160	180
Dimethyl phthalate	0.0477	U	~	~	~
Di-n-butyl phthalate	0.0477	U	~	~	~
Di-n-octyl phthalate	0.176	D	~	4400	10000
Fluoranthene	0.0477	U	100	3200	3200
Fluorene	0.0477	U	30	3000	3800
Hexachlorobenzene	0.0477	U	0.33	0.96	0.96
Hexachlorobutadiene	0.0477	U	~	1.2	1.2
Hexachlorocyclopentadiene	0.0477	U	~	91	91
Hexachloroethane	0.0477	U	~	0.56	0.56
Indeno(1,2,3-cd)pyrene	0.0477	U	0.5	25	110
Isophorone	0.0477	U	~	1.9	1.9
Naphthalene	0.0477	U	12	25	25
Nitrobenzene	0.0477	U	~	0.79	2.2
N-Nitrosodimethylamine	0.0477	U	~	0.000041	7.6e-005
N-nitroso-di-n-propylamine	0.0477	U	~	0.0013	0.0061
N-Nitrosodiphenylamine	0.0477	U	~	20	83
Pentachlorophenol	0.0477	U	0.8	5	5
Phenanthrene	0.0477	U	100	10000	10000
Phenol	0.0477	U	0.33	66	88
Pyrene	0.0477	U	100	2200	2206

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**Table 5**  
**Waste Characterization Analytical Results for Pesticides, Herbicides and PCBs**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-8) Composite		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result				
Units	mg/kg	Q	mg/Kg	mg/kg	mg/kg
<b>Pesticides, EPA TCL List</b>					
4,4'-DDD	0.00191	U	0.0033	6.8	30
4,4'-DDE	0.00191	U	0.0033	41	170
4,4'-DDT	0.00191	U	0.0033	53	230
Aldrin	0.00191	U	0.005	0.1	0.44
alpha-BHC	0.00191	U	0.02	0.046	0.19
beta-BHC	0.00191	U	0.036	0.22	0.82
Chlordane, total	0.00382	U	~	49	49
delta-BHC	0.00191	U	0.04	11	30
Dieldrin	0.00191	U	0.005	0.11	0.44
Endosulfan I	0.00191	U	2.4	110	260
Endosulfan II	0.00191	U	2.4	130	260
Endosulfan sulfate	0.00191	U	2.4	70	70
Endrin	0.00191	U	0.014	5.5	5.5
Endrin aldehyde	0.00191	U	~	~	~
Endrin ketone	0.00191	U	~	~	~
gamma-BHC (Lindane)	0.00191	U	0.1	0.072	0.072
Heptachlor	0.00191	U	0.042	0.68	0.68
Heptachlor epoxide	0.00191	U	~	1.1	1.1
Methoxychlor	0.00955	U	~	630	630
Toxaphene	0.0966	U	~	1.2	1.2
<b>Polychlorinated Biphenyls (PCB)</b>					
Aroclor 1016	0.0193	U	~	15	200
Aroclor 1221	0.0193	U	~	0.63	2.5
Aroclor 1232	0.0193	U	~	0.5	2
Aroclor 1242	0.0193	U	~	16	62
Aroclor 1248	0.0193	U	~	9.9	44
Aroclor 1254	0.0193	U	~	4.4	44
Aroclor 1260	0.0193	U	~	30	130
Total PCBs	0.0193	U	0.1	~	50

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U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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**Table 6**  
**Waste Characterization Analytical Results for Metals**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-8) Composite		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result	Q			
Aluminum	9,510		~	~	190000
Antimony	0.58	U	~	27	27
Arsenic	4.68		13	12	53
Barium	26.40		350	8200	8200
Beryllium	0.44		7.2	320	320
Cadmium	0.35	U	2.5	38	38
Calcium	779	B	~	~	~
Chromium, Trivalent	14.60		~	~	190000
Chromium, Hexavalent	0.58	U	1	94	190
Cobalt	12.90		~	8.1	22
Copper	12.50		50	8200	36000
Iron	19,400		~	~	190000
Lead	12		63	450	450
Magnesium	2,770		~	~	~
Manganese	480		1600	31000	190000
Mercury	0.03	U	0.18	10	10
Nickel	13.90	B	30	650	650
Potassium	1,120	B	~	~	~
Selenium	2.61		3.9	26	26
Silver	0.58	U	2	84	84
Sodium	113	B	~	~	~
Thallium	1.16	U	~	14	14
Vanadium	20.80		~	1500	72000
Zinc	39.50		109	12000	12000

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B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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

  = sample exceeds PA Clean Fill Limits



Table 7  
Waste Characterization Analytical Results for TCLPs  
11-28 31st Drive, Long Island city, NY

Sample ID	WC-1 (0-8) Composite		WC-1-SB-2 (2-3) Grab		WC-SB-1 (3-4) Site Grab		EPA Hazardous Waste Limits
Sampling Date	6/20/2017		6/20/2017		6/20/2017		
Client Matrix	Soil		Soil		Soil		
Units	mg/L	Q	mg/L	Q			
Volatile Organics, TCLP RCRA List							
1,1-Dichloroethylene	NT		0.00250	U	NT		0.33
1,2-Dichloroethane	NT		0.00250	U	NT		0.02
1,4-Dichlorobenzene	NT		0.00250	U	NT		1.8
2-Butanone	NT		0.00250	U	NT		0.12
Benzene	NT		0.00250	U	NT		0.06
Carbon tetrachloride	NT		0.00250	U	NT		0.76
Chlorobenzene	NT		0.00250	U	NT		1.1
Chloroform	NT		0.00250	U	NT		0.37
Tetrachloroethylene	NT		0.00250	U	NT		1.3
Trichloroethylene	NT		0.00250	U	NT		0.47
Vinyl Chloride	NT		0.00250	U	NT		0.02
Semi-Volatiles, TCLP RCRA							
1,4-Dichlorobenzene	0.00645	U	NT		NT		1.8
2,4,5-Trichlorophenol	0.00722	U	NT		NT		~
2,4,6-Trichlorophenol	0.00654	U	NT		NT		~
2,4-Dinitrotoluene	0.00473	U	NT		NT		~
2-Methylphenol	0.00171	U	NT		NT		0.33
3- & 4-Methylphenols	0.00743	U	NT		NT		~
Cresols, total	0.00740	U	NT		NT		~
Hexachlorobenzene	0.00591	U	NT		NT		0.33
Hexachlorobutadiene	0.00662	U	NT		NT		~
Hexachloroethane	0.00726	U	NT		NT		~
Nitrobenzene	0.00393	U	NT		NT		~
Pentachlorophenol	0.00753	U	NT		NT		0.8
Pyridine	0.00637	U	NT		NT		~
Pesticides, TCLP RCRA List							
Chlordane, total	0.00022	U	NT		NT		~
Endrin	0.00004	U	NT		NT		0.014
gamma-BHC (Lindane)	0.00004	U	NT		NT		0.1
Heptachlor	0.00004	U	NT		NT		0.042
Heptachlor epoxide	0.00004	U	NT		NT		~
Methoxychlor	0.00004	U	NT		NT		~
Toxaphene	0.00111	U	NT		NT		~
Metals, TCLP							
Arsenic	NT		NT		0.00400	U	13
Barium	NT		NT		0.134		350
Cadmium	NT		NT		0.00300	U	2.5
Chromium	NT		NT		0.00600	U	~
Copper	0.00333	U	NT		NT		50
Mercury	0.00020	U	NT		0.00020	U	0.18
Lead	NT		NT		0.00400	B	63
Nickel	0.00556	U	NT		NT		30
Selenium	NT		NT		0.0110	U	3.9
Silver	NT		NT		0.00600	U	2
Zinc	0.0722	B	NT		NT		109
Herbicides, TCLP							
2,4,5-TP (Silvex)	0.00500	U	NT		NT		3.8
2,4-D	0.00500	U	NT		NT		~

**NOTES:**

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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



**Table 8**  
**Waste Characterization Analytical Results for RCRA Characteristics**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-8) Composite		WC-1-SB-2 (2-3) Grab		WC-SB-1 (3-4) Site Grab	
Sampling Date	6/20/2017		6/20/2017		6/20/2017	
Client Matrix	Soil		Soil		Soil	
Compound	Result	Q	Result	Q	Result	Q
<b>Corrosivity</b>						
pH	8.040		NT		NT	
<b>Ignitability</b>						
Ignitability	Non-Ignit.		NT		NT	
<b>Paint Filter Test</b>						
Paint Filter Test	NT		NT		No Free Liquid	
<b>Reactivity-Cyanide</b>						
Reactivity - Cyanide	0.25 mg/kg	U	NT		NT	
<b>Reactivity-Sulfide</b>						
Reactivity - Sulfide	15 mg/Kg	U	NT		NT	

**NOTES:**

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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



Table 9 – Concrete Waste Characterization Summary

			NY-GWP	NY-Res.	NY-ResRestrict	NY-UnRestricted		
	Lab Sample Id							
	Collection Date						Concrete	Concrete in
	Client Id						Washed	Contact w/soil
	Matrix						17I1195-01	17I1195-02
Project Id : 11-28 31 Drive, LIC, NY							9/28/2017	9/28/2017
	CAS	Units						
Miscellaneous/Inorganics								
Percent Solid	PHNX - PCTSOLID	%					95.9	97.5
Metals, Total								
Aluminum	7429-90-5	mg/Kg					4620	6340
Antimony	7440-36-0	mg/Kg					1.26	1.79
Arsenic	7440-38-2	mg/Kg	16	16	16	13	3.8	5.56
Barium	7440-39-3	mg/Kg	820	350	400	350	55.8	79.2
Beryllium	7440-41-7	mg/Kg	47	14	72	7.2	<0.1	<0.103
Cadmium	7440-43-9	mg/Kg	7.5	2.5	4.3	2.5	0.644	0.825
Calcium	7440-70-2	mg/Kg					103000	102000
Chromium	7440-47-3	mg/Kg		36	180	30	10.4	13.7
Chromium-III	16065-83-1	mg/Kg		36	180	30	6.1	10.2
Chromium-VI	18540-29-9	mg/Kg	19	22	110	1	4.3	3.49
Cobalt	7440-48-4	mg/Kg					2.4	3.93
Copper	7440-50-8	mg/kg	1,720	270	270	50	5.96	18.2
Iron	7439-89-6	mg/Kg					5920	11000
Lead	7439-92-1	mg/Kg	450	400	400	63	2.69	52.9
Magnesium	7439-95-4	mg/Kg					17000	11600
Manganese	7439-96-5	mg/Kg	2,000	2,000	2,000	1,600	119	152
Mercury	7439-97-6	mg/Kg	0.73	0.81	0.81	0.18	<0.0313	0.0811
Nickel	7440-02-0	mg/Kg	130	140	310	30	7.55	10.6
Potassium	9/7/7440	mg/Kg					477	746
Selenium	7782-49-2	mg/Kg	4	36	180	3.9	<1.04	<1.03
Silver	7440-22-4	mg/Kg	8.3	36	180	2	<10.4	<0.513
Sodium	7440-23-5	mg/Kg					136	168
Thallium	7440-28-0	mg/Kg					<1.04	<1.03
Vanadium	7440-62-2	mg/Kg					51.9	56.1
Zinc	7440-66-6	mg/Kg	2,480	2,200	10,000	109	26.5	62.1
Result Detected								
RL Exceeds Criteria								
It Exceeds Criteria								



Table 10 – UST Sediment Sampling Data

11-28 31<sup>st</sup> Drive, Queens

Sample ID York ID Sampling Date Client Matrix		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives		Sediments from UST 17J1208-01 10/27/2017 3:00:00 PM Soil	
Compound		CAS Number	mg/Kg	Result	Q
Volatile Organics, 8260 Lis				mg/Kg	
Dilution Factor				1	
1,1,1,2-Tetrachloroethane		630-20-6	~	0.00320	U
1,1,1-Trichloroethane		71-55-6	0.68	0.00320	U
1,1,2,2-Tetrachloroethane		79-34-5	~	0.00320	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	~	0.00320	U
1,1,2-Trichloroethane		79-00-5	~	0.00320	U
1,1-Dichloroethane		75-34-3	0.27	0.00320	U
1,1-Dichloroethylene		75-35-4	0.33	0.00320	U
1,1-Dichloropropylene		563-58-6	~	0.00320	U
1,2,3-Trichlorobenzene		87-61-6	~	0.00320	U
1,2,3-Trichloropropane		96-18-4	~	0.00320	U
1,2,4-Trichlorobenzene		120-82-1	~	0.00320	U
1,2,4-Trimethylbenzene		95-63-6	3.6	0.00320	U
1,2-Dibromo-3-chloropropane		96-12-8	~	0.00320	U
1,2-Dibromoethane		106-93-4	~	0.00320	U
1,2-Dichlorobenzene		95-50-1	1.1	0.00320	U
1,2-Dichloroethane		107-06-2	0.02	0.00320	U
1,2-Dichloropropane		78-87-5	~	0.00320	U
1,3,5-Trimethylbenzene		108-67-8	8.4	0.00320	U
1,3-Dichlorobenzene		541-73-1	2.4	0.00320	U
1,3-Dichloropropane		142-28-9	~	0.00320	U
1,4-Dichlorobenzene		106-46-7	1.8	0.00320	U
1,4-Dioxane		123-91-1	0.1	0.0640	U
2,2-Dichloropropane		594-20-7	~	0.00320	U
2-Butanone		78-93-3	0.12	0.00320	U
2-Chlorotoluene		95-49-8	~	0.00320	U
4-Chlorotoluene		106-43-4	~	0.00320	U
Acetone		67-64-1	0.05	0.0540	
Benzene		71-43-2	0.06	0.00320	U
Bromobenzene		108-86-1	~	0.00320	U
Bromochloromethane		74-97-5	~	0.00320	U
Bromodichloromethane		75-27-4	~	0.00320	U
Bromoform		75-25-2	~	0.00320	U
Bromomethane		74-83-9	~	0.00320	U
Carbon tetrachloride		56-23-5	0.76	0.00320	U



Chlorobenzene	108-90-7	1.1	0.00320	U
Chloroethane	75-00-3	~	0.00320	U
Chloroform	67-66-3	0.37	0.00320	U
Chloromethane	74-87-3	~	0.00320	U
cis-1,2-Dichloroethylene	156-59-2	0.25	0.00320	U
cis-1,3-Dichloropropylene	10061-01-5	~	0.00320	U
Dibromochloromethane	124-48-1	~	0.00320	U
Dibromomethane	74-95-3	~	0.00320	U
Dichlorodifluoromethane	75-71-8	~	0.00320	U
Ethyl Benzene	100-41-4	1	0.00320	U
Hexachlorobutadiene	87-68-3	~	0.00320	U
Isopropylbenzene	98-82-8	~	0.00320	U
Methyl tert-butyl ether (MTBE)	1634-04-4	0.93	0.00320	U
Methylene chloride	75-09-2	0.05	0.00640	U
Naphthalene	91-20-3	12	0.00320	U
n-Butylbenzene	104-51-8	12	0.00320	U
n-Propylbenzene	103-65-1	3.9	0.00320	U
o-Xylene	95-47-6	~	0.00320	U
p- & m- Xylenes	179601-23-1	~	0.00640	U
p-Isopropyltoluene	99-87-6	~	0.00320	U
sec-Butylbenzene	135-98-8	11	0.00320	U
Styrene	100-42-5	~	0.00320	U
tert-Butylbenzene	98-06-6	5.9	0.00320	U
Tetrachloroethylene	127-18-4	1.3	0.00320	U
Toluene	108-88-3	0.7	0.00320	U
trans-1,2-Dichloroethylene	156-60-5	0.19	0.00320	U
trans-1,3-Dichloropropylene	10061-02-6	~	0.00320	U
Trichloroethylene	79-01-6	0.47	0.00320	U
Trichlorofluoromethane	75-69-4	~	0.00320	U
Vinyl acetate	108-05-4	~	0.00320	U
Vinyl Chloride	75-01-4	0.02	0.00320	U
Xylenes, Total	1330-20-7	0.26	0.00950	U
Volatile Organics, TCLP RCRA Lis		mg/Kg	mg/L	
Dilution Factor			10	
1,1-Dichloroethylene	75-35-4	0.33	0.0250	U
1,2-Dichloroethane	107-06-2	0.02	0.0250	U
1,4-Dichlorobenzene	106-46-7	1.8	0.0250	U
2-Butanone	78-93-3	0.12	0.0250	U
Benzene	71-43-2	0.06	0.0250	U
Carbon tetrachloride	56-23-5	0.76	0.0250	U
Chlorobenzene	108-90-7	1.1	0.0250	U



Chloroform	67-66-3	0.37	0.0250	U
Tetrachloroethylene	127-18-4	1.3	0.0250	U
Trichloroethylene	79-01-6	0.47	0.0250	U
Vinyl Chloride	75-01-4	0.02	0.0250	U
<b>Semi-Volatiles, 8270 Target List</b>		mg/Kg	mg/Kg	
<b>Dilution Factor</b>			2	
1,2,4-Trichlorobenzene	120-82-1	~	0.0570	U
1,2-Dichlorobenzene	95-50-1	1.1	0.0570	U
1,3-Dichlorobenzene	541-73-1	2.4	0.0570	U
1,4-Dichlorobenzene	106-46-7	1.8	0.0570	U
2,4,5-Trichloropheno	95-95-4	~	0.0570	U
2,4,6-Trichloropheno	88-06-2	~	0.0570	U
2,4-Dichloropheno	120-83-2	~	0.0570	U
2,4-Dimethylpheno	105-67-9	~	0.0570	U
2,4-Dinitropheno	51-28-5	~	0.114	U
2,4-Dinitrotoluen	121-14-2	~	0.0570	U
2,6-Dinitrotoluen	606-20-2	~	0.0570	U
2-Chloronaphthalen	91-58-7	~	0.0570	U
2-Chloropheno	95-57-8	~	0.0570	U
2-Methylnaphthalene	91-57-6	~	0.0570	U
2-Methylphenol	95-48-7	0.33	0.0570	U
2-Nitroanilin	88-74-4	~	0.114	U
2-Nitropheno	88-75-5	~	0.0570	U
3- & 4-Methylphenols	65794-96-9	~	0.0570	U
3,3-Dichlorobenzidin	91-94-1	~	0.0570	U
3-Nitroanilin	99-09-2	~	0.114	U
4,6-Dinitro-2-methylphenc	534-52-1	~	0.114	U
4-Bromophenyl phenyl ethe	101-55-3	~	0.0570	U
4-Chloro-3-methylphenc	59-50-7	~	0.0570	U
4-Chloroanilin	106-47-8	~	0.0570	U
4-Chlorophenyl phenyl ethe	7005-72-3	~	0.0570	U
4-Nitroanilin	100-01-6	~	0.114	U
4-Nitropheno	100-02-7	~	0.114	U
Acenaphthene	83-32-9	20	0.0570	U
Acenaphthylene	208-96-8	100	0.0570	U
Aniline	62-53-3	~	0.228	U
Anthracene	120-12-7	100	0.102	JD
Benzo(a)anthracen	56-55-3	1	0.361	D
Benzo(a)pyrene	50-32-8	1	0.337	D
Benzo(b)fluoranthen	205-99-2	1	0.300	D
Benzo(g,h,i)perylene	191-24-2	100	0.227	D



Benzo(k)fluoranthene	207-08-9	0.8	0.330	D
Benzyl alcohol	100-51-6	~	0.0570	U
Benzyl butyl phthalate	85-68-7	~	0.0570	U
Bis(2-chloroethoxy)methane	111-91-1	~	0.0570	U
Bis(2-chloroethyl)ether	111-44-4	~	0.0570	U
Bis(2-chloroisopropyl)ether	108-60-1	~	0.0570	U
Bis(2-ethylhexyl)phthalate	117-81-7	~	0.0901	JD
Chrysene	218-01-9	1	0.358	D
Dibenzo(a,h)anthracene	53-70-3	0.33	0.0791	JD
Dibenzofuran	132-64-9	7	0.0570	U
Diethyl phthalate	84-66-2	~	0.0570	U
Dimethyl phthalate	131-11-3	~	0.0570	U
Di-n-butyl phthalate	84-74-2	~	0.232	D
Di-n-octyl phthalate	117-84-0	~	0.0570	U
Fluoranthene	206-44-0	100	0.767	D
Fluorene	86-73-7	30	0.0570	U
Hexachlorobenzene	118-74-1	0.33	0.0570	U
Hexachlorobutadiene	87-68-3	~	0.0570	U
Hexachlorocyclopentadiene	77-47-4	~	0.0570	U
Hexachloroethane	67-72-1	~	0.0570	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.207	D
Isophorone	78-59-1	~	0.0570	U
Naphthalene	91-20-3	12	0.0570	U
Nitrobenzene	98-95-3	~	0.0570	U
N-Nitrosodimethylamine	62-75-9	~	0.0570	U
N-nitroso-di-n-propylamine	621-64-7	~	0.0570	U
N-Nitrosodiphenylamine	86-30-6	~	0.0570	U
Pentachlorophenol	87-86-5	0.8	0.0570	U
Phenanthrene	85-01-8	100	0.460	D
Phenol	108-95-2	0.33	0.0570	U
Pyrene	129-00-0	100	0.596	D
Pyridine	110-86-1	~	0.228	U
Semi-Volatiles, TCLP RCRA Target List		mg/Kg	mg/L	
Dilution Factor			1	
1,4-Dichlorobenzene	106-46-7	1.8	0.00645	U
2,4,5-Trichlorophenol	95-95-4	~	0.00722	U
2,4,6-Trichlorophenol	88-06-2	~	0.00654	U
2,4-Dinitrotoluene	121-14-2	~	0.00473	U
2-Methylphenol	95-48-7	0.33	0.00171	U
3- & 4-Methylphenols	65794-96-9	~	0.00743	U
Cresols, total	1319-77-3	~	0.00740	U



Hexachlorobenzène	118-74-1	0.33	0.00591	U
Hexachlorobutadiène	87-68-3	~	0.00662	U
Hexachloroéthane	67-72-1	~	0.00726	U
Nitrobenzène	98-95-3	~	0.00393	U
Pentachlorophène	87-86-5	0.8	0.00753	U
Pyridine	110-86-1	~	0.00637	U
<b>Pesticides, TCLP RCRA Lis</b>		mg/Kg	mg/L	
<b>Dilution Facto</b>			1	
Chlordane, tota	57-74-9	~	0.00022	U
Endrin	72-20-8	0.014	0.00004	U
gamma-BHC (Lindane)	58-89-9	0.1	0.00004	U
Heptachlor	76-44-8	0.042	0.00004	U
Heptachlor epoxide	1024-57-3	~	0.00004	U
Methoxychlor	72-43-5	~	0.00004	U
Toxaphene	8001-35-2	~	0.00111	U
<b>Metals, Target Analyte</b>		mg/Kg	mg/Kg	
<b>Dilution Facto</b>			1	
Aluminium	7429-90-5	~	8,180	B
Antimony	7440-36-0	~	3,740	
Arsenic	7440-38-2	13	4,570	
Barium	7440-39-3	350	88,500	
Beryllium	7440-41-7	7.2	0.136	U
Cadmium	7440-43-9	2.5	0.409	U
Calcium	7440-70-2	~	49,500	
Chromium	7440-47-3	~	16,400	
Cobalt	7440-48-4	~	8,010	
Copper	7440-50-8	50	36,900	
Iron	7439-89-6	~	31,600	
Lead	7439-92-1	63	<b>179</b>	
Magnesium	7439-95-4	~	2,930	
Manganese	7439-96-5	1600	353	
Nickel	7440-02-0	30	7,930	
Potassium	7440-09-7	~	1,020	
Selenium	7782-49-2	3.9	3,420	
Silver	7440-22-4	2	0.682	U
Sodium	7440-23-5	~	129	
Thallium	7440-28-0	~	1,360	U
Vanadium	7440-62-2	~	17,900	
Zinc	7440-66-6	109	109	
<b>Metals, TCLP RCRA</b>		mg/kg	mg/L	
<b>Dilution Facto</b>			1	



Arsenic	7440-38-2	13	0.00400	U
Barium	7440-39-3	350	0.640	B
Cadmium	7440-43-9	2.5	0.00400	
Chromium	7440-47-3	~	0.00600	U
Lead	7439-92-1	63	0.0180	
Selenium	7782-49-2	3.9	0.0150	B
Silver	7440-22-4	2	0.00600	U
<b>Mercury by 7473</b>		mg/Kg	mg/Kg	
<b>Dilution Facto</b>			1	
Mercury	7439-97-6	0.18	0.151	
<b>Mercury TCLP by 7473</b>		mg/Kg	mg/L	
<b>Dilution Facto</b>			1	
Mercury	7439-97-6	0.18	0.00020	U
<b>TCLP Extraction for METALS EPA 131:</b>			N/A	
<b>Dilution Facto</b>			1	
TCLP Extractor		~	Completec	
<b>TCLP Extraction for SVOCs/PEST/HERE</b>			N/A	
<b>Dilution Facto</b>			1	
TCLP Extractor		~	Completec	
<b>TCLP Extraction for VOA by EPA 1311 ZH</b>			%	
<b>Dilution Facto</b>			1	
TCLP Extractor		~	Completec	
<b>Total Solid:</b>			%	
<b>Dilution Facto</b>			1	
% Solids	solids	~	73.300	
<b>Herbicides, TCLP Target Lis</b>		mg/Kg	mg/L	
<b>Dilution Facto</b>			1	
2,4,5-TP (Silvex)	93-72-1	3.8	0.00500	U
2,4-D	94-75-7	~	0.00500	U

**NOTES:**

Indicates an Exceedance of UUSCO:

**Q is the Qualifier Column with definitions as follo**

D=result is from an analysis that required a diluti

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estim

U=analyte not detected at or above the level indicate

B=analyte found in the analysis batch blan

E=result is estimated and cannot be accurately reported due to levels encountered or interferei

P=this flag is used for pesticide and PCB (Aroclor) target compounds when there is a % difference for detected concentrations that exceed method dictated limits be

NT=this indicates the analyte was not a target for this samp

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



**DISCLAIMER:**

York Analytical Laboratories, Inc. is providing this information as a convenience to you. York makes no representations or warranties that these data are accurate, complete or represent the latest regulatory authority limits or analytes. York is not responsible for any errors or omissions in these specific regulations. Your use of these data constitute your understanding of these limitations and you agree to hold York harmless from any and all action that may arise from use of said information. As regulations change often, we encourage the user to review the regulatory limits and lists of interest to confirm these data.







Table 11 (Cont.)  
Soil Samples Analytical Results for SVOCs  
11-28-31<sup>st</sup> Drive, Queens, NY

Sample ID	SP-1	SP-2	SP-2	SP-2	SP-3	SP-3	SP-4	SP-4	SP-5	SP-5	NYSDC Part 375 Unrestricted Use Soil Cleanup Objective mg/kg dry	Restricted Use Soil Cleanup Objectives (6 NYC RR Pt.375-6.8b) - Restricted Residential mg/kg dry
Sampling Depth (ft)	0-2	0-2	8-9	8-9	8-9	8-9	2'-4'	6-8'	0-2	6-8'		
Sampling Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013		
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		
Units	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry		
1,2,4-Trichlorobenzene	<0.101	<0.104	<0.107	<0.106	<0.099	<0.099	<0.294	<0.297	<0.034	<0.033	NS	NS
1,2-Dichlorobenzene	<0.183	<0.187	<0.194	<0.191	<0.180	<0.175	NA	NA	NA	NA	NS	NS
1,3-Dichlorobenzene	<0.0854	<0.0908	<0.0928	<0.0908	<0.0925	<0.0846	<0.0846	NA	NA	NA	NS	NS
1,4-Dichlorobenzene	<0.172	<0.177	<0.183	<0.180	<0.849	<0.849	<0.165	NA	NA	NA	NS	NS
2,4,5-Trichlorophenol	<0.217	<0.223	<0.230	<0.227	<0.208	<0.208	<0.107	<0.107	<0.036	<0.035	NS	NS
2,4,6-Trichlorophenol	<0.142	<0.146	<0.151	<0.149	<0.136	<0.136	<0.136	<0.102	<0.048	<0.047	NS	NS
2,4-Dichlorophenol	<0.228	<0.234	<0.242	<0.239	<0.218	<0.218	<0.112	<0.109	<0.048	<0.047	NS	NS
2,4-Dimethylphenol	<0.196	<0.201	<0.208	<0.205	<0.965	<0.965	<0.187	<0.187	<0.035	<0.034	NS	NS
2,4-Dinitrophenol	<0.235	<0.241	<0.249	<0.246	<0.216	<0.225	<0.039	<0.039	<0.069	<0.067	NS	NS
2,4-Dinitrochlorobenzene	<0.124	<0.127	<0.131	<0.127	<0.099	<0.118	<0.118	<0.092	<0.041	<0.041	NS	NS
2,4-Dinitrotoluene	<0.144	<0.148	<0.153	<0.150	<0.136	<0.136	<0.034	<0.034	<0.034	<0.033	NS	NS
2-Chlorophenol	<0.155	<0.155	<0.160	<0.158	<0.144	<0.144	<0.144	<0.034	<0.034	<0.033	NS	NS
2-Chlorophenyl ether	<0.0984	<0.0984	<0.0979	<0.0966	<0.083	<0.083	<0.083	<0.034	<0.033	<0.033	NS	NS
2-Methylphenol	<0.221	<0.220	<0.228	<0.226	<0.106	<0.106	<0.206	<0.206	<0.027	<0.026	NS	NS
3-Methylphenol	<0.106	<0.109	<0.113	<0.111	<0.534	<0.534	<0.102	<0.113	<0.12	<0.12	NS	NS
3-Nitroaniline	<0.250	<0.250	<0.259	<0.253	<0.233	<0.233	<0.233	<0.029	<0.029	<0.029	NS	NS
2-Nitrophenol	<0.761	<0.761	<0.807	<0.795	<0.0726	<0.0726	<0.0726	<0.033	<0.033	<0.031	NS	NS
3,5-Dichlorobenzidine	<0.147	<0.150	<0.156	<0.151	<0.140	<0.140	<0.140	<0.045	<0.045	<0.043	NS	NS
3,4-Methylenediphenyl ether	<0.121	<0.124	<0.129	<0.127	<0.098	<0.116	<0.116	<0.047	<0.046	<0.046	NS	NS
4-Methyl-2-methylphenol	<0.353	<0.361	<0.374	<0.369	<0.337	<0.337	<0.266	<0.266	<0.059	<0.057	NS	NS
4-Methyl-3-methylphenol	<0.135	<0.138	<0.143	<0.141	<0.664	<0.664	<0.129	<0.129	<0.062	<0.059	NS	NS
4-Chloro-3-methylphenol	<0.189	<0.193	<0.200	<0.197	<0.098	<0.098	<0.180	<0.180	<0.043	<0.041	NS	NS
4-Chloroaniline	<0.0727	<0.0743	<0.0772	<0.0761	<0.068	<0.068	<0.068	<0.03	<0.029	<0.029	NS	NS
4-Chlorophenyl phenyl ether	<0.164	<0.168	<0.174	<0.172	<0.088	<0.137	<0.036	<0.036	<0.035	<0.034	NS	NS
4-Nitroaniline	<0.116	<0.119	<0.123	<0.119	<0.571	<0.571	<0.111	<0.109	<0.048	<0.047	NS	NS
4-Nitrophenol	<0.104	<0.104	<0.107	<0.106	<0.069	<0.069	<0.069	<0.037	<0.036	<0.035	NS	NS
Acenaphthylene	<0.134	<0.138	<0.142	<0.140	<0.661	<0.661	<0.128	<0.128	<0.036	<0.035	NS	NS
Aniline	<0.160	<0.164	<0.170	<0.167	<0.153	<0.153	<0.153	<0.03	<0.03	<0.03	NS	NS
Anthracene	0.84	<0.157	<0.162	<0.160	<0.752	<0.752	<0.146	<0.146	<0.027	<0.026	NS	NS
Benzo[a]anthracene	0.608	0.495	<0.111	<0.109	<0.315	<0.315	<0.100	<0.100	<0.015	<0.015	1	1
Benzo[a]pyrene	0.508	0.326	<0.118	<0.116	<0.546	<0.546	<0.106	<0.106	<0.027	<0.026	1	1
Benzo[b]fluoranthene	0.866	<0.240	<0.249	<0.244	<0.115	<0.115	<0.224	<0.224	<0.058	<0.056	1	1
Benzo[k]fluoranthene	0.194	<0.0954	<0.0985	<0.0972	<0.458	<0.458	<0.0886	<0.0886	<0.022	<0.022	100	100
Benzo[e]pyrene	0.598	<0.267	<0.267	<0.265	<0.293	<0.293	<0.268	<0.268	<0.019	<0.018	3.9	3.9
Benzyl alcohol	<0.280	<0.287	<0.297	<0.293	<0.268	<0.268	NA	NA	NA	NA	NS	NS
Benzyl butyl phthalate	<0.154	<0.158	<0.164	<0.162	<0.761	<0.761	<0.148	<0.148	<0.022	<0.022	NS	NS
Butyl-2-chlorobenzylmethane	<0.0962	<0.0986	<0.102	<0.101	<0.474	<0.474	<0.0921	<0.0921	<0.04	<0.039	NS	NS
Butyl-2-chlorobenzyl ether	<0.143	<0.146	<0.151	<0.149	<0.703	<0.703	<0.136	<0.136	<0.049	<0.048	NS	NS
Butyl-2-chlorobenzylpropyl ether	<0.0985	<0.101	<0.104	<0.103	<0.485	<0.485	<0.0942	<0.0942	<0.047	<0.046	NS	NS
Butyl-2-ethylbenzylphthalate	<0.193	<0.198	<0.205	<0.202	<0.951	<0.951	<0.185	<0.185	<0.036	<0.034	NS	NS
Chrysene	0.605	0.211	<0.137	<0.135	<0.634	<0.634	<0.123	<0.123	<0.021	<0.021	1	3.9
Di-n-butyl phthalate	<0.214	<0.217	<0.221	<0.219	<0.599	<0.599	<0.109	<0.109	<0.031	<0.031	NS	NS
Di-n-octyl phthalate	<0.280	<0.287	<0.297	<0.293	<0.288	<0.288	<0.288	<0.022	<0.022	<0.022	NS	NS
Diethyl-2,2,4,4-tetrahydrophthalate	<0.112	<0.113	<0.114	<0.113	<0.274	<0.274	<0.038	<0.038	<0.031	<0.031	NS	NS
Diethyl phthalate	<0.176	<0.180	<0.186	<0.184	<0.665	<0.665	<0.168	<0.168	<0.039	<0.038	NS	NS
Dimethyl phthalate	<0.125	<0.128	<0.132	<0.131	<0.615	<0.615	<0.297	<0.297	<0.039	<0.037	NS	NS
Dioxin/Scotin	<0.009	<0.010	<0.010	<0.010	<0.009	<0.009	NA	NA	NA	NA	NS	NS
Fluoranthene	1.09	<0.168	<0.174	<0.172	<0.808	<0.808	<0.157	<0.157	<0.026	<0.025	100	100
Fluorene	<0.134	<0.138	<0.142	<0.138	<0.661	<0.661	<0.126	<0.126	<0.026	<0.025	30	100
Heptachlorobenzene	<0.165	<0.169	<0.175	<0.173	<0.813	<0.813	<0.138	<0.138	<0.038	<0.037	NS	NS
Heptachlorobutadiene	<0.086	<0.089	<0.091	<0.089	<0.466	<0.466	<0.094	<0.094	<0.038	<0.036	NS	NS
Heptachlorocyclopentadiene	<0.246	<0.214	<0.221	<0.218	<0.109	<0.109	<0.199	<0.199	<0.52	<0.51	NS	NS
Heptachloroethane	<0.080	<0.082	<0.0849	<0.0849	<0.087	<0.087	<0.0765	<0.0765	<0.06	<0.058	NS	NS
Indene(1,2,3-d)pyrene	0.219	<0.131	<0.135	<0.133	<0.628	<0.628	<0.122	<0.122	<0.017	<0.016	0.5	0.5
Isophthalene	<0.0962	<0.0986	<0.102	<0.101	<0.474	<0.474	<0.0921	<0.0921	<0.033	<0.032	NS	NS
Nitrobenzene	<0.0694	<0.0699	<0.071	<0.0698	<0.660	<0.660	<0.084	<0.084	<0.053	<0.054	NS	NS
N,N-Dimethylpropylamine	<0.115	<0.118	<0.122	<0.120	<0.565	<0.565	<0.110	<0.110	<0.034	<0.034	NS	NS
N,N-Dimethylbenzylamine	<0.128	<0.130	<0.134	<0.132	<0.623	<0.623	<0.121	<0.121	<0.044	<0.043	NS	NS
Nitrofluorene	<0.097	<0.099	<0.103	<0.101	<0.474	<0.474	<0.0921	<0.0921	<0.033	<0.033	NS	NS
Phthalic anhydride	<0.031	<0.032	<0.034	<0.033	<0.184	<0.184	<0.032	<0.032	<0.034	<0.033	NS	NS
Phthalophenone	0.806	<0.32	<0.35	<0.33	<0.719	<0.719	<0.140	<0.140	<0.029	<0.028	100	100
Phenol	<0.124	<0.124	<0.126	<0.126	<0.595	<0.595	<0.164	<0.164	<0.034	<0.034	100	100
Pyrene	0.988	0.476	<0.121	<0.119	<0.562	<0.562	<0.109	<0.109	<0.026	<0.025	100	100
Pyridine	<0.196	<0.202	<0.208	<0.206	<0.967	<0.967	<0.188	<0.188	<0.03	<0.029	NS	NS
Total SVOCs	6.326	ND	ND	0.366	ND	ND	ND	ND	ND	ND	NS	NS

\*Analyte detected at or above the MEL (method detection limit) but below the RL (Reporting Limit) - data is estimated

ND-analyte not detected at or above the level indicated

NS-this indicates that no regulatory limit has been established for this analyte

NA...this indicates the analyte was not a target for this sample



Table 11 (Cont)  
Soil Samples Analytical Results for Pesticides & PCBs  
11-28 31<sup>st</sup> Drive, Queens, NY

Sample ID	SP-1	SP-1	SP-2	SP-2	SP-2	SP-3	SP-3	SP-4	SP-4	SP-4	SP-5	SP-5	SP-5	SP-5	SP-5	NYDEC Part 375 Unrestricted Use Soil Cleanup Objectives mg/kg dry	Restricted Use Soil Cleanup Objectives (6 NYC RR Pt.375 (6.8g) - Restricted Residential mg/kg dry
Sampling Depth (ft)	0-2'	8'-9'	0-2'	8'-9'	8'-9'	0-2'	8'-9'	2-4'	10/15/2013	6'-8'	0-2'	10/15/2013	6'-8'	10/15/2013	6'-8'		
Sampling Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013		
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		
Units	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry		
4,4'-DDD	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	0.0024	<0.0024	<0.0023	<0.0023	<0.0023	<0.0023	0.0033	13
4,4'-DDE	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0024	<0.0024	<0.0023	<0.0023	<0.0023	<0.0023	0.0033	8.9
4,4'-DDT	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0033	7.9
Aldrin	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0014	<0.0014	<0.0013	<0.0013	<0.0013	<0.0013	0.005	0.097
alpha-BHC	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0010	<0.0010	<0.0009	<0.0009	<0.0009	<0.0009	0.02	0.48
alpha-Chlordane	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.00074	<0.00074	<0.00072	<0.00072	<0.00072	<0.00072	0.094	4.2
beta-BHC	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.00098	<0.00098	<0.00096	<0.00096	<0.00096	<0.00096	NS	NS
delta-BHC	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	0.04	100
DDT	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.00076	<0.00076	<0.00074	<0.00074	<0.00074	<0.00074	0.005	0.2
Endosulfan I	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.00090	<0.00090	<0.00089	<0.00089	<0.00089	<0.00089	2.4	24
Endosulfan II	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0029	<0.0029	<0.0028	<0.0028	<0.0028	<0.0028	2.4	24
Endosulfan sulfate	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0036	<0.0036	<0.0035	<0.0035	<0.0035	<0.0035	2.4	24
Endrin	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0015	<0.0015	<0.0014	<0.0014	<0.0014	<0.0014	0.014	11
Endrin aldehyde	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0022	<0.0022	<0.0021	<0.0021	<0.0021	<0.0021	NS	NS
Endrin ketone	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	NS	NS
gamma-BHC (Lindane)	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0015	<0.0015	<0.0014	<0.0014	<0.0014	<0.0014	NS	NS
Heptachlor	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.0014	<0.0014	<0.0013	<0.0013	<0.0013	<0.0013	NS	NS
Heptachlor epoxide	<0.00185	<0.00190	<0.00189	<0.00189	<0.00193	<0.00182	<0.00177	<0.00177	<0.00177	<0.00094	<0.00094	<0.00092	<0.00092	<0.00092	<0.00092	0.1	1.3
Methoxychlor	<0.00923	<0.00948	<0.00946	<0.00946	<0.00966	<0.00910	<0.00883	<0.00877	<0.00877	<0.0084	<0.0084	<0.0083	<0.0083	<0.0083	<0.0083	NS	NS
Toxaphene	<0.0934	<0.0959	<0.0957	<0.0957	<0.0978	<0.0921	<0.0894	<0.0894	<0.0894	<0.023	<0.023	<0.022	<0.022	<0.022	<0.022	NS	NS
Aroclor 1016	<0.0190	<0.0195	<0.0195	<0.0195	<0.0199	<0.0187	<0.0182	<0.0182	<0.0182	<0.073	<0.073	<0.070	<0.070	<0.070	<0.070	NS	NS
Aroclor 1221	<0.0190	<0.0195	<0.0195	<0.0195	<0.0199	<0.0187	<0.0182	<0.0182	<0.0182	<0.059	<0.059	<0.057	<0.057	<0.057	<0.057	NS	NS
Aroclor 1232	<0.0190	<0.0195	<0.0195	<0.0195	<0.0199	<0.0187	<0.0182	<0.0182	<0.0182	<0.084	<0.084	<0.082	<0.082	<0.082	<0.082	NS	NS
Aroclor 1242	<0.0190	<0.0195	<0.0195	<0.0195	<0.0199	<0.0187	<0.0182	<0.0182	<0.0182	<0.076	<0.076	<0.075	<0.075	<0.075	<0.075	NS	NS
Aroclor 1248	<0.0190	<0.0195	<0.0195	<0.0195	<0.0199	<0.0187	<0.0182	<0.0182	<0.0182	<0.071	<0.071	<0.070	<0.070	<0.070	<0.070	NS	NS
Aroclor 1254	<0.0190	<0.0195	<0.0195	<0.0195	<0.0199	<0.0187	<0.0182	<0.0182	<0.0182	<0.030	<0.030	<0.029	<0.029	<0.029	<0.029	NS	NS
Total PCBs	<0.0190	<0.0195	<0.0195	<0.0195	<0.0199	<0.0187	<0.0182	<0.0182	<0.0182	<0.084	<0.084	<0.082	<0.082	<0.082	<0.082	0.1	1

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



Table 11 (Cont.)  
Soil Samples Analytical Results for Metals  
11-28 31<sup>st</sup> Drive, Queens, NY

Sample ID	SP-1	SP-2	SP-2	SP-2	SP-2	SP-3	SP-3	SP-4	SP-4	SP-5	SP-5	NSDEC Pre-375 Unrestricted Use Soil Cleanup Objective mg/kg dry	Restricted Use Soil Cleanup Objective mg/kg dry Residential mg/kg dry
Sampling Depth (ft)	0-2	0-2	0-2	8-9	8-9	0-2	8-9	2-4	6-8	0-2	6-8		
Sampling Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	10/15/2013	10/15/2013	10/15/2013	10/15/2013		
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		
Units	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry	mg/kg dry		
Aluminum	7630	9791	11500	9660	9660	9650	8960	10400	11400	8760	11600	NS	NS
Antimony	0.386	2.64	<0.261	<0.258	<0.258	<0.258	<0.255	19.5	10.6	8.43	10.7	NS	NS
Arsenic	7.14	4.04	6.7	6.35	6.35	4.21	3.93	4.38	3.85	4.02	3.62	15	16
Barium	863	576	26.2	21.8	21.8	86	36.3	88.1	24.4	18.3	48.6	350	400
Beryllium	<0.112	<0.115	<0.119	<0.117	<0.117	<0.110	<0.107	0.52	0.54	0.39	0.47	7.2	7.2
Calcium	26900	49300	853	1930	1930	16400	617	237	212	1.75	2.22	2.3	4.3
Cadmium	3.55	3.89	8.75	6.83	6.83	829	7.08	220	7.28	698	832	NS	NS
Chromium	116	17.3	16	12.9	12.9	44.6	13.4	26.8	7.96	632	8.05	NS	NS
Copper	49.6	1350	2730	2630	2630	1730	134	1960	2320	1570	112	NS	NS
Cobalt	1300	4320	2730	2630	2630	1730	134	1960	2320	1570	112	NS	NS
Lead	820	1120	820	760	760	460	310	187	4.2	710	10	42	40
Manganese	3210	1120	820	760	760	460	310	187	4.2	710	10	NS	NS
Magnesium	1820	343	241	189	189	458	310	310	3470	184	430	1600	2000
Nickel	10.3	26.3	51	39	39	17.2	12.3	39	277	194	17.6	30	30
Phosphorus	1800	564	170	1390	1390	1070	937	859	16.3	12.9	1070	NS	NS
Potassium	245	0.853	3.33	2.97	2.97	2.22	2.65	67	7.69	772	987	NS	NS
Silver	0.708	<0.115	<0.119	<0.117	<0.117	<0.110	<0.107	<1	<0.792	0.844	<0.878	3.9	180
Selenium	321	226	127	118	118	282	142	60.7	41.5	48.4	109	NS	NS
Thallium	<0.358	<0.367	<0.380	<0.375	<0.375	<0.353	<0.343	<2	<1.58	0.29	<1.76	NS	NS
Tungsten	17.1	21.4	23.3	26.6	26.6	43.2	21.7	23	25.4	23.1	27.3	NS	NS
Zinc	111	60	44.8	33.3	33.3	64.7	34.0	142	47.1	38.8	53.4	109	10,000
Mercury	<0.0369	<0.0378	<0.0392	<0.0386	<0.0386	<0.0364	<0.0353	0.2	0.02	<0.02	0.02	0.18	0.81
Chromium, Trivalent	12.9	37.2	17.1	16.5	16.5	14.1	15.7	36.5	18.4	13.8	17.2	30	180
Chromium, Hexavalent	<0.392	1.47	<0.416	<0.410	<0.410	<0.386	<0.375	<0.297	<0.297	<0.286	<0.286	1	110

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

J= analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

Grey shaded values represent concentration exceeding Unrestricted Use SCOs



### Table 12 – UST Excavation Endpoint Sample Results

Sample ID	Compound										NYSDEC Part 375 Restricted Use Soil Cleanup		NYSDEC Part 375 Unrestricted Use Soil Cleanup	
York ID											mg/Kg		mg/Kg	
Sampling Date											mg/Kg		mg/Kg	
Client Matrix											mg/Kg		mg/Kg	
	EP-1 (5 ft)	EP-2 (5 ft)	EP-3 (5 ft)	EP-4 (5 ft)	EP-5 (6.5 ft)	Soil		Soil		Soil		Soil		
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	Result	Q	Result	Q	Result	Q	Result	Q	
Volatile Organics, 8260 List	1	1	1	1	1									
Dilution Factor														
I,1,1,2-Tetrachloroethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,1,1,1-Trichloroethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	100	0.68	
I,1,2,2-Tetrachloroethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,1,2-Trichloroethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,1-Dichloroethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	26	0.27	
I,1-Dichloroethylene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	100	0.33	
I,1-Dichloropropylene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,2,3-Trichlorobenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,2,3-Trichloropropane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,2,4-Trichlorobenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,2,4-Trimethylbenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,2-Dibromo-3-chloropropane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	52	47	
I,2-Dibromoethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,2-Dichlorobenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	100	1.1	
I,2-Dichloroethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	3.1	0.02	
I,2-Dichloropropane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,3,5-Trimethylbenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	52	8.4	
I,3-Dichlorobenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	49	2.4	
I,3-Dichloropropane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
I,4-Dichlorobenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	13	1.8	
I,4-Dioxane	0.0530	U	0.0400	U	0.0340	U		0.0480	U	0.0500	U	13	0.1	
2,2-Dichloropropane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
2-Butanone	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	100	0.12	
2-Chlorotoluene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
4-Chlorotoluene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
Acetone	0.00530	U	0.00400	U	0.00340	U		0.00480	U	0.00500	U	100	0.05	
Benzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	4.8	0.06	
Bromobenzene	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
Bromochloromethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
Bromodichloromethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
Bromoform	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
Bromomethane	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	~	~	
Carbon tetrachloride	0.00270	U	0.00200	U	0.00170	U		0.00240	U	0.00250	U	2.4	0.76	



Chlorobenzene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	1.1
Chloroethane	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Chloroform	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	49	10	0.37
Chloromethane	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
cis-1,2-Dichloroethylene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	59	0.25
cis-1,3-Dichloropropylene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Dibromochloromethane	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Dibromomethane	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Dichlorodifluoromethane	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Ethyl Benzene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	41	30	1
Hexachlorobutadiene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Isopropylbenzene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Methyl tert-butyl ether (MTBE)	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	62	0.93
Methylene chloride	0.00530	U	0.00400	U	0.00340	U	0.00480	U	0.00500	U	100	51	0.05
Naphthalene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	12
n-Butylbenzene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	12
n-Propylbenzene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	3.9
o-Xylene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
p- & m- Xylenes	0.00530	U	0.00400	U	0.00340	U	0.00480	U	0.00500	U	~	~	~
p-Isopropyltoluene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
sec-Butylbenzene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	11
Styrene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
tert-Butylbenzene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	5.9
Tetrachloroethylene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	19	5.5	1.3
Toluene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	0.7
trans-1,2-Dichloroethylene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	100	100	0.19
trans-1,3-Dichloropropylene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Trichloroethylene	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	21	10	0.47
Trichlorofluoromethane	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Vinyl acetate	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	~	~	~
Vinyl Chloride	0.00270	U	0.00200	U	0.00170	U	0.00240	U	0.00250	U	0.9	0.21	0.02
Xylenes, Total	0.00800	U	0.00610	U	0.00510	U	0.00730	U	0.00740	U	100	100	0.26
<b>Volatile Organics, Tentatively Identified Cmpds.</b>	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg				
<b>Dilution Factor</b>	1		1		1		1		1				
Tentatively Identified Compounds	0	U	0	U	0	U	0	U	0	U	~	~	~
<b>Semi-Volatiles, 8270 Target List</b>	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	mg/Kg	mg/Kg
<b>Dilution Factor</b>	2		2		2		2		2				
1,2,4-Trichlorobenzene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
1,2-Dichlorobenzene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	1.1
1,3-Dichlorobenzene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	49	17	2.4
1,4-Dichlorobenzene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	13	9.8	1.8



2,4,5-Trichlorophenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2,4,6-Trichlorophenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2,4-Dichlorophenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2,4-Dimethylphenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2,4-Dinitrophenol	0.0984	U	0.0953	U	0.0964	U	0.0965	U	0.101	U	~	~	~
2,4-Dinitrotoluene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2,6-Dinitrotoluene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2-Chloronaphthalene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2-Chlorophenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2-Methylnaphthalene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
2-Methylphenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	0.33
2-Nitroaniline	0.0984	U	0.0953	U	0.0964	U	0.0965	U	0.101	U	~	~	~
2-Nitrophenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
3- & 4-Methylphenols	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
3,3-Dichlorobenzidine	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
3-Nitroaniline	0.0984	U	0.0953	U	0.0964	U	0.0965	U	0.101	U	~	~	~
4,6-Dinitro-2-methylphenol	0.0984	U	0.0953	U	0.0964	U	0.0965	U	0.101	U	~	~	~
4-Bromophenyl phenyl ether	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
4-Chloro-3-methylphenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
4-Chloroaniline	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
4-Chlorophenyl phenyl ether	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
4-Nitroaniline	0.0984	U	0.0953	U	0.0964	U	0.0965	U	0.101	U	~	~	~
4-Nitrophenol	0.0984	U	0.0953	U	0.0964	U	0.0965	U	0.101	U	~	~	~
Acenaphthene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	20
Acenaphthylene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	100
Aniline	0.197	U	0.191	U	0.193	U	0.193	U	0.203	U	~	~	~
Anthracene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	100
Benzo(a)anthracene	0.0889	JD	0.109	D	0.219	D	0.0578	JD	0.0510	JD	1	1	1
Benzo(a)pyrene	0.0975	JD	0.0937	JD	0.224	D	0.0555	JD	0.0508	U	1	1	1
Benzo(b)fluoranthene	0.0841	JD	0.0762	JD	0.204	D	0.0483	U	0.0508	U	1	1	1
Benzo(g,h,i)perylene	0.0700	JD	0.0609	JD	0.156	D	0.0483	U	0.0508	U	100	100	100
Benzo(k)fluoranthene	0.0975	JD	0.0906	JD	0.222	D	0.0540	JD	0.0508	U	3.9	1	0.8
Benzyl alcohol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Benzyl butyl phthalate	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Bis(2-chloroethoxy)methane	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Bis(2-chloroethyl)ether	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Bis(2-chloroisopropyl)ether	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Bis(2-ethylhexyl)phthalate	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Chrysene	0.101	D	0.114	D	0.266	D	0.0694	JD	0.0575	JD	3.9	1	1
Dibenzo(a,h)anthracene	0.0493	U	0.0478	U	0.0509	JD	0.0483	U	0.0508	U	0.33	0.33	0.33
Dibenzofuran	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	59	14	7



Diethyl phthalate	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Dimethyl phthalate	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Di-n-butyl phthalate	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Di-n-octyl phthalate	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Fluoranthene	0.158	D	0.240	D	0.350	D	0.116	D	0.0980	JD	100	100	100
Fluorene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	30
Hexachlorobenzene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	1.2	0.33	0.33
Hexachlorobutadiene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Hexachlorocyclopentadiene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Hexachloroethane	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Indeno(1,2,3-cd)pyrene	0.0661	JD	0.0548	JD	0.143	D	0.0483	U	0.0508	U	0.5	0.5	0.5
Isophorone	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Naphthalene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	12
Nitrobenzene	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
N-Nitrosodimethylamine	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
N-nitroso-di-n-propylamine	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
N-Nitrosodiphenylamine	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	~	~	~
Pentachlorophenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	6.7	2.4	0.8
Phenanthrene	0.0621	JD	0.171	D	0.143	D	0.0578	JD	0.0519	JD	100	100	100
Phenol	0.0493	U	0.0478	U	0.0483	U	0.0483	U	0.0508	U	100	100	0.33
Pyrene	0.143	D	0.201	D	0.303	D	0.103	D	0.0843	JD	100	100	100
Pyridine	0.197	U	0.191	U	0.193	U	0.193	U	0.203	U	~	~	~
Semi-Volatiles, Tentatively Identified Cmpds.	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg				
Dilution Factor	2		2		2		2		2				
Tentatively Identified Compounds	0	U	0	U	0	U	0	U	0	U	~	~	~
Total Solids	%		%		%		%		%				
Dilution Factor	1		1		1		1		1				
% Solids	84.800		87.500		86.500		86.500		82.300		~	~	~

#### NOTES:

Any Regulatory Exceedences are color coded by Regulation

#### Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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



Table 13 – Contamination Remaining Onsite in Exceedance of UUSCOs

11-28 31<sup>st</sup> Drive, Queens

SP-4, 6-8' bgs (see Figure 6)		SP-5, 6-8' bgs (see Figure 6)	
Contaminant	Selenium	Contaminant	Selenium
Concentration (mg/kg)	7.69	Concentration (mg/kg)	9.87
UUSCO (mg/kg)	3.9	UUSCO (mg/kg)	3.9
Residential SCO (mg/kg)	36	Residential SCO (mg/kg)	36



**Table 14a**  
**Pre-Injection Groundwater Results**  
**11-28 31st Drive, Queens, NY**

Sample ID	MW-1				MW-2		MW-3		MW-4		MW-6		Field Blank		Trip Blank		NYSDEC TOGS Standards and Guidance Values - GA	
Sampling Date	2/19/2018				2/19/2018		2/19/2018		2/19/2018		2/19/2018		2/19/2018		2/19/2018			
Matrix	Groundwater				Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater			
Compound	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q		
1,1,1,2-Tetrachloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,1,1-Trichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,1,2,2-Tetrachloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,1,2-Trichloro-1,2,2-trifluoroeth	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,1,2-Trichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1	
1,1-Dichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,1-Dichloroethylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,1-Dichloropropylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,2,3-Trichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,2,3-Trichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.04	
1,2,4,5-Tetramethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
1,2,4-Trichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,2,4-Trimethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,2-Dibromo-3-chloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.04	
1,2-Dibromoethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.0006	
1,2-Dichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	3	
1,2-Dichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.6	
1,2-Dichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1	
1,3,5-Trimethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,3-Dichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	3	
1,3-Dichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
1,4-Dichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	3	
2,2-Dichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
2-Butanone	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50	
2-Chlorotoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
2-Hexanone	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50	
4-Chlorotoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
4-Methyl-2-pentanone	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
Acetone	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.6		1.0	U			50	
Benzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1	
Bromobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Bromochloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Bromodichloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50	
Bromoform	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50	
Bromomethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Carbon disulfide	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
Carbon tetrachloride	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Chlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Chloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Chloroform	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	7	
Chloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
cis-1,2-Dichloroethylene	0.2	U	0.6		0.2	U	0.9		57		0.2	U	0.2	U	0.2	U	5	
cis-1,3-Dichloropropylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.4	
Dibromochloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50	
Dibromomethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
Dichlorodifluoromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Ethyl Benzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Hexachlorobutadiene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.5	
Isopropylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Methyl tert-butyl ether (MTBE)	0.2	U	0.9		0.2	U	0.2	U	0.3	J	0.2	U	0.2	U	0.2	U	10	
Methylene chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5	
Naphthalene	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	10	
n-Butylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
n-Propylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
o-Xylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
p- & m- Xylenes	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	
p-Diethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
p-Ethyltoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS	
p-Isopropyltoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
sec-Butylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Styrene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
tert-Butylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Tetrachloroethylene	0.3	J	25		4.1		70		75		0.2	U	0.2	U	0.2	U	5	
Toluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
trans-1,2-Dichloroethylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	J	0.2	U	0.2	U	0.2	U	5
trans-1,3-Dichloropropylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.4	
Trichloroethylene	0.2	U	0.4	J	0.2	U	0.7		15		0.2	U	0.2	U	0.2	U	5	
Trichlorofluoromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5	
Vinyl Chloride	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	2	
Xylenes, Total	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	5	

**NOTES:**

**Q** is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

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

Indicates a TOGS Exceedance







Table 14b - Remedial Investigation Groundwater Data (2013 and 2015)

## SVOCs

11-28 31st Drive, Queens

SampleID	MW-1	MW-2	MW-3	MW-3 (Duplicate)	Field Blank	Field Blank	NYSDEC TOGS Standards and Guidance Values - GA
Sampling Date	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/24/2013	4/25/2013	
Matrix	Groundwater	Groundwater	Groundwater	Groundwater	DI Water	DI Water	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Semi-Volatiles, 8270 Target List							
1,2,4-Trichlorobenzene	<2.47	<2.53	<2.53	<2.53	<2.53	<2.53	5
1,2-Dichlorobenzene	<2.49	<2.55	<2.55	<2.55	<2.55	<2.55	3
1,3-Dichlorobenzene	<2.61	<2.68	<2.68	<2.68	<2.68	<2.68	3
1,4-Dichlorobenzene	<2.21	<2.27	<2.27	<2.27	<2.27	<2.27	3
2,4,5-Trichlorophenol	<1.91	<1.96	<1.96	<1.96	<1.96	<1.96	1
2,4,6-Trichlorophenol	<1.75	<1.79	<1.79	<1.79	<1.79	<1.79	1
2,4-Dichlorophenol	<1.89	<1.94	<1.94	<1.94	<1.94	<1.94	5
2,4-Dimethylphenol	<1.60	<1.64	<1.64	<1.64	<1.64	<1.64	50
2,4-Dinitrophenol	<2.25	<2.31	<2.31	<2.31	<2.31	<2.31	10
2,4-Dinitrotoluene	<1.61	<1.65	<1.65	<1.65	<1.65	<1.65	5
2,6-Dinitrotoluene	<1.61	<1.65	<1.65	<1.65	<1.65	<1.65	5
2-Chloronaphthalene	<2.20	<2.26	<2.26	<2.26	<2.26	<2.26	10
2-Chlorophenol	<1.79	<1.84	<1.84	<1.84	<1.84	<1.84	1
2-Methylnaphthalene	<2.76	<2.83	<2.83	<2.83	<2.83	<2.83	NS
2-Methylphenol	<1.16	<1.19	<1.19	<1.19	<1.19	<1.19	1
2-Nitroaniline	<1.68	<1.72	<1.72	<1.72	<1.72	<1.72	5
2-Nitrophenol	<2.36	<2.42	<2.42	<2.42	<2.42	<2.42	1
3,3'-Dichlorobenzidine	<1.27	<1.30	<1.30	<1.30	<1.30	<1.30	5
3- & 4-Methylphenols	<1.12	<1.15	<1.15	<1.15	<1.15	<1.15	NS
3-Nitroaniline	<1.68	<1.72	<1.72	<1.72	<1.72	<1.72	5
4,6-Dinitro-2-methylphenol	<1.62	<1.66	<1.66	<1.66	<1.66	<1.66	NS
4-Bromophenyl phenyl ether	<1.33	<1.36	<1.36	<1.36	<1.36	<1.36	NS
4-Chloro-3-methylphenol	<1.89	<1.94	<1.94	<1.94	<1.94	<1.94	1
4-Chloroaniline	<2.98	<3.06	<3.06	<3.06	<3.06	<3.06	5
4-Chlorophenyl phenyl ether	<2.45	<2.51	<2.51	<2.51	<2.51	<2.51	NS
4-Nitroaniline	<2.68	<2.75	<2.75	<2.75	<2.75	<2.75	5
4-Nitrophenol	<1.66	<1.70	<1.70	<1.70	<1.70	<1.70	1
Acenaphthene	<1.77	<1.82	<1.82	<1.82	<1.82	<1.82	20
Acenaphthylene	<1.74	<1.78	<1.78	<1.78	<1.78	<1.78	NS
Aniline	<1.50	<1.54	<1.54	<1.54	<1.54	<1.54	5
Anthracene	<1.19	<1.22	<1.22	<1.22	<1.22	<1.22	50
Benzo(a)anthracene	<1.31	<1.34	<1.34	<1.34	<1.34	<1.34	0.002
Benzo(a)pyrene	<1.30	<1.33	<1.33	<1.33	<1.33	<1.33	0.002
Benzo(b)fluoranthene	<1.41	<1.45	<1.45	<1.45	<1.45	<1.45	0.002
Benzo(g,h,i)perylene	<1.71	<1.75	<1.75	<1.75	<1.75	<1.75	NS
Benzo(k)fluoranthene	<1.83	<1.88	<1.88	<1.88	<1.88	<1.88	0.002
Benzyl alcohol	<1.45	<1.49	<1.49	<1.49	<1.49	<1.49	NS
Benzyl butyl phthalate	<0.852	<0.874	<0.874	<0.874	<0.874	<0.874	50
Bis(2-chloroethoxy)methane	<1.77	<1.82	<1.82	<1.82	<1.82	<1.82	5
Bis(2-chloroethyl)ether	<1.50	<1.54	<1.54	<1.54	<1.54	<1.54	1
Bis(2-chloroisopropyl)ether	<2.99	<3.07	<3.07	<3.07	<3.07	<3.07	5
Bis(2-ethylhexyl)phthalate	<4.78	<4.90	<4.90	<4.90	<4.90	<4.90	5
Chrysene	<1.47	<1.51	<1.51	<1.51	<1.51	<1.51	0.002
Di-n-butyl phthalate	11.2	<2.10	<2.10	<2.10	<2.10	<2.10	50
Di-n-octyl phthalate	<1.12	<1.15	<1.15	<1.15	<1.15	<1.15	50
Dibenzo(a,h)anthracene	<1.56	<1.60	<1.60	<1.60	<1.60	<1.60	NS
Dibenzofuran	<2.41	<2.47	<2.47	<2.47	<2.47	<2.47	NS
Diethyl phthalate	<2.56	<2.63	<2.63	<2.63	<2.63	<2.63	50
Dimethyl phthalate	<1.91	<1.96	<1.96	<1.96	<1.96	<1.96	50
Fluoranthene	<1.24	<1.27	<1.27	<1.27	<1.27	<1.27	50
Fluorene	<1.83	<1.88	<1.88	<1.88	<1.88	<1.88	50
Hexachlorobenzene	<1.27	<1.30	<1.30	<1.30	<1.30	<1.30	0.04
Hexachlorobutadiene	<2.79	<2.86	<2.86	<2.86	<2.86	<2.86	0.5
Hexachlorocyclopentadiene	<2.53	<2.59	<2.59	<2.59	<2.59	<2.59	5
Hexachloroethane	<3.04	<3.12	<3.12	<3.12	<3.12	<3.12	5
Indeno(1,2,3-cd)pyrene	<1.70	<1.74	<1.74	<1.74	<1.74	<1.74	0.002
Isophorone	<2.68	<2.75	<2.75	<2.75	<2.75	<2.75	50
N-nitroso-di-n-propylamine	<2.56	<2.63	<2.63	<2.63	<2.63	<2.63	NS
N-Nitrosodimethylamine	<0.389	<0.399	<0.399	<0.399	<0.399	<0.399	NS
N-Nitrosodiphenylamine	<5.00	<5.13	<5.13	<5.13	<5.13	<5.13	50
Naphthalene	<1.99	<2.04	<2.04	<2.04	<2.04	<2.04	10
Nitrobenzene	<1.69	<1.73	<1.73	<1.73	<1.73	<1.73	0.4
Pentachlorophenol	<1.45	<1.49	<1.49	<1.49	<1.49	<1.49	1
Phenanthrene	<1.37	<1.41	<1.41	<1.41	<1.41	<1.41	50
Phenol	<1.10	<1.13	<1.13	<1.13	<1.13	<1.13	1
Pyrene	<1.73	<1.77	<1.77	<1.77	<1.77	<1.77	50
Pyridine	<3.91	<4.01	<4.01	<4.01	<4.01	<4.01	50
Total VOCs	11.2	ND	ND	ND	ND	ND	NS

ND=this indicates the analyte was not detected

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



Table 14b - Remedial Investigation Groundwater Data (2013 and 2015)  
Pesticides and PCBs  
11-28 31st Drive, Queens

SampleID	MW-1	MW-2	MW-3	MW-3 (Duplicate)	Field Blank	Field Blank	NYSDEC TOCS Standards and Guidance Values - GA
Sampling Date	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/24/2013	4/25/2013	
Matrix	Groundwater	Groundwater	Groundwater	Groundwater	DI Water	DI Water	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Pesticides							
4,4'-DDD	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
4,4'-DDE	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
4,4'-DDT	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Aldrin	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
alpha-BHC	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
beta-BHC	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Chlordane, total	<0.00410	<0.00410	<0.00410	<0.00410	NT	<0.00410	NS
delta-BHC	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
delta-BHC	NT	NT	NT	NT	<0.00100	NT	NS
Dieldrin	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Endosulfan I	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Endosulfan II	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Endosulfan sulfate	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Endrin	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Endrin aldehyde	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Endrin ketone	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
gamma-BHC (Lindane)	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
gamma-Chlordane	NT	NT	NT	NT	<0.00100	NT	NS
Heptachlor	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Heptachlor epoxide	<0.00103	<0.00100	<0.00100	<0.00103	<0.00100	<0.00100	NS
Methoxychlor	<0.00513	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	NS
Toxaphene	<0.0513	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	NS
Polychlorinated Biphenyls (PCB)							
Aroclor 1016	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS
Aroclor 1221	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS
Aroclor 1232	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS
Aroclor 1242	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS
Aroclor 1248	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS
Aroclor 1254	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS
Aroclor 1260	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS
Total PCBs	<0.0513	<0.0500	<0.0500	<0.0513	<0.0500	<0.0500	NS

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

NT=this indicates the analyte was not a target for this sample



Table 14b - Remedial Investigation Groundwater Data (2013 and 2015)

Total Metals  
11-28 31st Drive, Queens

Sample ID	MW-1	MW-2	MW-3	MW-3 (Duplicate)	Field Blank	Field Blank	NYSDEC TOGS Standards and Guidance Values - GA
Sampling Date	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/24/2013	4/25/2013	
Matrix	Groundwater	Groundwater	Groundwater	Groundwater	DI Water	DI Water	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Metals, Target Analyte, Total							
Aluminum	280	1910	53	748	<10	<10	NS
Antimony	<3	<3	<3	<3	<3	<3	3
Arsenic	<4	<4	<4	<4	<4	<4	25
Barium	65	184	41	71	<2	<2	1000
Beryllium	1	1	<1	<1	<1	<1	3
Cadmium	<2	<2	<2	<2	<2	<2	5
Calcium	50900	120000	68700	70400	<19	6050	NS
Chromium	2 J	8	<2	<2	<2	<2	50
Cobalt	6	2 J	<2	2 J	<2	<2	NS
Copper	<2	7	<2	<2	<2	<2	200
Iron	243	860	52	402	<10	<10	300
Lead	<2	3	<2	<2	<2	<2	25
Magnesium	10700	16500	14400	14800	<10	953	35000
Manganese	1980	1190	19	165	<2	<2	300
Nickel	7	5	1	1 J	1 J	<1	100
Potassium	4590	4940	2160	2230	<26	654	NS
Selenium	<7	7 J	<7	<7	<7	<7	10
Silver	<2	<2	<2	<2	<2	<2	50
Sodium	35600	27000	58600	58000	<61	5720	20000
Thallium	<3	<3	<3	<3	<3	<3	0.5
Vanadium	<2	2 J	<2	2 J	<2	<2	NS
Zinc	2 J	27	2 J	21	2 J	2 J	5000
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.7
Chromium, Trivalent	<8.00	<8.00	<8.00	<8.00	<8.00	<8.00	50
Chromium, Hexavalent	<6.00	<6.00	<6.00	<6.00	<6.00	<6.00	50

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

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

Table 14b - Remedial Investigation Groundwater Data (2013 and 2015)

Dissolved Metals  
11-28 31st Drive, Queens

Sample ID	MW-1	MW-2	MW-3	MW-3 (Duplicate)	Field Blank	Field Blank	NYSDEC TOGS Standards and Guidance Values - GA
Sampling Date	4/25/2013	4/25/2013	4/25/2013	4/25/2013	4/24/2013	4/25/2013	
Matrix	Groundwater	Groundwater	Groundwater	Groundwater	DI Water	DI Water	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Metals, Target Analyte, Dissolved							
Aluminum	<10	<10	<10	<10	NT	<10	NS
Antimony	<3	<3	<3	<3	NT	<3	3
Arsenic	<4	<4	<4	<4	NT	<4	25
Barium	50	35	40	42	NT	<2	1000
Beryllium	<1	<1	<1	<1	NT	<1	3
Cadmium	<2	<2	<2	<2	NT	<2	5
Calcium	52700	106000	68700	69400	NT	6210	NS
Chromium	<2	<2	<2	<2	NT	<2	50
Cobalt	5	<2	<2	<2	NT	<2	NS
Copper	<2	<2	<2	<2	NT	<2	200
Iron	29	<10	<10	<10	NT	<10	300
Lead	<2	<2	<2	<2	NT	<2	25
Magnesium	10800	15000	14300	14600	NT	958	35000
Manganese	1910	566	16	17	NT	<2	300
Nickel	6	<1	<1	<1	NT	<1	100
Potassium	4830	4200	2210	2170	NT	705	NS
Selenium	<7	<7	<7	<7	NT	<7	10
Silver	<2	<2	<2	<2	NT	<2	50
Sodium	36600	27200	58700	59300	NT	6120	20000
Thallium	<3	<3	<3	<3	NT	<3	0.5
Vanadium	<2	<2	<2	<2	NT	<2	NS
Zinc	<2	<2	<2	<2	NT	<2	5000
Mercury	<0.03900	<0.03900	<0.03900	<0.03900	NT	<0.039	0.7

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

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



Table 15

## Post-Injection Groundwater Results

11-28 31st Drive, Queens, NY

Sample ID	MW-1		MW-2		MW-3		MW-4		MW-6		Trip Blank		NYSDEC TOGS Standards and Guidance Values - GA
Sampling Date	7/24/2018		7/24/2018		7/24/2018		7/24/2018		7/24/2018		7/24/2018		
Client Matrix	Water		Water		Water		Water		Water		Water		
Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
Volatile Organics, 8260 List - Low Level	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L
Dilution Factor	1		1		1		1		1		1		
Tetrachloroethylene	0.220	J	20		1.200		13		43		0.200	U	5
Trichloroethylene	0.200	U	0.630		0.200	U	0.430	J	0.460	J	0.200	U	5

## NOTES:

**Q is the Q ualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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

Indicates a TOGS Exceedance

Well	MW-1	MW-2	MW-3	MW-4	MW-6
Sampling Date	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018
Sodium Persulfate Concentration (g/L)	0	28.74	34.68	40.62	0



## **FIGURES**





AMC ENGINEERING PLLC

18-36 42nd Street  
Astoria, NY 11105

718-545-0474

PROJECT

11-28 31st Drive  
Queens, NY 11106  
Block 502 Lot 22

DATE: JULY 13, 2018


DRAWING BY: NR

TITLE:

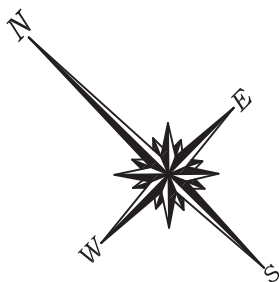
FIGURE 1 -  
SITE LOCATION MAP



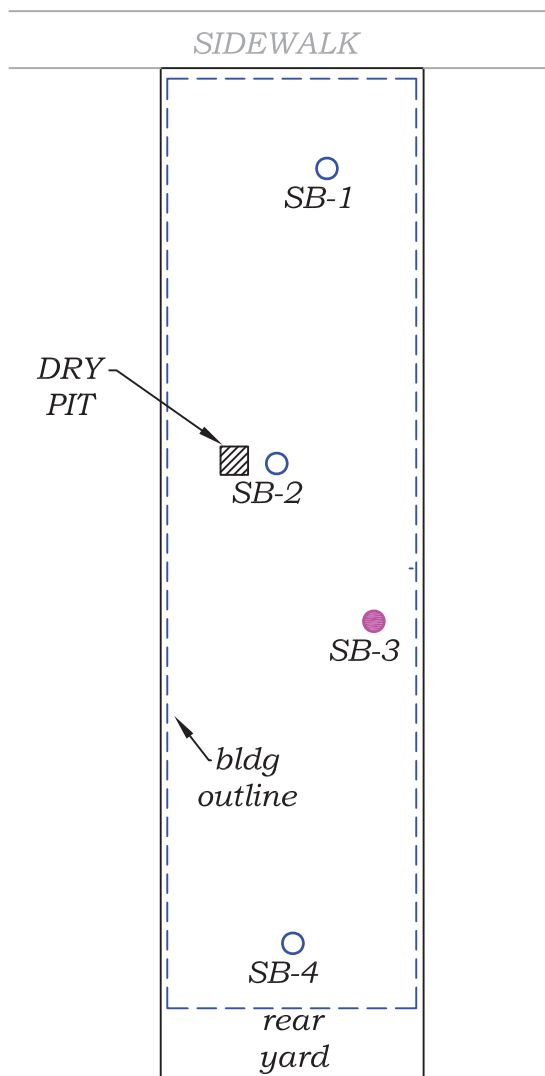


 <p><b>AMC ENGINEERING PLLC</b> 18-36 42nd Street Astoria, NY 11105 718-545-0474</p>	<p><b>PROJECT</b></p> <p>11-28 31st Drive Queens, NY 11106 Block 502 Lot 22</p>
<p><b>DATE:</b> JULY 13, 2018</p>	<p><b>TITLE:</b> <b>FIGURE 2 - SITE LAYOUT MAP</b></p>
<p><b>DRAWING BY:</b> NR</p>	



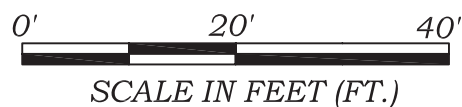


31st DRIVE



**LEGEND:**

- WASTE CHARACTERIZATION BORING TO 7 FEET BELOW GRADE (SB)
- WASTE CHARACTERIZATION BORING TO 4 FEET BELOW GRADE (SB)



**HYDRO TECH ENVIRONMENTAL CORP.**

MAIN OFFICE:  
77 ARKAY DRIVE, SUITE G  
HAUPPAUGE, NEW YORK 11788  
T (631)462-5866 F (631)462-5877  
www.hydrotechenvironmental.com

NYC OFFICE:  
15 OCEAN AVENUE, 2nd Floor  
BROOKLYN, NEW YORK 11225  
T (718)636-0800 F (718)636-0900

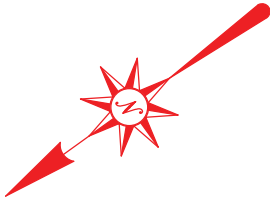
11-28 31st Drive  
Long Island City, NY  
HTE Job# 120029

Drawn By: C.Q.  
Reviewed By: P.M.  
Approved By: M.R.  
Date: 07/05/17  
Scale: AS NOTED

TITLE:

**FIGURE 3: MAP OF WASTE CHARACTERIZATION SAMPLING**





31st Drive

25'

Sidewalk

## Key


 Property Boundary

 Area of Excavation  
for Concrete Slab and  
Soil / Fill

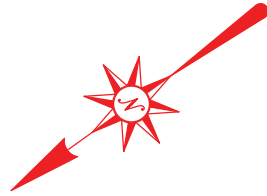
 Tank Pit Excavation Area

 Elevator Pit Excavation Area

- UST Tank Pit Excavation**  
5 ft wide x 9 ft long x 6 ft deep;  
Approximately 100 gal of rainwater  
that seeped into tank disposed of at  
Advanced Waste Water  
Treatment, Corp; UST disposed of  
as scrap metal
- Elevator Pit excavated to 6.6' bgs;**  
soil stockpiled and used to backfill  
rear yard
- Approximately 323.5 tons  
of nonhazardous contaminated historic fill / native  
soil excavated from 0 to 3' bgs  
and disposed of at Clean  
Earth of Carteret
- Approximately 145 tons of nonhazardous  
C&D waste from original building slab disposed  
of at Evergreen Recycling of Corona

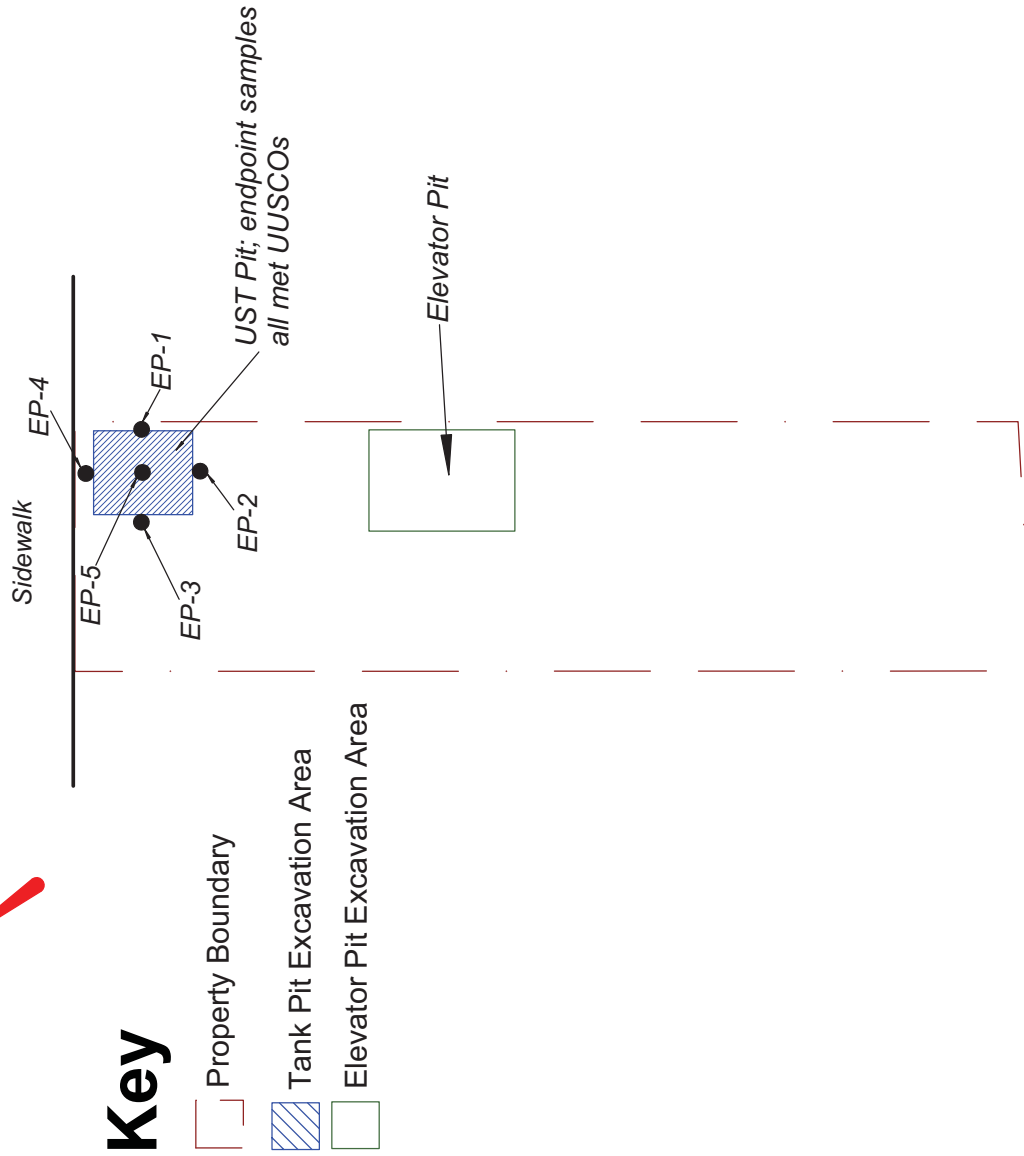
	
<b>AMC ENGINEERING PLLC</b> 18-36 42nd Street Astoria, NY 11105 718-545-0474	
PROJECT 11-28 31st Drive Queens, NY 11106 Block 502 Lot 22	
DATE: DEC 4, 2018	DRAWING BY: NR
TITLE: FIGURE 4 - EXCAVATED MATERIALS REMOVAL	





31st Drive

25'




## Key

Property Boundary

Tank Pit Excavation Area

Elevator Pit Excavation Area

  
AMC ENGINEERING PLLC  
18-36 42nd Street  
Astoria, NY 11105  
718-545-0474

PROJECT  
11-28 31st Drive  
Queens, NY 11106  
Block 502 Lot 22

TITLE:  
FIGURE 5 -  
UST ENDPOINT SAMPLE LOCATIONS

DATE: DEC 4, 2018 | DRAWING BY: NR






31st Drive

25'

Sidewalk

# Key

 Property Boundary

 Tank Pit Excavation Area

 Elevator Pit Excavation Area

CONTAMINANT	Depth: 6-8' below grade		
	Concentration (mg/kg)	UUSCO (mg/kg)	Residential SCO (mg/kg)
Selenium	9.87	3.9	36

SP-5 (from RI)

SP-4 (from RI)

Elevator Pit

CONTAMINANT	Depth: 6-8' below grade		
	Concentration (mg/kg)	UUSCO (mg/kg)	Residential SCO (mg/kg)
Selenium	7.69	3.9	36



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18-36 42nd Street  
Astoria, NY 11105  
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PROJECT

11-28 31st Drive  
Queens, NY 11106  
Block 502 Lot 22

TITLE:

FIGURE 6 -  
CONTAMINATION REMAINING ONSITE

DATE: DEC 5, 2018 | DRAWING BY: NR



MW-5			
VOC	Jan-2015 (Pre-Injection)	Feb-2018 (Pre-Injection)	Jul-2018 (Post-Injection)
Trichloroethylene	5	0.81	Not Sampled
Units			µg/L

MW-6			
VOC	Jan-2015 (Pre-Injection)	Feb-2018 (Pre-Injection)	Jul-2018 (Post-Injection)
Trichloroethylene	5	75	43
Units			µg/L

~~MW5~~

31st Drive

Sidewalk

IW1 MW4 IW2 IW3

MW6



Key

- Site Boundary
- Vapor Barrier Area
- Injection Point
- Monitoring Well

Adjacent Lot 19

Adjacent Lot 23

MW-4			
VOC	Jan-2015 (Pre-Injection)	Feb-2018 (Pre-Injection)	Jul-2018 (Post-Injection)
Trichloroethylene	5	70	13
Units			µg/L

MW-3			
VOC	Apr-2013 (Pre-Injection)	Feb-2018 (Pre-Injection)	Jul-2018 (Post-Injection)
Trichloroethylene	5	0.2	0.2
Units			µg/L

MW-2			
VOC	Apr-2013 (Pre-Injection)	Feb-2018 (Pre-Injection)	Jul-2018 (Post-Injection)
Trichloroethylene	5	0.4	0.03
Units			µg/L

MW-1			
VOC	Apr-2013 (Pre-Injection)	Feb-2018 (Pre-Injection)	Jul-2018 (Post-Injection)
Trichloroethylene	5	0.2	0.2
Units			µg/L

MW1

25'



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18-36 42nd Street  
Astoria, NY 11105  
718-545-0474

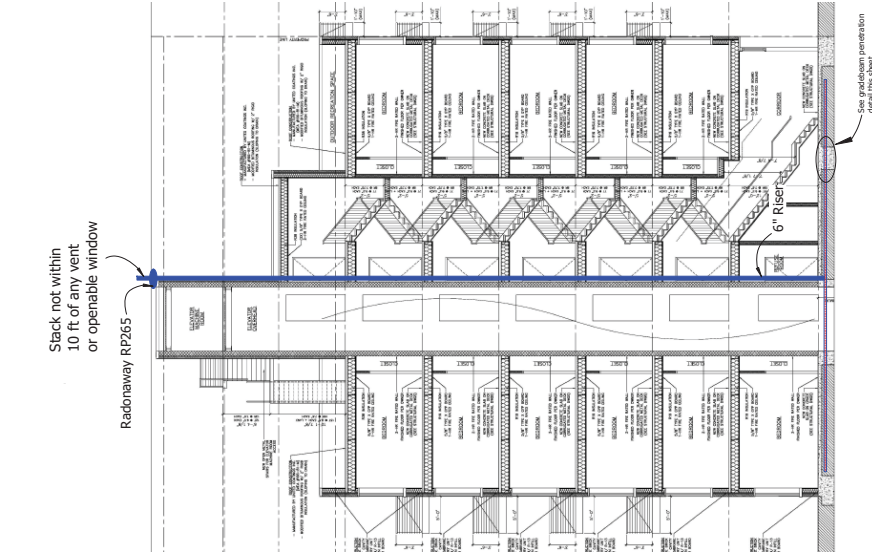
PROJECT

11-28 31st Drive  
Queens, NY 11106  
Block 502 Lot 22

DATE: DEC 7, 2018 | DRAWING BY: NR

TITLE: FIGURE 7 -  
PRE AND POST INJECTION GROUNDWATER RESULTS







31st Drive

Sidewalk

IW1 IW2 IW3



### Key

- Site Boundary
- Area Covered By Vapor Barrier
- Injection Point

SSDS Riser

Adjacent Lot 23

Rear Yard

25'



**AMC ENGINEERING PLLC**  
18-36 42nd Street  
Astoria, NY 11105  
718-545-0474

PROJECT

11-28 31st Drive  
Queens, NY 11106  
Block 502 Lot 22

DATE: DEC 4, 2018 | DRAWING BY: NR

TITLE: **ENGINEERING CONTROLS LOCATIONS**

FIGURE 9 -



**ATTACHMENT A**  
**Digital Copy of FER**



**ATTACHMENT B**  
**Easement and Metes and Bounds  
Description, Survey Map**



**NYC DEPARTMENT OF FINANCE  
OFFICE OF THE CITY REGISTER**

This page is part of the instrument. The City Register will rely on the information provided by you on this page for purposes of indexing this instrument. The information on this page will control for indexing purposes in the event of any conflict with the rest of the document.



2016080300503001003EDEA8

**RECORDING AND ENDORSEMENT COVER PAGE**

**PAGE 1 OF 10**

**Document ID: 2016080300503001**

Document Date: 07-26-2016

Preparation Date: 08-10-2016

Document Type: EASEMENT

Document Page Count: 9

**PRESENTER:**

THE LAW OFFICE OF JOSEPH YAU, PLLC  
139 CENTRE ST STE 816  
NEW YORK, NY 10013  
347-788-8304

**RETURN TO:**

THE LAW OFFICE OF JOSEPH YAU, PLLC  
139 CENTRE ST STE 816  
NEW YORK, NY 10013  
347-788-8304

Borough	Block	Lot	Unit	Address
QUEENS	502	22	Entire Lot	1128 31ST DR

**Property Type:** INDUSTRIAL BUILDING Easement

**CROSS REFERENCE DATA**

CRFN \_\_\_\_\_ or DocumentID \_\_\_\_\_ or \_\_\_\_\_ Year \_\_\_\_\_ Reel \_\_\_\_\_ Page \_\_\_\_\_ or File Number \_\_\_\_\_

**PARTIES**

**GRANTOR/SELLER:**

GBT REAL ESTATE LLC  
1083 MAPLE LN  
NEW HYDE PARK, NY 11040

**GRANTEE/BUYER:**

NYS DEPT OF ENVIRONMENTAL CONSERVATION  
625 BROADWAY  
ALBANY, NY 12233

**FEES AND TAXES**

**Mortgage :**

Mortgage Amount: \$ 0.00

Taxable Mortgage Amount: \$ 0.00

Exemption:

TAXES: County (Basic): \$ 0.00

City (Additional): \$ 0.00

Spec (Additional): \$ 0.00

TASF: \$ 0.00

MTA: \$ 0.00

NYCTA: \$ 0.00

Additional MRT: \$ 0.00

**TOTAL:** \$ 0.00

Recording Fee: \$ 82.00

Affidavit Fee: \$ 0.00

**Filing Fee:**

\$ 100.00

NYC Real Property Transfer Tax:

\$ 0.00

NYS Real Estate Transfer Tax:

\$ 0.00

**RECORDED OR FILED IN THE OFFICE  
OF THE CITY REGISTER OF THE**

**CITY OF NEW YORK**

Recorded/Filed 08-12-2016 10:48

City Register File No.(CRFN):

2016000278636



*Granville McMill*

**City Register Official Signature**



**ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36  
OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW**

**THIS INDENTURE** made this 26<sup>th</sup> day of July, 2016, between Owner(s) GBT Real Estate LLC, having an office at 1083 Maple Lane, New Hyde Park, New York 11040, County of Nassau, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

**WHEREAS**, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

**WHEREAS**, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

**WHEREAS**, Grantor, is the owner of real property located at the address of 11-28 31st Drive in the City of New York, County of Queens and State of New York, known and designated on the tax map of the New York City Department of Finance as tax map parcel number: Block 502 Lot 22, being the same as that property conveyed to Grantor by deed dated February 7, 2014 and recorded in the City Register of the City of New York as CRFN # 20140000061160. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.055 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 25, 2016 prepared by Vincent J. Dicce, L.S. of Boro Land Surveying, P.C., which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

**WHEREAS**, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is



extinguished pursuant to ECL Article 71, Title 36; and

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C241159-04-14, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. **Purposes.** Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. **Institutional and Engineering Controls.** The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

**Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii),  
Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial  
as described in 6 NYCRR Part 375-1.8(g)(2)(iv)**

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;

(4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the New York City Department of Health and Mental Hygiene to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

(5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;



(7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

(9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;

(10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, New York 12233  
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

**This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation**



**pursuant to Title 36 of Article 71 of the Environmental Conservation Law.**

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;



5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:      Site Number: C241159  
Office of General Counsel  
NYSDEC  
625 Broadway  
Albany New York 12233-5500

With a copy to:      Site Control Section  
Division of Environmental Remediation  
NYSDEC  
625 Broadway  
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail



and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

**Remainder of Page Intentionally Left Blank**



IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

GBT Real Estate LLC:

By: George Man

Print Name: George Man

Title: member Date: 7/20/2016

**Grantor's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF New York     )

On the 20th day of July, in the year 2016, before me, the undersigned, personally appeared George Man, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

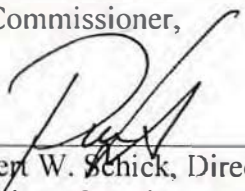
Joseph Yeu  
Notary Public - State of New York

Joseph Yeu  
Notary Public State of New York  
No. 02YA6186606  
Qualified in Kings County  
Commission Expires May 5, 2020



**THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK**, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner,

By:

  
Robert W. Schick, Director  
Division of Environmental Remediation

**Grantee's Acknowledgment**

STATE OF NEW YORK     )  
  ) ss:  
COUNTY OF ALBANY     )

On the 26<sup>th</sup> day of July, in the year 2014 before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

  
Notary Public - State of New York

**David J. Chiusano**  
**Notary Public, State of New York**  
**No. 01CH5032146**  
**Qualified in Schenectady County**  
**Commission Expires August 22, 2018**



**SCHEDULE "A" PROPERTY DESCRIPTION**

**Legal Description of the Easement Area**

ALL that certain plot, piece or parcel of land with the buildings or improvements thereon, erected, situate, lying and being in the Astoria, Long Island City, in the Borough and County of Queens, City and State of New York, being more particularly bounded and described as follows:

BEGINNING at a point on the southerly side of 31st Drive, distant 175 feet westerly from the corner formed by the intersection of the southerly side of 31st Drive with the westerly side of 12th Street;

RUNNING THENCE southerly at right angles to 31st Drive, 95 feet 11-3/8ths inches to the southerly side of the land on the map hereinafter mentioned and to the land now or formerly of Robert Moore;

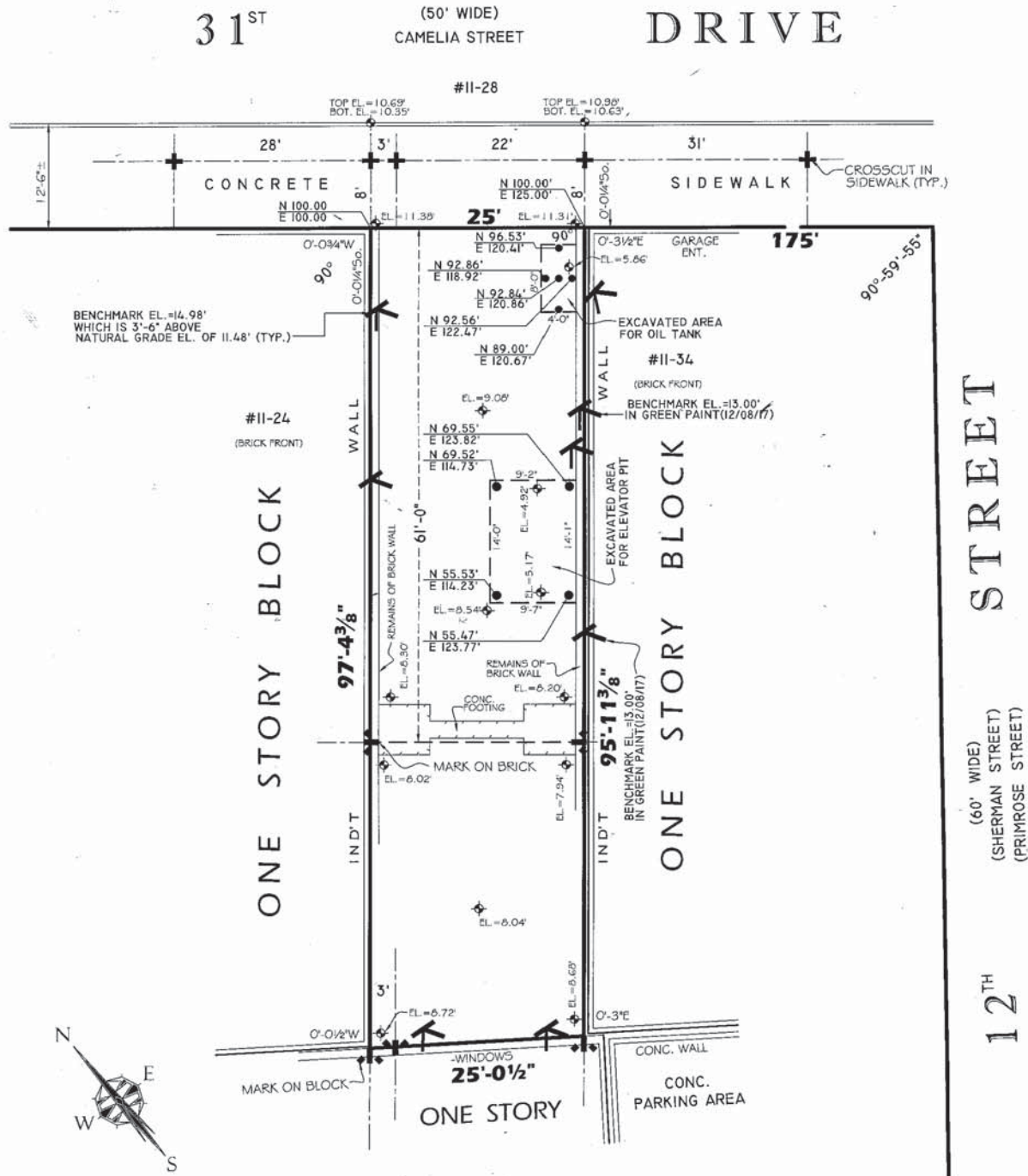
THENCE westerly along the said land and along the southerly line of said lot, 25 feet 1/2 inch to the westerly side of said lot on said map;

THENCE northerly along the westerly line of said lot on said map at right angles to 31st Drive, 97 feet 4-3/8ths inches to the southerly side of 31st Drive;

THENCE easterly along the southerly side of 31st Drive, 25 feet to the point or place of BEGINNING.

Containing approximately 2,416 square feet or 0.055 acres more or less.





NOTE: ALL MARKS IN GREEN PAINT EXCEPT FOR  
BENCHMARK ELEVATIONS IN YELLOW PAINT

NOTE: TO PROVIDE CLARITY, CERTAIN DIMENSIONS,  
FEATURES AND/OR LOCATIONS ARE NOT DRAWN TO SCALE.

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS  
SURVEY IS A VIOLATION OF SECTION 7209 OF  
THE NEW YORK STATE EDUCATION LAW. COPIES  
OF THIS SURVEY MAP NOT BEARING THE LAND  
SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL  
NOT BE CONSIDERED TO BE A VALID TRUE COPY.  
GUARANTEES OR CERTIFICATIONS INDICATED HEREON  
SHALL RUN ONLY TO THE PERSON FOR WHOM THE  
SURVEY IS PREPARED, AND ON HIS BEHALF TO  
THE TITLE COMPANY, GOVERNMENTAL AGENCY  
AND LENDING INSTITUTION LISTED HEREON, AND  
TO THE ASSIGNEES OF THE LENDING INSTITUTION.  
GUARANTEES OR CERTIFICATIONS ARE NOT TRANSFERABLE  
TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

BLOCK: 502  
LOT: 22  
SECTION: 4  
COUNTY: QUEENS  
DWG BY: PLATO SMITH  
CHK'D BY:

SURVEYED

OCTOBER 19, 2017

INFO ADDED: 12/08/2017

INFO ADDED: 12/21/2017

STAKEOUT SURVEY

ALL ELEVATIONS  
REFER TO NAVD 88

*Vincent J. Dicce*  
VINCENT J. DICCE L.S., P.C.



BORO LAND SURVEYING, P.C.  
353 COURT STREET  
BROOKLYN, N.Y. 11231  
TEL. (718) 624-BORO (2676)



**ATTACHMENT C**  
**CAMP Air Monitoring Reports**

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# Hydro Tech Environmental Air Monitoring Form

Project Name: \_\_\_\_\_  
 Site Location: 11-28 31st Dr LIC, NY  
 Date: 9-19-17  
 HTE Personnel: Mario Pinada  
 Weather: Overcast / Light Rain  
 Temperature: 70°F  
 Humidity: 89%

Wind Direction: S by W

TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results: (mg/m³)	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500						
7:15 AM	PID 2000 / PDR 1500						
7:30 AM	PID 2000 / PDR 1500						
7:45 AM	PID 2000 / PDR 1500						
8:00 AM	PID 2000 / PDR 1500						
8:15 AM	PID 2000 / PDR 1500						
8:30 AM	PID 2000 / PDR 1500						
8:45 AM	PID 2000 / PDR 1500						
9:00 AM	PID 2000 / PDR 1500	N/A	N	N	N/A	N/A	Brushing concrete slab
9:15 AM	PID 2000 / PDR 1500						
9:30 AM	PID 2000 / PDR 1500						
9:45 AM	PID 2000 / PDR 1500						
10:00 AM	PID 2000 / PDR 1500						low activity
10:15 AM	PID 2000 / PDR 1500						Heavy Rain
10:30 AM	PID 2000 / PDR 1500						stop piling concrete
10:45 AM	PID 2000 / PDR 1500						
11:00 AM	PID 2000 / PDR 1500						
11:15 AM	PID 2000 / PDR 1500						Brushing concrete slab
11:30 AM	PID 2000 / PDR 1500						
11:45 AM	PID 2000 / PDR 1500						lunch
12:00 PM	PID 2000 / PDR 1500						lunch
12:15 PM	PID 2000 / PDR 1500						lunch
12:30 PM	PID 2000 / PDR 1500						Brushing concrete slab
12:45 PM	PID 2000 / PDR 1500						
1:00 PM	PID 2000 / PDR 1500						
1:15 PM	PID 2000 / PDR 1500						stop piling concrete
1:30 PM	PID 2000 / PDR 1500						
1:45 PM	PID 2000 / PDR 1500						
2:00 PM	PID 2000 / PDR 1500						
2:15 PM	PID 2000 / PDR 1500						
2:30 PM	PID 2000 / PDR 1500						
2:45 PM	PID 2000 / PDR 1500						
3:00 PM	PID 2000 / PDR 1500						
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m³ will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m³ will result in the work to stop immediately.



# Hydro Tech Environmental Air Monitoring Form

CT Name: 11-28 31st Dist L.L.C., NY 1106

Location: 9-20-17

Personnel: S. Alvarez Castillo

Weather: Mostly Cloudy

Temp: Low 70's Humidity: 73%

Wind Direction: NW 9 mph

TIME	Air Monitoring Stations Make and Model	Air Particulate levels Sampling Results: gradient (mg/m <sup>3</sup> )	PID Readings (ppm)	Air Particulate levels Sampling Results: gradient (mg/m <sup>3</sup> )	PID Readings (ppm)	Odors (Y/N)	Visible Dust (Y/N)	Corrective Action Taken	Additional comments
7:00 AM	TSE-8530 Dust Trak II	0.012	0.0	0.014	0.0	2	2	N/A	S.A.B = SCUR AS BEFORE
7:15 AM	TSE-8530 Dust Trak II	0.018	0.0	0.017	0.0	2	2	N/A	HTE ON SITE
7:30 AM	TSE-8530 Dust Trak II	0.020	0.0	0.019	0.0	2	2	N/A	Background check
7:45 AM	TSE-8530 Dust Trak II	0.021	0.0	0.020	0.0	2	2	N/A	Alarm new way up
8:00 AM	TSE-8530 Dust Trak II	0.019	0.0	0.018	0.0	2	2	N/A	Set up ramp station
8:15 AM	TSE-8530 Dust Trak II	0.020	0.0	0.019	0.0	2	2	N/A	Breaking concrete also
8:30 AM	TSE-8530 Dust Trak II	0.022	0.0	0.020	0.0	2	2	N/A	S.A.B
8:45 AM	TSE-8530 Dust Trak II	0.017	0.0	0.017	0.0	2	2	N/A	S.A.B
9:00 AM	TSE-8530 Dust Trak II	0.016	0.0	0.015	0.0	2	2	N/A	S.A.B
9:15 AM	TSE-8530 Dust Trak II	0.020	0.0	0.016	0.0	2	2	N/A	S.A.B
9:30 AM	TSE-8530 Dust Trak II	0.022	0.0	0.020	0.0	2	2	N/A	Low activity
9:45 AM	TSE-8530 Dust Trak II	0.023	0.0	0.022	0.0	2	2	N/A	Concrete stacking? 13mg
10:00 AM	TSE-8530 Dust Trak II	0.026	0.0	0.022	0.0	2	2	N/A	S.A.B
10:15 AM	TSE-8530 Dust Trak II	0.018	0.0	0.018	0.0	2	2	N/A	Breaking concrete slab
10:30 AM	TSE-8530 Dust Trak II	0.016	0.0	0.015	0.0	2	2	N/A	S.A.B
10:45 AM	TSE-8530 Dust Trak II	0.015	0.0	0.015	0.0	2	2	N/A	S.A.B
11:00 AM	TSE-8530 Dust Trak II	0.013	0.0	0.012	0.0	2	2	N/A	S.A.B
11:15 AM	TSE-8530 Dust Trak II	0.012	0.0	0.010	0.0	2	2	N/A	Break for lunch
11:30 AM	TSE-8530 Dust Trak II	0.014	0.0	0.009	0.0	2	2	N/A	No activity
11:45 AM	TSE-8530 Dust Trak II	0.019	0.0	0.011	0.0	2	2	N/A	Resume work
12:00 PM	TSE-8530 Dust Trak II	0.021	0.0	0.016	0.0	2	2	N/A	Concrete stacking 21mg
12:15 PM	TSE-8530 Dust Trak II	0.024	0.0	0.018	0.0	2	2	N/A	S.A.B
12:30 PM	TSE-8530 Dust Trak II	0.027	0.0	0.021	0.0	2	2	N/A	S.A.B
12:45 PM	TSE-8530 Dust Trak II	0.021	0.0	0.018	0.0	2	2	N/A	No activity
1:00 PM	TSE-8530 Dust Trak II	0.020	0.0	0.017	0.0	2	2	N/A	"
1:15 PM	TSE-8530 Dust Trak II	0.019	0.0	0.015	0.0	2	2	N/A	"
1:30 PM	TSE-8530 Dust Trak II	0.019	0.0	0.015	0.0	2	2	N/A	"
1:45 PM	TSE-8530 Dust Trak II	0.019	0.0	0.015	0.0	2	2	N/A	HTE OFF SITE



# Hydro-Tech Environmental Air Monitoring Form

Project Name: # 11-28-313F LONG ISLAND CITY  
 Site Location: # 150154  
 Date: 10/10/2017  
 RTIE Performed: RABOLLO  
 Weather: MOSTLY CLOUDY

Temp: 73° Humidity: 62%

Wind Direction: NE 8 mph

Corrective Action Taken:  
 Additional comments:

TIME	Air Monitoring Stations Name and Model	Air Particulate Levels Sampling Results: gradient (mg/m³)	Up	PM10 Readings (µg/m³)	Air Particulate Levels Sampling Results: gradient (mg/m³)	PM10 Readings (PPM)	Odors (Y/N)	Visible Dust (Y/N)	Corrective Action Taken	Additional comments
7:00 AM	15E-0530 Dust Trak II	0.0 0.23		0.0	0.0 0.31	0.0	N	N	LOADING	LOADING TRUCK WITH CONCRETE ROCKS
7:15 AM	15E-0530 Dust Trak II	0.0 0.13		0.0	0.0 0.33	0.0	N	N	N/A	"
7:30 AM	15E-0530 Dust Trak II	0.0 0.27		0.0	0.0 0.35	0.0	N	N	N/A	"
7:45 AM	15E-0530 Dust Trak II	0.0 0.24		0.0	0.0 0.30	0.0	N	N	N/A	"
8:00 AM	15E-0530 Dust Trak II	0.0 0.30		0.0	0.0 0.32	0.0	N	N	N/A	DRIPPING CONCRETE ROCKS
8:15 AM	15E-0530 Dust Trak II	0.0 0.26		0.0	0.0 0.31	0.0	N	N	N/A	"
8:30 AM	15E-0530 Dust Trak II	0.0 0.33		0.0	0.0 0.37	0.0	N	N	N/A	"
8:45 AM	15E-0530 Dust Trak II	0.0 0.23		0.0	0.0 0.29	0.0	N	N	N/A	MOVING CONCRETE ROCKS
9:00 AM	15E-0530 Dust Trak II	0.0 0.35		0.0	0.0 0.23	0.0	N	N	N/A	"
9:15 AM	15E-0530 Dust Trak II	0.0 0.30		0.0	0.0 0.19	0.0	N	N	N/A	LOADING TRUCKS WITH CONCRETE ROCKS
9:30 AM	15E-0530 Dust Trak II	0.0 0.24		0.0	0.0 0.26	0.0	N	N	N/A	"
9:45 AM	15E-0530 Dust Trak II	0.0 0.24		0.0	0.0 0.29	0.0	N	N	N/A	"
10:00 AM	15E-0530 Dust Trak II	0.0 0.14		0.0	0.0 0.17	0.0	N	N	N/A	MOVING CONCRETE ROCKS
10:15 AM	15E-0530 Dust Trak II	0.0 0.16		0.0	0.0 0.14	0.0	N	N	N/A	"
10:30 AM	15E-0530 Dust Trak II	0.0 0.18		0.0	0.0 0.16	0.0	N	N	N/A	DRIPPING CONCRETE ROCKS
10:45 AM	15E-0530 Dust Trak II	0.0 0.17		0.0	0.0 0.10	0.0	N	N	N/A	"
11:00 AM	15E-0530 Dust Trak II	0.0 0.09		0.0	0.0 0.13	0.0	N	N	N/A	LUNCH
11:15 AM	15E-0530 Dust Trak II	0.0 0.06		0.0	0.0 0.08	0.0	N	N	N/A	LUNCH
11:30 AM	15E-0530 Dust Trak II	0.0 0.04		0.0	0.0 0.09	0.0	N	N	N/A	LOADING TRUCKS CONCRETE ROCKS
11:45 AM	15E-0530 Dust Trak II	0.0 0.08		0.0	0.0 0.04	0.0	N	N	N/A	"
12:00 PM	15E-0530 Dust Trak II	0.0 0.03		0.0	0.0 0.05	0.0	N	N	N/A	DRIPPING CONCRETE ROCKS
12:15 PM	15E-0530 Dust Trak II	0.0 0.03		0.0	0.0 0.02	0.0	N	N	N/A	"
12:30 PM	15E-0530 Dust Trak II	0.0 0.04		0.0	0.0 0.03	0.0	N	N	N/A	LUNCH
12:45 PM	15E-0530 Dust Trak II	0.0 0.06		0.0	0.0 0.04	0.0	N	N	N/A	LUNCH
1:00 PM	15E-0530 Dust Trak II	0.0 0.04		0.0	0.0 0.09	0.0	N	N	N/A	LOADING TRUCKS CONCRETE ROCKS
1:15 PM	15E-0530 Dust Trak II	0.0 0.08		0.0	0.0 0.04	0.0	N	N	N/A	"
1:30 PM	15E-0530 Dust Trak II	0.0 0.03		0.0	0.0 0.05	0.0	N	N	N/A	DRIPPING CONCRETE ROCKS
1:45 PM	15E-0530 Dust Trak II	0.0 0.03		0.0	0.0 0.02	0.0	N	N	N/A	"
2:00 PM	15E-0530 Dust Trak II	0.0 0.04		0.0	0.0 0.03	0.0	N	N	N/A	HTC ON SITE
2:15 PM	15E-0530 Dust Trak II	0.0 0.06		0.0	0.0 0.04	0.0	N	N	N/A	"
2:30 PM	15E-0530 Dust Trak II	0.0 0.04		0.0	0.0 0.09	0.0	N	N	N/A	"
2:45 PM	15E-0530 Dust Trak II	0.0 0.08		0.0	0.0 0.04	0.0	N	N	N/A	"
3:00 PM	15E-0530 Dust Trak II	0.0 0.03		0.0	0.0 0.05	0.0	N	N	N/A	"
3:15 PM	15E-0530 Dust Trak II	0.0 0.03		0.0	0.0 0.02	0.0	N	N	N/A	"
3:30 PM	15E-0530 Dust Trak II	0.0 0.04		0.0	0.0 0.03	0.0	N	N	N/A	"
3:45 PM	15E-0530 Dust Trak II	0.0 0.06		0.0	0.0 0.04	0.0	N	N	N/A	"
4:00 PM	15E-0530 Dust Trak II	0.0 0.04		0.0	0.0 0.09	0.0	N	N	N/A	"

Hydro-Tech Environmental will be conducting dust and particulate monitoring activities at the site in accordance with the applicable dust and particulate monitoring from DEH-10 Technical Guidance for Site Investigation and Remediation (Landscape) or DEH-10 Technical Guidance, any particular levels to exceed 0.10 mg/m³ will result in the implementation of dust suppression techniques to allow work to continue. If DEH-10 Technical Guidance, any particular levels to exceed 0.15 mg/m³ will result in the work to stop immediately.



# Hydro-Tech Environmental Air Monitoring Form

Project Name: # 150154

Site Location: 11-28 31st DRIVE LONG ISLAND CITY NY

Date: 10/12/2017

RIE Personnel: CROSOLO

Weather: CLOUDY

Temp: 61°

Humidity: 71%

Wind Direction: ENE 14 mph

TIME	Air Monitoring Stations Make and Model	Air Particulate Sampling Results gradient (ng/m <sup>3</sup> )	PM10 Readings (ppm)	Air Particulate levels Sampling Results: Down gradient (ng/m <sup>3</sup> )	PM10 Readings (ppm)	PM10 Readings (ppm)	Odors (Y/N)	Visible Dust (Y/N)	Corrective Action Taken	Additional comments
7:00 AM	15E-0530 Dust Trak II	0.018	0.0	0.018	0.0	0.0	N	N	N/A	LOADING SOIL TRUCKS WITH SOIL
7:15 AM	15E-0530 Dust Trak II	0.030	0.0	0.030	0.0	0.0	N	N	N/A	"
7:30 AM	15E-0530 Dust Trak II	0.020	0.0	0.020	0.0	0.0	N	N	N/A	"
7:45 AM	15E-0530 Dust Trak II	0.032	0.0	0.032	0.0	0.0	N	N	N/A	"
8:00 AM	15E-0530 Dust Trak II	0.021	0.0	0.021	0.0	0.0	N	N	N/A	"
8:15 AM	15E-0530 Dust Trak II	0.024	0.0	0.024	0.0	0.0	N	N	N/A	"
8:30 AM	15E-0530 Dust Trak II	0.023	0.0	0.023	0.0	0.0	N	N	N/A	"
8:45 AM	15E-0530 Dust Trak II	0.031	0.0	0.031	0.0	0.0	N	N	N/A	"
9:00 AM	15E-0530 Dust Trak II	0.025	0.0	0.025	0.0	0.0	N	N	N/A	"
9:15 AM	15E-0530 Dust Trak II	0.026	0.0	0.026	0.0	0.0	N	N	N/A	"
9:30 AM	15E-0530 Dust Trak II	0.036	0.0	0.036	0.0	0.0	N	N	N/A	"
9:45 AM	15E-0530 Dust Trak II	0.038	0.0	0.038	0.0	0.0	N	N	N/A	"
10:00 AM	15E-0530 Dust Trak II	0.027	0.0	0.027	0.0	0.0	N	N	N/A	"
10:15 AM	15E-0530 Dust Trak II	0.028	0.0	0.028	0.0	0.0	N	N	N/A	"
10:30 AM	15E-0530 Dust Trak II	0.019	0.0	0.019	0.0	0.0	N	N	N/A	"
10:45 AM	15E-0530 Dust Trak II	0.017	0.0	0.017	0.0	0.0	N	N	N/A	"
11:00 AM	15E-0530 Dust Trak II	0.012	0.0	0.012	0.0	0.0	N	N	N/A	"
11:15 AM	15E-0530 Dust Trak II	0.015	0.0	0.015	0.0	0.0	N	N	N/A	"
11:30 AM	15E-0530 Dust Trak II	0.010	0.0	0.010	0.0	0.0	N	N	N/A	"
11:45 AM	15E-0530 Dust Trak II	0.014	0.0	0.014	0.0	0.0	N	N	N/A	"
12:00 PM	15E-0530 Dust Trak II	0.013	0.0	0.013	0.0	0.0	N	N	N/A	"
12:15 PM	15E-0530 Dust Trak II	0.013	0.0	0.013	0.0	0.0	N	N	N/A	"
12:30 PM	15E-0530 Dust Trak II	0.008	0.0	0.008	0.0	0.0	N	N	N/A	"
12:45 PM	15E-0530 Dust Trak II	0.005	0.0	0.005	0.0	0.0	N	N	N/A	"
1:00 PM	15E-0530 Dust Trak II	0.007	0.0	0.007	0.0	0.0	N	N	N/A	"
1:15 PM	15E-0530 Dust Trak II	0.004	0.0	0.004	0.0	0.0	N	N	N/A	"
1:30 PM	15E-0530 Dust Trak II	0.006	0.0	0.006	0.0	0.0	N	N	N/A	"
1:45 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
2:00 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
2:15 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
2:30 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
2:45 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
3:00 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
3:15 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
3:30 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
3:45 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"
4:00 PM	15E-0530 Dust Trak II	0.009	0.0	0.009	0.0	0.0	N	N	N/A	"

Residue Air Monitoring will be conducted during around intrusive activities at the site in accordance with the Fuelage Dust and Particulate Monitoring from DEN-10 Technical Guidance for Site Investigation and Remediation (Appendix 10-10) Technical Guidance, any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue, any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



# Hydro-Tech Environmental Air Monitoring Form

# 150154

11-28-31 DRIVE LONG ISLAND CITY NY

10/13/2017

ROBERTO

CLOUDY

TIME	Air Monitoring Stations - Make and Model	Air Particulate Levels - Sampling Results - gradient (mg/m <sup>3</sup> )	PID Readings (ppm)	Air Particulate Levels - Sampling Results - Down Gradient (mg/m <sup>3</sup> )	PID Readings (ppm)	Odors (V/N)	Visible Dust (V/N)	Corrective Action Taken	Wind Direction	Humidity	Temp	Additional Comments
7:00 AM	15E-0530 Dust Trak II	0.0 20	0.0	0.0 23	0.0	N	N	N/A	ENE	72%	9M PH	LOADING TRUCKS WITH SOIL
7:15 AM	15E-0530 Dust Trak II	0.0 21	0.0	0.0 22	0.0	N	N	N/A				
7:30 AM	15E-0530 Dust Trak II	0.0 21	0.0	0.0 22	0.0	N	N	N/A				
7:45 AM	15E-0530 Dust Trak II	0.0 22	0.0	0.0 22	0.0	N	N	N/A				
8:00 AM	15E-0530 Dust Trak II	0.0 22	0.0	0.0 22	0.0	N	N	N/A				
8:15 AM	15E-0530 Dust Trak II	0.0 24	0.0	0.0 22	0.0	N	N	N/A				
8:30 AM	15E-0530 Dust Trak II	0.0 24	0.0	0.0 22	0.0	N	N	N/A				
8:45 AM	15E-0530 Dust Trak II	0.0 24	0.0	0.0 22	0.0	N	N	N/A				
9:00 AM	15E-0530 Dust Trak II	0.0 25	0.0	0.0 19	0.0	N	N	N/A				
9:15 AM	15E-0530 Dust Trak II	0.0 23	0.0	0.0 13	0.0	N	N	N/A				
9:30 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
9:45 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
10:00 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
10:15 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
10:30 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
10:45 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
11:00 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
11:15 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
11:30 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
11:45 AM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
12:00 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
12:15 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
12:30 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
12:45 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
1:00 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
1:15 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
1:30 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
1:45 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
2:00 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
2:15 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
2:30 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
2:45 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
3:00 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
3:15 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
3:30 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
3:45 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				
4:00 PM	15E-0530 Dust Trak II	0.0 13	0.0	0.0 13	0.0	N	N	N/A				

Technical Air Monitoring will be conducted during ground activities at the site in accordance with the Fuel Oil and Particulate Monitoring from DEN-10 Technical Guidance for Site Investigation and Remediation Appendix for DEN-10 Technical Guidance. Any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. Any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



# Hydro Tech Environmental Air Monitoring Form

Project Name: 1150154

Site Location: 11-25 31st Drive Long Island City, NY 11106

Date: 10-16-17

HTE Personnel: S. Ivusheva (estill)

Weather: Cloudy

TIME	Air Monitoring Stations Make and Model	Air Particulate levels Sampling Results: gradient (mg/m <sup>3</sup> )	PID Readings (ppm)	Air Particulate levels Sampling Results: Down gradient (mg/m <sup>3</sup> )	PID Readings (ppm)	Odors (V/h)	Visible Dust (V/h)	Corrective Action Taken	Additional comments
7:00 AM	TSE-8530 Dust Trak II	0.029	0.1	0.016	0.1	2.7	2.2	2/A	HTC onsite
7:15 AM	TSE-8530 Dust Trak II	0.032	0.1	0.018	0.1	2.7	2.2	2/A	Background check
7:30 AM	TSE-8530 Dust Trak II	0.037	0.1	0.023	0.1	2.7	2.2	2/A	Machinery work up
7:45 AM	TSE-8530 Dust Trak II	0.035	0.1	0.023	0.1	2.7	2.2	2/A	Loading concrete
8:00 AM	TSE-8530 Dust Trak II	0.031	0.1	0.019	0.1	2.7	2.2	2/A	Loading concrete
8:15 AM	TSE-8530 Dust Trak II	0.042	0.1	0.019	0.1	2.7	2.2	2/A	Loading concrete
8:30 AM	TSE-8530 Dust Trak II	0.039	0.1	0.021	0.1	2.7	2.2	2/A	Loading concrete
8:45 AM	TSE-8530 Dust Trak II	0.035	0.1	0.021	0.1	2.7	2.2	2/A	Loading concrete
9:00 AM	TSE-8530 Dust Trak II	0.036	0.1	0.021	0.1	2.7	2.2	2/A	Loading concrete
9:15 AM	TSE-8530 Dust Trak II	0.040	0.1	0.022	0.1	2.7	2.2	2/A	Loading concrete
9:30 AM	TSE-8530 Dust Trak II	0.043	0.1	0.022	0.1	2.7	2.2	2/A	Loading concrete
9:45 AM	TSE-8530 Dust Trak II	0.035	0.1	0.021	0.1	2.7	2.2	2/A	Loading concrete
10:00 AM	TSE-8530 Dust Trak II	0.029	0.1	0.015	0.1	2.7	2.2	2/A	Loading concrete
10:15 AM	TSE-8530 Dust Trak II	0.023	0.1	0.015	0.1	2.7	2.2	2/A	Loading concrete
10:30 AM	TSE-8530 Dust Trak II	0.030	0.1	0.015	0.1	2.7	2.2	2/A	Loading concrete
10:45 AM	TSE-8530 Dust Trak II	0.029	0.1	0.015	0.1	2.7	2.2	2/A	Loading concrete
11:00 AM	TSE-8530 Dust Trak II	0.033	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
11:15 AM	TSE-8530 Dust Trak II	0.033	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
11:30 AM	TSE-8530 Dust Trak II	0.033	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
11:45 AM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
12:00 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
12:15 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
12:30 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
12:45 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
1:00 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
1:15 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
1:30 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
1:45 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
2:00 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
2:15 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
2:30 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
2:45 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
3:00 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
3:15 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
3:30 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
3:45 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete
4:00 PM	TSE-8530 Dust Trak II	0.032	0.1	0.017	0.1	2.7	2.2	2/A	Loading concrete

Particulate Air Monitoring will be conducted during ground intrusive activities at the Site in accordance with the Equative Dust and Particulate Monitoring from DER-10 Technical Guidance for Site Investigation and Remediation (Appendix A). As per DER-10 Technical Guidance, any particular levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particular levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.

S.A.B = S.M.V. AS BEFORE







# Hydro Tech Environmental Air Monitoring Form

Project Name: RESIDENCIAL  
 Site Location: 11-28 31st Drive LONG ISLAND CITY, NY  
 Date: 11/28/17  
 HTE Personnel: PAUL MATLI  
 Weather: SUNNY  
 Temperature: 50°F  
 Humidity:

TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results: (mg/m³)	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500						
7:15 AM	PID 2000 / PDR 1500						
7:30 AM	PID 2000 / PDR 1500						
7:45 AM	PID 2000 / PDR 1500						
8:00 AM	PID 2000 / PDR 1500	0.015	N	N	0.0		
8:15 AM	PID 2000 / PDR 1500	0.019			0.0		EXCAVATING
8:30 AM	PID 2000 / PDR 1500	0.013			0.2		FOR UNDERPIN
8:45 AM	PID 2000 / PDR 1500	0.015			0.5		"
9:00 AM	PID 2000 / PDR 1500	0.016			0.2		"
9:15 AM	PID 2000 / PDR 1500	0.020			0.5		LOW ACTIVITY
9:30 AM	PID 2000 / PDR 1500	0.019			0.6		"
9:45 AM	PID 2000 / PDR 1500	0.022			0.4		"
10:00 AM	PID 2000 / PDR 1500	0.020			0.5		EXCAVATING
10:15 AM	PID 2000 / PDR 1500	0.019			0.5		UNDERPIN
10:30 AM	PID 2000 / PDR 1500	0.015			0.5		"
10:45 AM	PID 2000 / PDR 1500	0.016			0.6		"
11:00 AM	PID 2000 / PDR 1500	0.015			0.5		PILING UP
11:15 AM	PID 2000 / PDR 1500	0.012			0.5		DIRT
11:30 AM	PID 2000 / PDR 1500	0.015			0.0		"
11:45 AM	PID 2000 / PDR 1500	0.016			0.6		"
12:00 PM	PID 2000 / PDR 1500	0.019			0.5		LOW ACTIVITY
12:15 PM	PID 2000 / PDR 1500	0.021			0.6		"
12:30 PM	PID 2000 / PDR 1500	0.021			0.5		"
12:45 PM	PID 2000 / PDR 1500	0.015			0.0		
1:00 PM	PID 2000 / PDR 1500	0.016			0.2		
1:15 PM	PID 2000 / PDR 1500	0.021			0.5		
1:30 PM	PID 2000 / PDR 1500	0.020			0.6		
1:45 PM	PID 2000 / PDR 1500	0.031			0.5		
2:00 PM	PID 2000 / PDR 1500	0.031	Y	Y	0.0		
2:15 PM	PID 2000 / PDR 1500						
2:30 PM	PID 2000 / PDR 1500						
2:45 PM	PID 2000 / PDR 1500						
3:00 PM	PID 2000 / PDR 1500						
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m³ will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m³ will result in the work to stop immediately.

LABORERS: SCHULMAN HOMES INC

- LUIS > USING SHOVELS TO EXCAVATE UNDERPINS
- ELI



Hydro Tech Environmental Air Monitoring Form							
Project Name:							
Site Location: 11-22 31st DEVE LONG ISLAND CITY NY							
Date: 11/30/17							
HTE Personnel: PAUL MATLI							
Weather: Cloudy / Cold							
Temperature: 43°F							
Humidity:							
TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results: (mg/m³)	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500						
7:15 AM	PID 2000 / PDR 1500						
7:30 AM	PID 2000 / PDR 1500						
7:45 AM	PID 2000 / PDR 1500						
8:00 AM	PID 2000 / PDR 1500	0.015	N	N	N/A		STARTING TO
8:15 AM	PID 2000 / PDR 1500	0.050					EXCAVATE
8:30 AM	PID 2000 / PDR 1500	0.021					UNDER PINS
8:45 AM	PID 2000 / PDR 1500	0.035					"
9:00 AM	PID 2000 / PDR 1500	0.031					"
9:15 AM	PID 2000 / PDR 1500	0.041					"
9:30 AM	PID 2000 / PDR 1500	0.091					"
9:45 AM	PID 2000 / PDR 1500	0.090					LOW ACTIVITY
10:00 AM	PID 2000 / PDR 1500	0.035					"
10:15 AM	PID 2000 / PDR 1500	0.022					"
10:30 AM	PID 2000 / PDR 1500	0.012					EXCAVATING
10:45 AM	PID 2000 / PDR 1500	0.062					PITS
11:00 AM	PID 2000 / PDR 1500	0.065					FOR UNDERPIN
11:15 AM	PID 2000 / PDR 1500	0.022					"
11:30 AM	PID 2000 / PDR 1500	0.065					"
11:45 AM	PID 2000 / PDR 1500	0.090					"
12:00 PM	PID 2000 / PDR 1500	0.058					STOP PILING
12:15 PM	PID 2000 / PDR 1500	0.025					"
12:30 PM	PID 2000 / PDR 1500	0.022					"
12:45 PM	PID 2000 / PDR 1500	0.023					"
1:00 PM	PID 2000 / PDR 1500	0.019					EXCAVATING
1:15 PM	PID 2000 / PDR 1500	0.065					"
1:30 PM	PID 2000 / PDR 1500	0.069					"
1:45 PM	PID 2000 / PDR 1500	0.055					BACK FILLING
2:00 PM	PID 2000 / PDR 1500	0.051					TO POUR
2:15 PM	PID 2000 / PDR 1500	0.053					CONCRETE
2:30 PM	PID 2000 / PDR 1500	0.054					
2:45 PM	PID 2000 / PDR 1500	0.055					
3:00 PM	PID 2000 / PDR 1500	0.014	↓	↓	↓		↓
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m³ will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m³ will result in the work to stop immediately.















# Hydro Tech Environmental Air Monitoring Form

Project Name:  
 Site Location: 11-28 31st Drive LTO  
 Date: 12/13/17  
 HTE Personnel: PAUL MATLI

Weather:

Temperature:

Humidity:

TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results: (mg/m <sup>3</sup> )	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500	0.045	N	N	0.0		waiting for delivery of new blue stone
7:15 AM	PID 2000 / PDR 1500	0.040			0.1		"
7:30 AM	PID 2000 / PDR 1500	0.031			0.2		"
7:45 AM	PID 2000 / PDR 1500	0.035			0.1		"
8:00 AM	PID 2000 / PDR 1500	0.038			0.2		"
8:15 AM	PID 2000 / PDR 1500	0.031			0.1		"
8:30 AM	PID 2000 / PDR 1500	0.041			0.2		Dumping blue stone
8:45 AM	PID 2000 / PDR 1500	0.042			0.1		stop
9:00 AM	PID 2000 / PDR 1500	0.045			0.2		
9:15 AM	PID 2000 / PDR 1500	0.049			0.3		Digging Cleave pit
9:30 AM	PID 2000 / PDR 1500	0.041			0.1		
9:45 AM	PID 2000 / PDR 1500	0.039			0.2		
10:00 AM	PID 2000 / PDR 1500	0.041			0.2		
10:15 AM	PID 2000 / PDR 1500	0.028			0.1		
10:30 AM	PID 2000 / PDR 1500	0.051			0.2		
10:45 AM	PID 2000 / PDR 1500	0.053			0.1		
11:00 AM	PID 2000 / PDR 1500	0.049			0.2		
11:15 AM	PID 2000 / PDR 1500	0.029			0.1		
11:30 AM	PID 2000 / PDR 1500	0.051			0.2		
11:45 AM	PID 2000 / PDR 1500	0.045			0.2		
12:00 PM	PID 2000 / PDR 1500	0.048			0.1		
12:15 PM	PID 2000 / PDR 1500	0.055			0.1		
12:30 PM	PID 2000 / PDR 1500	0.058			0.2		
12:45 PM	PID 2000 / PDR 1500	0.057			0.2		
1:00 PM	PID 2000 / PDR 1500	0.049			0.2		
1:15 PM	PID 2000 / PDR 1500	0.035			0.1		Back filling w/ old stone
1:30 PM	PID 2000 / PDR 1500	0.039			0.1		6 inch thickness
1:45 PM	PID 2000 / PDR 1500	0.051			0.1		
2:00 PM	PID 2000 / PDR 1500	0.050	✓	✓	0.1		
2:15 PM	PID 2000 / PDR 1500	0.049	✓	N	0.1		
2:30 PM	PID 2000 / PDR 1500	0.029	✓	N	0.2		
2:45 PM	PID 2000 / PDR 1500	0.058	N	N	0.3		
3:00 PM	PID 2000 / PDR 1500	0.045	N	N	0.3		
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during around intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



Hydro Tech Environmental Air Monitoring Form							
Project Name:							
Site Location: 11-2831ST Drive LEO							
Date: 12/19/12							
HTE Personnel: PAUL M. ALC.							
Weather:							
Temperature:							
Humidity:							
TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results: (mg/m <sup>3</sup> )	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500						
7:15 AM	PID 2000 / PDR 1500						
7:30 AM	PID 2000 / PDR 1500						
7:45 AM	PID 2000 / PDR 1500						
8:00 AM	PID 2000 / PDR 1500	0.015	N	N	0.1		Get fugitive dust
8:15 AM	PID 2000 / PDR 1500	0.020			0.1		"
8:30 AM	PID 2000 / PDR 1500	0.025			0.1		waiting on operator
8:45 AM	PID 2000 / PDR 1500	0.031			0.2		Operator to backfill
9:00 AM	PID 2000 / PDR 1500	0.030			0.2		"
9:15 AM	PID 2000 / PDR 1500	0.040			0.2		"
9:30 AM	PID 2000 / PDR 1500	0.041			0.2		"
9:45 AM	PID 2000 / PDR 1500	0.035			0.1		Low Activity
10:00 AM	PID 2000 / PDR 1500	0.030			0.1		"
10:15 AM	PID 2000 / PDR 1500	0.027			0.1		"
10:30 AM	PID 2000 / PDR 1500	0.025			0.1		"
10:45 AM	PID 2000 / PDR 1500	0.021			0.2		Operator
11:00 AM	PID 2000 / PDR 1500	0.028			0.1		Accured
11:15 AM	PID 2000 / PDR 1500	0.022			0.2		"
11:30 AM	PID 2000 / PDR 1500	0.031			0.3		Beginning backfilling
11:45 AM	PID 2000 / PDR 1500	0.034			0.1		"
12:00 PM	PID 2000 / PDR 1500	0.028			0.1		"
12:15 PM	PID 2000 / PDR 1500	0.025			0.1		Backfilling
12:30 PM	PID 2000 / PDR 1500	0.027			0.1		"
12:45 PM	PID 2000 / PDR 1500	0.020			0.1		"
1:00 PM	PID 2000 / PDR 1500	0.028			0.1		"
1:15 PM	PID 2000 / PDR 1500	0.031			0.1		Moving dirt to back of property
1:30 PM	PID 2000 / PDR 1500	0.035			0.1		"
1:45 PM	PID 2000 / PDR 1500	0.035			0.1		"
2:00 PM	PID 2000 / PDR 1500	0.030			0.1		"
2:15 PM	PID 2000 / PDR 1500	0.031			0.6		"
2:30 PM	PID 2000 / PDR 1500	0.035	✓	✓	0.6		Leveling
2:45 PM	PID 2000 / PDR 1500						
3:00 PM	PID 2000 / PDR 1500						
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



# Hydro-Tech Environmental Air Monitoring Form

Project Name: **11-28 31st DRIVE, LONG ISLAND CITY.**  
 Site Location: **11-28 31st**  
 Date: **8-25-2018**  
 HTE Personnel: **Julio GALAN**  
 Weather: **SUNNY**  
 Temperature: **79**  
 Humidity: **13**

TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results (mg/m <sup>3</sup> )	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500	0.000	N	N	0.0	N/A	HTC ON SITE
7:15 AM	PID 2000 / PDR 1500	0.038	N	N	0.0	N/A	NO ACTIVITIES
7:30 AM	PID 2000 / PDR 1500	0.010	N	N	0.0	N/A	S.A.B
7:45 AM	PID 2000 / PDR 1500	0.022	N	N	0.0	N/A	S.A.B
8:00 AM	PID 2000 / PDR 1500	0.034	N	N	0.0	N/A	S.A.B
8:15 AM	PID 2000 / PDR 1500	0.015	N	N	0.0	N/A	S.A.B
8:30 AM	PID 2000 / PDR 1500	0.038	N	N	0.0	N/A	S.A.B
8:45 AM	PID 2000 / PDR 1500	0.015	N	N	0.0	N/A	S.A.B
9:00 AM	PID 2000 / PDR 1500	0.008	N	N	0.0	N/A	S.A.B
9:15 AM	PID 2000 / PDR 1500	0.013	N	N	0.0	N/A	S.A.B
9:30 AM	PID 2000 / PDR 1500	0.036	N	N	0.0	N/A	S.A.B
9:45 AM	PID 2000 / PDR 1500	0.078	N	N	0.0	N/A	S.A.B
10:00 AM	PID 2000 / PDR 1500	0.014	N	N	0.0	N/A	S.A.B
10:15 AM	PID 2000 / PDR 1500	0.043	N	N	0.0	N/A	S.A.B
10:30 AM	PID 2000 / PDR 1500	0.061	N	N	0.0	N/A	S.A.B
10:45 AM	PID 2000 / PDR 1500	0.059	N	N	0.0	N/A	S.A.B
11:00 AM	PID 2000 / PDR 1500	0.007	N	N	0.0	N/A	S.A.B
11:15 AM	PID 2000 / PDR 1500	0.025	N	N	0.0	N/A	S.A.B
11:30 AM	PID 2000 / PDR 1500	0.012	N	N	0.0	N/A	S.A.B
11:45 AM	PID 2000 / PDR 1500	0.039	N	N	0.0	N/A	UNLOADING TRUCKS
12:00 PM	PID 2000 / PDR 1500	0.030	N	N	0.0	N/A	BACKFILLING
12:15 PM	PID 2000 / PDR 1500	0.041	N	N	0.0	N/A	BACKFILLING
12:30 PM	PID 2000 / PDR 1500	0.029	N	N	0.0	N/A	BACKFILLING
12:45 PM	PID 2000 / PDR 1500	0.023	N	N	0.0	N/A	BACKFILLING
1:00 PM	PID 2000 / PDR 1500	0.006	N	N	0.0	N/A	HTC OFF SITE
1:15 PM	PID 2000 / PDR 1500	0.011	N	N	0.0	N/A	
1:30 PM	PID 2000 / PDR 1500						
1:45 PM	PID 2000 / PDR 1500						
2:00 PM	PID 2000 / PDR 1500						
2:15 PM	PID 2000 / PDR 1500						
2:30 PM	PID 2000 / PDR 1500						
2:45 PM	PID 2000 / PDR 1500						
3:00 PM	PID 2000 / PDR 1500						
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground intrusive activities at the site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



# Hydro-Tech Environmental Air Monitoring Form

Project Name: 11-28 31<sup>ST</sup> DRIVE, LONG ISLAND CITY  
 Site Location: 01-26-2018  
 Date: JULIO GALARRA  
 MTE Personnel: PARTIAL CLOUDY  
 Weather: 36  
 Temperature: 14.7  
 Humidity:

TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results (mg/m <sup>3</sup> )	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500	0.0 11	N	N	0.0	N/A	HTE ON SITE
7:15 AM	PID 2000 / PDR 1500	0.0 45	N	N	0.0	N/A	UNLOADING TRUCKS
7:30 AM	PID 2000 / PDR 1500	0.0 30	N	N	0.0	N/A	UNLOADING TRUCKS
7:45 AM	PID 2000 / PDR 1500	0.0 53	N	N	0.0	N/A	UNLOADING TRUCKS
8:00 AM	PID 2000 / PDR 1500	0.0 22	N	N	0.0	N/A	LOW ACTIVITY
8:15 AM	PID 2000 / PDR 1500	0.0 52	N	N	0.0	N/A	LOW ACTIVITY
8:30 AM	PID 2000 / PDR 1500	0.0 40	N	N	0.0	N/A	LOW ACTIVITY
8:45 AM	PID 2000 / PDR 1500	0.0 72	N	N	0.0	N/A	LOW ACTIVITY
9:00 AM	PID 2000 / PDR 1500	0.0 14	Y	N	0.0	SPRAYING WATER	UNLOADING TRUCKS
9:15 AM	PID 2000 / PDR 1500	0.0 22	N	N	0.0	N/A	UNLOADING TRUCKS
9:30 AM	PID 2000 / PDR 1500	0.0 58	N	N	0.0	N/A	BACKFILLING SITE
9:45 AM	PID 2000 / PDR 1500	0.0 82	N	N	0.0	N/A	BACKFILLING SITE
10:00 AM	PID 2000 / PDR 1500	0.0 26	N	N	0.0	N/A	BACKFILLING SITE
10:15 AM	PID 2000 / PDR 1500	0.0 86	N	N	0.0	N/A	LOW ACTIVITY
10:30 AM	PID 2000 / PDR 1500	0.0 80	N	N	0.0	N/A	LOW ACTIVITY
10:45 AM	PID 2000 / PDR 1500	0.0 40	N	N	0.0	N/A	UNLOADING TRUCKS
11:00 AM	PID 2000 / PDR 1500	0.0 23	Y	N	0.0	SPRAYING WATER	UNLOADING TRUCKS
11:15 AM	PID 2000 / PDR 1500	0.0 18	N	N	0.0	N/A	UNLOADING TRUCKS
11:30 AM	PID 2000 / PDR 1500	0.0 17	N	N	0.0	N/A	NO ACTIVITY
11:45 AM	PID 2000 / PDR 1500	0.0 55	N	N	0.0	N/A	NO ACTIVITY
12:00 PM	PID 2000 / PDR 1500	0.0 46	N	N	0.0	N/A	NO ACTIVITY
12:15 PM	PID 2000 / PDR 1500	0.0 29	N	N	0.0	N/A	BACKFILLING
12:30 PM	PID 2000 / PDR 1500	0.0 80	N	N	0.0	N/A	BACKFILLING
12:45 PM	PID 2000 / PDR 1500	0.0 24	N	N	0.0	N/A	BACKFILLING
1:00 PM	PID 2000 / PDR 1500	0.0 83	N	N	0.0	N/A	UNLOADING TRUCKS
1:15 PM	PID 2000 / PDR 1500	0.0 26	Y	N	0.0	SPRAYING WATER	UNLOADING TRUCKS
1:30 PM	PID 2000 / PDR 1500	0.0 16	N	N	0.0	N/A	BACKFILLING
1:45 PM	PID 2000 / PDR 1500	0.0 92	N	N	0.0	N/A	BACKFILLING
2:00 PM	PID 2000 / PDR 1500	0.0 16	N	N	0.0	N/A	BACKFILLING
2:15 PM	PID 2000 / PDR 1500	0.0 42	N	N	0.0	N/A	BACKFILLING
2:30 PM	PID 2000 / PDR 1500	0.0 29	N	N	0.0	N/A	BACKFILLING
2:45 PM	PID 2000 / PDR 1500	0.0 53	N	N	0.0	N/A	RESUME WORK
3:00 PM	PID 2000 / PDR 1500	0.0 21	N	N	0.0	N/A	UNLOADING TRUCKS
3:15 PM	PID 2000 / PDR 1500	0.0 13	N	N	0.0	N/A	UNLOADING TRUCKS
3:30 PM	PID 2000 / PDR 1500	0.0 44	N	N	0.0	N/A	BACKFILLING
3:45 PM	PID 2000 / PDR 1500	0.0 18	N	N	0.0	N/A	BACKFILLING
4:00 PM	PID 2000 / PDR 1500						HTE OFF SITE
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground-intrusive activities at the site in accordance with the fugitive dust and particulate monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



# Hydro-Tech Environmental Air Monitoring Form

Project Name: 11-28 31st DRIVE, LONG ISLAND CITY  
 Site Location: 11-28 31st DRIVE, LONG ISLAND CITY  
 Date: 1-29-2019  
 HTE Personnel: LUCIO GALARZA  
 Weather: SUNNY  
 Temperature: 38  
 Humidity: 26%

TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results (mg/m <sup>3</sup> )	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500	0.0 27	N	N	0.0	N/A	SETTING UP PIST/PDR
7:15 AM	PID 2000 / PDR 1500	0.0 34	N	N	0.0	N/A	UNLOADING TRUCK
7:30 AM	PID 2000 / PDR 1500	0.0 60	N	N	0.0	N/A	S. A. 13
7:45 AM	PID 2000 / PDR 1500	0.0 48	N	N	0.0	N/A	S. A. 13
8:00 AM	PID 2000 / PDR 1500	0.0 19	N	N	0.0	N/A	BACKFILLING YARD
8:15 AM	PID 2000 / PDR 1500	0.0 24	N	N	0.0	N/A	UNLOADING TRUCK
8:30 AM	PID 2000 / PDR 1500	0.0 39	N	N	0.0	N/A	S. A. 13
8:45 AM	PID 2000 / PDR 1500	0.0 32	N	N	0.0	N/A	S. A. 13
9:00 AM	PID 2000 / PDR 1500	0.0 16	N	N	0.0	N/A	BACKFILLING YARD
9:15 AM	PID 2000 / PDR 1500	0.0 26	N	N	0.0	N/A	BACKFILLING YARD
9:30 AM	PID 2000 / PDR 1500	0.0 31	N	N	0.0	N/A	BACKFILLING YARD
9:45 AM	PID 2000 / PDR 1500	0.0 44	N	N	0.0	N/A	NO ACTIVITY
10:00 AM	PID 2000 / PDR 1500	0.0 28	N	N	0.0	N/A	HTC OFFSITE
10:15 AM	PID 2000 / PDR 1500						
10:30 AM	PID 2000 / PDR 1500						
10:45 AM	PID 2000 / PDR 1500						
11:00 AM	PID 2000 / PDR 1500						
11:15 AM	PID 2000 / PDR 1500						
11:30 AM	PID 2000 / PDR 1500						
11:45 AM	PID 2000 / PDR 1500						
12:00 PM	PID 2000 / PDR 1500						
12:15 PM	PID 2000 / PDR 1500						
12:30 PM	PID 2000 / PDR 1500						
12:45 PM	PID 2000 / PDR 1500						
1:00 PM	PID 2000 / PDR 1500						
1:15 PM	PID 2000 / PDR 1500						
1:30 PM	PID 2000 / PDR 1500						
1:45 PM	PID 2000 / PDR 1500						
2:00 PM	PID 2000 / PDR 1500						
2:15 PM	PID 2000 / PDR 1500						
2:30 PM	PID 2000 / PDR 1500						
2:45 PM	PID 2000 / PDR 1500						
3:00 PM	PID 2000 / PDR 1500						
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



# Hydro-Tech Environmental Air Monitoring Form

Project Name: 11-28 31<sup>st</sup> Dr  
 Site Location: 11-28 31<sup>st</sup> DRIVE, ASTORIA  
 Date: 2/14/18  
 HTE Personnel: DAVE MILANESI  
 Weather: Cloudy / 42°F  
 Temperature: 42°F  
 Humidity:

TIME	Air Monitoring Equipment Make and Model	Air Particulate levels Sampling Results (mg/m <sup>3</sup> )	Visible Dust (Y/N)	Odors (Y/N)	PID Readings (PPM)	Corrective Action Taken	Additional comments
7:00 AM	PID 2000 / PDR 1500						
7:15 AM	PID 2000 / PDR 1500						
7:30 AM	PID 2000 / PDR 1500						
7:45 AM	PID 2000 / PDR 1500						
8:00 AM	PID 2000 / PDR 1500						
8:15 AM	PID 2000 / PDR 1500						
8:30 AM	PID 2000 / PDR 1500						
8:45 AM	PID 2000 / PDR 1500						
8:50 AM	PID 2000 / PDR 1500	0.009	N	N	0.0	N/A	HTE ON SITE
9:15 AM	PID 2000 / PDR 1500	0.011					MARKING WELL LOCATIONS
9:30 AM	PID 2000 / PDR 1500	0.018					"
9:45 AM	PID 2000 / PDR 1500	0.016					RIG ARRIVED
10:00 AM	PID 2000 / PDR 1500	0.014					SETTING UP RIG
10:15 AM	PID 2000 / PDR 1500	0.021					INSTALLING WELLS
10:30 AM	PID 2000 / PDR 1500	0.028					"
10:45 AM	PID 2000 / PDR 1500	0.019					"
11:00 AM	PID 2000 / PDR 1500	0.024					"
11:15 AM	PID 2000 / PDR 1500	0.037					"
11:30 AM	PID 2000 / PDR 1500	0.026					"
11:45 AM	PID 2000 / PDR 1500	0.027					"
12:00 PM	PID 2000 / PDR 1500	0.033					"
12:15 PM	PID 2000 / PDR 1500	0.030					"
12:30 PM	PID 2000 / PDR 1500	0.041					LUNCH
12:45 PM	PID 2000 / PDR 1500	0.029					"
1:00 PM	PID 2000 / PDR 1500	0.031					"
1:15 PM	PID 2000 / PDR 1500	0.038					LOW ACTIVITY
1:30 PM	PID 2000 / PDR 1500	0.021					"
1:45 PM	PID 2000 / PDR 1500	0.022					PURGING WELLS
2:00 PM	PID 2000 / PDR 1500	0.020					"
2:15 PM	PID 2000 / PDR 1500	0.017					"
2:30 PM	PID 2000 / PDR 1500	0.023					"
2:45 PM	PID 2000 / PDR 1500	0.026					"
3:00 PM	PID 2000 / PDR 1500	0.019	↓	↓	↓	↓	"
3:15 PM	PID 2000 / PDR 1500						
3:30 PM	PID 2000 / PDR 1500						
3:45 PM	PID 2000 / PDR 1500						
4:00 PM	PID 2000 / PDR 1500						
4:15 PM	PID 2000 / PDR 1500						
4:30 PM	PID 2000 / PDR 1500						
4:45 PM	PID 2000 / PDR 1500						
5:00 PM	PID 2000 / PDR 1500						

Particulate Air Monitoring will be conducted during ground intrusive activities at the Site in accordance with the Fugitive Dust and Particulate Monitoring from DER-10 Technical Guidance. As per DER-10 Technical Guidance, any particulate levels to exceed 0.10 mg/m<sup>3</sup> will result in the implementation of dust suppression techniques to allow work to continue. As per DER-10 Technical Guidance, any particulate levels to exceed 0.15 mg/m<sup>3</sup> will result in the work to stop immediately.



**ATTACHMENT D**  
**NYSDEC Approvals of Substantive  
Technical Requirements**



# New York State Department of Environmental Conservation

## Division of Environmental Remediation

Office of the Director, 12th Floor

625 Broadway, Albany, New York 12233-7011

Phone: (518) 402-9706 • Fax: (518) 402-9020

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

JUN 02 2014

George Man  
Attn: Timothy Li, R.A.  
957 56<sup>th</sup> Street  
Brooklyn, New York 11219

**RE: Site Name: 11-28 31<sup>st</sup> Drive**  
**Site No.: C241159**  
**Location of Site: 11-28 31<sup>st</sup> Drive, Queens County, Queens, New York**

Dear Mr. Man:

To complete your file, attached is a fully executed copy of the Brownfield Cleanup Agreement for the 11-28 31<sup>st</sup> Drive Site.

If you have any further questions relating to this matter, please contact the project attorney for this site, John Byrne, Esq., NYS Department of Environmental Conservation, Office of General Counsel, One Hunters Point Plaza, 47-40 21<sup>st</sup> Street, Long Island City, New York 11101, or by email at [jrbyrne@gw.dec.state.ny.us](mailto:jrbyrne@gw.dec.state.ny.us).

Sincerely,

Robert W. Schick, P.E.

Director

Division of Environmental Remediation

Enclosure

ec: Sondra Martinkat, Project Manager

cc w/enc.: J. Byrne, Esq.  
A. Guglielmi, Esq./E. Armater



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
BROWNFIELD CLEANUP PROGRAM

ECL §27-1401 *et seq.*

In the Matter of a Remedial Program for

**BROWNFIELD SITE  
CLEANUP AGREEMENT  
Index No.: C241159-04-14**

**11-28 31st Drive**

DEC Site No.: C241159

Located at: 11-28 31st Drive  
Queens County  
Queens, NY 11106

Hereinafter referred to as "Site"

by:

George Man  
957 56th Street, Brooklyn, NY 11219

Hereinafter referred to as "Applicant"

**WHEREAS**, the Department of Environmental Conservation (the "Department") is authorized to administer the Brownfield Cleanup Program ("BCP") set forth in Article 27, Title 14 of the Environmental Conservation Law ("ECL"); and

**WHEREAS**, the Applicant submitted an application received by the Department on January 21, 2014; and

**WHEREAS**, the Department has determined that the Site and Applicant are eligible to participate in the BCP.

**NOW, THEREFORE**, IN CONSIDERATION OF AND IN EXCHANGE FOR THE MUTUAL COVENANTS AND PROMISES, THE PARTIES AGREE TO THE FOLLOWING:

I. Applicant Status

The Applicant, George Man, is participating in the BCP as a Volunteer as defined in ECL 27-1405(1)(b).

II. Real Property

The Site subject to this Brownfield Cleanup Agreement (the "BCA" or "Agreement") consists of approximately 0.055 acres, a Map of which is attached as Exhibit "A", and is described as follows:

Tax Map/Parcel No.: 502-22  
Street Number: 11-28 31st Drive, Queens  
Owner: George Man



### III. Payment of State Costs

Invoices shall be sent to Applicant at the following address:

George Man  
Attn: Timothy Li, R.A.  
957 56th Street  
Brooklyn, NY 11219  
[tli.architect@gmail.com](mailto:tli.architect@gmail.com)

### IV. Communications

A. All written communications required by this Agreement shall be transmitted by United States Postal Service, by private courier service, by hand delivery, or by electronic mail.

1. Communication from Applicant shall be sent to:

Sondra Martinkat  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
One Hunters Point Plaza  
47-40 21st Street  
Long Island City, NY 11101  
[smmartin@gw.dec.state.ny.us](mailto:smmartin@gw.dec.state.ny.us)

Note: one hard copy (unbound) of work plans and reports is required, as well as one electronic copy.

Krista Anders (electronic copy only)  
New York State Department of Health  
Bureau of Environmental Exposure Investigation  
Empire State Plaza  
Corning Tower Room 1787  
Albany, NY 12237  
[kma06@health.state.ny.us](mailto:kma06@health.state.ny.us)

John Byrne, Esq. (correspondence only)  
New York State Department of Environmental Conservation  
Office of General Counsel  
One Hunters Point Plaza  
47-40 21st Street  
Long Island City, NY 11101  
[jfbyrne@gw.dec.state.ny.us](mailto:jfbyrne@gw.dec.state.ny.us)

2. Communication from the Department to Applicant shall be sent to:

George Man  
Attn: c/o Timothy Li, R.A.  
957 56th Street  
Brooklyn, NY 11219  
[tli.architect@gmail.com](mailto:tli.architect@gmail.com)



B. The Department and Applicant reserve the right to designate additional or different addressees for communication on written notice to the other. Additionally, the Department reserves the right to request that the Applicant provide more than one paper copy of any work plan or report.

C. Each party shall notify the other within ninety (90) days after any change in the addresses listed in this paragraph or in Paragraph III.

V. Miscellaneous

A. Applicant acknowledges that it has read, understands, and agrees to abide by all the terms set forth in Appendix A - "Standard Clauses for All New York State Brownfield Site Cleanup Agreements" which is attached to and hereby made a part of this Agreement as if set forth fully herein.

B. In the event of a conflict between the terms of this BCA (including any and all attachments thereto and amendments thereof) and the terms of Appendix A, the terms of this BCA shall control.


C. The effective date of this Agreement is the date it is signed by the Commissioner or the Commissioner's designee.

DATED:

JUN 02 2014

JOSEPH J. MARTENS  
COMMISSIONER  
NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION

By:

  
\_\_\_\_\_  
Robert W. Schick, P.E., Director  
Division of Environmental Remediation



CONSENT BY APPLICANT

Applicant hereby consents to the issuing and entering of this Agreement, waives Applicant's right to a hearing herein as provided by law, and agrees to be bound by this Agreement.

George Man

By: X George Man

Title: President

Date: 5/12/14

STATE OF NEW YORK )  
 ) ss:  
COUNTY OF New York )

On the 12<sup>th</sup> day of May in the year 2014 before me, the undersigned, personally appeared George Man, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

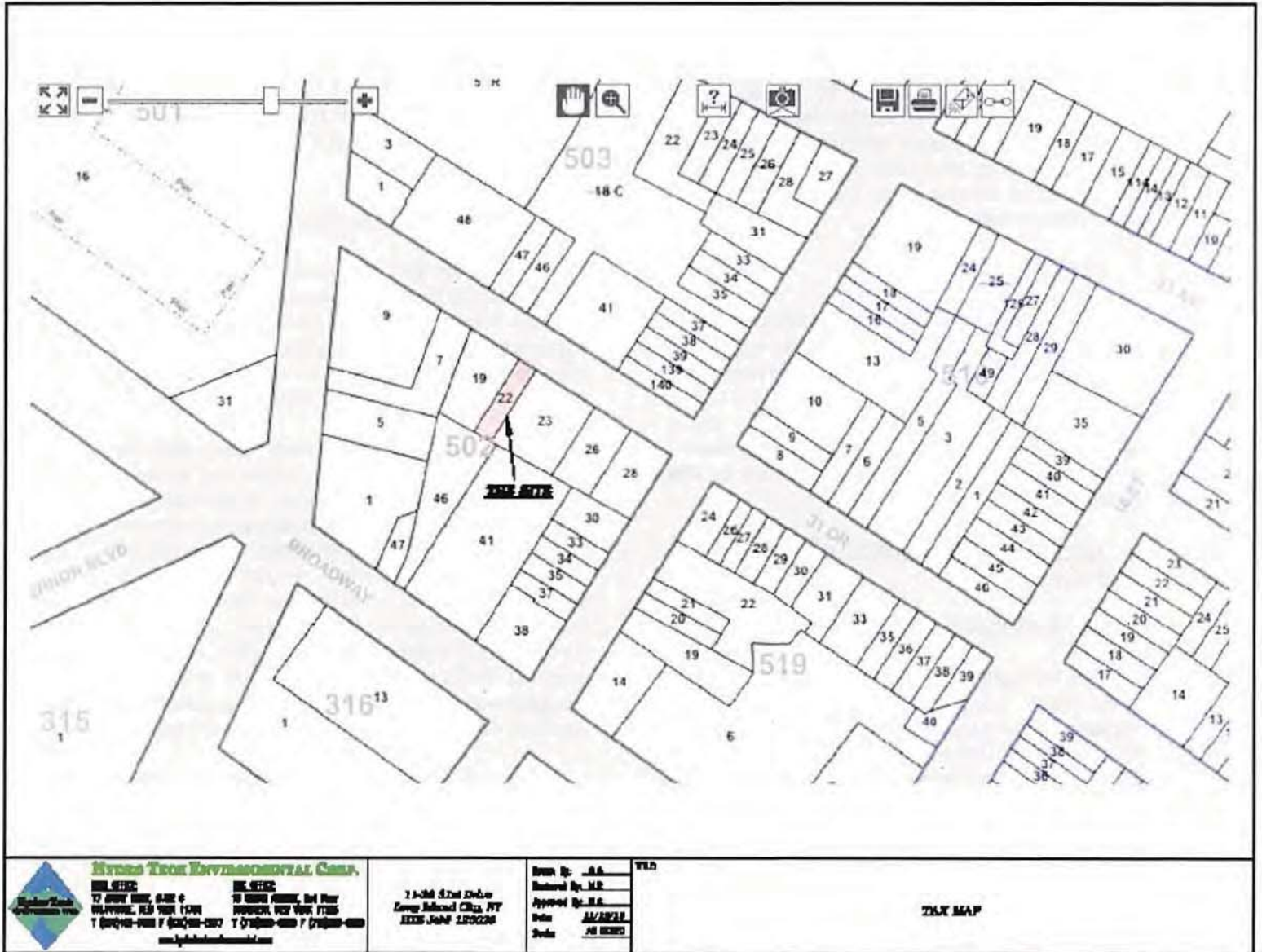
Steven T Ho  
Signature and Office of individual  
taking acknowledgment

STEVEN T HO  
NOTARY PUBLIC-STATE OF NEW YORK  
No. 01HO6233947  
Qualified in Queens County  
My Commission Expires January 03, 2015



# EXHIBIT A

## SITE MAP





## APPENDIX A

### STANDARD CLAUSES FOR ALL NEW YORK STATE BROWNFIELD SITE CLEANUP AGREEMENTS

The parties to the Brownfield Site Cleanup Agreement (hereinafter "the BCA" or "the Agreement" or "this Agreement") agree to be bound by the following clauses which are hereby made a part of the BCA. The word "Applicant" herein refers to any party to the Agreement, other than the New York State Department of Environmental Conservation (herein after "Department").

#### I. Citizen Participation Plan

Within twenty (20) days after the effective date of this Agreement, Applicant shall submit for review and approval a written citizen participation plan prepared in accordance with the requirements of ECL § 27-1417 and 6 NYCRR §§ 375-1.10 and 375-3.10. Upon approval, the Citizen Participation Plan shall be deemed to be incorporated into and made a part of this Agreement.

#### II. Development, Performance, and Reporting of Work Plans

##### A. Work Plan Requirements

The work plans ("Work Plan" or "Work Plans") under this Agreement shall be prepared and implemented in accordance with the requirements of ECL Article 27, Title 14, 6 NYCRR §§ 375-1.6(a) and 375-3.6, and all applicable laws, rules, regulations, and guidance documents. The Work Plans shall be captioned as follows:

1. "Remedial Investigation Work Plan" if the Work Plan provides for the investigation of the nature and extent of contamination within the boundaries of the Site and, if the Applicant is a "Participant", the extent of contamination emanating from such Site. If the Applicant is a "Volunteer" it shall perform a qualitative exposure assessment of the contamination emanating from the site in accordance with ECL § 27-1415(2)(b) and Department guidance;

2. "Remedial Work Plan" if the Work Plan provides for the development and implementation of a Remedial Program for contamination within the boundaries of the Site and, if the Applicant is a "Participant", the contamination that has emanated from such Site;

3. "IRM Work Plan" if the Work Plan provides for an interim remedial measure; or

4. "Site Management Plan" if the Work Plan provides for the identification and implementation of institutional and/or engineering controls as well as any

necessary monitoring and/or operation and maintenance of the remedy.

5. "Supplemental" if additional work plans other than those set forth in II.A.1-4 are required to be prepared and implemented.

##### B. Submission/Implementation of Work Plans

1. The first proposed Work Plan to be submitted under this Agreement shall be submitted no later than thirty (30) days after the effective date of this Agreement. Thereafter, the Applicant shall submit such other and additional work plans as determined in a schedule to be approved by the Department.

2. Any proposed Work Plan shall be submitted for the Department's review and approval and shall include, at a minimum, a chronological description of the anticipated activities to be conducted in accordance with current guidance, a schedule for performance of those activities, and sufficient detail to allow the Department to evaluate that Work Plan. The Department shall use best efforts in accordance with 6 NYCRR § 375-3.6(b) to approve, modify, or reject a proposed Work Plan within forty-five (45) days from its receipt or within fifteen (15) days from the close of the comment period, if applicable, whichever is later.

i. Upon the Department's written approval of a Work Plan, such Department-approved Work Plan shall be deemed to be incorporated into and made a part of this Agreement and shall be implemented in accordance with the schedule contained therein.

ii. If the Department requires modification of a Work Plan, the reason for such modification shall be provided in writing and the provisions of 6 NYCRR § 375-1.6(d)(3) shall apply.

iii. If the Department disapproves a Work Plan, the reason for such disapproval shall be provided in writing and the provisions of 6 NYCRR § 375-1.6(d)(4) shall apply.

3. A Site Management Plan, if necessary, shall be submitted in accordance with the schedule set forth in the IRM Work Plan or Remedial Work Plan.

##### C. Submission of Final Reports

1. In accordance with the schedule contained in an approved Work Plan, Applicant shall submit a Final Report for an Investigation Work Plan prepared in accordance with ECL § 27-1411(1) and 6 NYCRR §



375-1.6. If such Final Report concludes that no remediation is necessary, and the Site does not meet the requirements for Track 1, Applicant shall submit an Alternatives Analysis prepared in accordance with ECL § 27-1413 and 6 NYCRR § 375-3.8(f) that supports such determination.

2. In accordance with the schedule contained in an approved Work Plan, Applicant shall submit a Final Engineering Report certifying that remediation of the Site has been performed in accordance with the requirements of ECL §§ 27-1419(1) and (2) and 6 NYCRR § 375-1.6. The Department shall review such Report, the submittals made pursuant to this Agreement, and any other relevant information regarding the Site and make a determination as to whether the goals of the remedial program have been or will be achieved in accordance with established timeframes; if so, a written Certificate of Completion will be issued in accordance with ECL § 27-1419, 6 NYCRR §§ 375-1.9 and 375-3.9.

3. Within sixty (60) days of the Department's approval of a Final Report, Applicant shall submit such additional Work Plans as it proposes to implement. Failure to submit any additional Work Plans within such period shall, unless other Work Plans are under review by the Department or being implemented by Applicant, result in the termination of this Agreement pursuant to Paragraph XII.

#### D. Review of Submittals other than Work Plans

1. The Department shall timely notify Applicant in writing of its approval or disapproval of each submittal other than a Work Plan in accordance with 6 NYCRR § 375-1.6. All Department-approved submittals shall be incorporated into and become an enforceable part of this Agreement.

2. If the Department disapproves a submittal covered by this Subparagraph, it shall specify the reason for its disapproval and may request Applicant to modify or expand the submittal. Within fifteen (15) days after receiving written notice that Applicant's submittal has been disapproved, Applicant shall elect in writing to either (i) modify or expand it within thirty (30) days of receipt of the written notice of disapproval; (ii) complete any other Department-approved Work Plan(s); (iii) invoke dispute resolution pursuant to Paragraph XIII; or (iv) terminate this Agreement pursuant to Paragraph XII. If Applicant submits a revised submittal and it is disapproved, the Department and Applicant may pursue whatever remedies may be available under this Agreement or under law.

#### E. Department's Determination of Need for Remediation

The Department shall determine upon its approval of each Final Report dealing with the investigation of the Site whether remediation, or additional remediation as the case may be, is needed for protection of public health and the environment.

1. If the Department makes a preliminary determination that remediation, or additional remediation, is not needed for protection of public health and the environment, the Department shall notify the public of such determination and seek public comment in accordance with ECL § 27-1417(3)(f). The Department shall provide timely notification to the Applicant of its final determination following the close of the public comment period.

2. If the Department determines that additional remediation is not needed and such determination is based upon use restrictions, Applicant shall cause to be recorded an Environmental Easement in accordance with 6 NYCRR § 375-1.8(h).

3. If the Department determines that remediation, or additional remediation, is needed, Applicant may elect to submit for review and approval a proposed Remedial Work Plan (or modify an existing Work Plan for the Site) for a remedy selected upon due consideration of the factors set forth in ECL § 27-1415(3) and 6 NYCRR § 375-1.8(f). A proposed Remedial Work Plan addressing the Site's remediation will be noticed for public comment in accordance with ECL § 27-1417(3)(f) and the Citizen Participation Plan developed pursuant to this Agreement. If the Department determines following the close of the public comment period that modifications to the proposed Remedial Work Plan are needed, Applicant agrees to negotiate appropriate modifications to such Work Plan. If Applicant elects not to develop a Work Plan under this Subparagraph then this Agreement shall terminate in accordance with Paragraph XII. If the Applicant elects to develop a Work Plan, then it will be reviewed in accordance with Paragraph II.D above.

#### F. Institutional/Engineering Control Certification

In the event that the remedy for the Site, if any, or any Work Plan for the Site, requires institutional or engineering controls, Applicant shall submit a written certification in accordance with 6 NYCRR §§ 375-1.8(h)(3) and 375-3.8(h)(2).

#### III. Enforcement

Except as provided in Paragraph V, this Agreement shall be enforceable as a contractual agreement under the laws of the State of New York. Applicant shall not suffer any penalty except as provided in Paragraph V, or be subject to any proceeding or action if it cannot comply with any requirement of this Agreement as a result of a Force Majeure Event as described at 6



NYCRR § 375-1.5(b)(4) provided Applicant complies with the requirements set forth therein.

#### IV. Entry upon Site

A. Applicant hereby agrees to provide access to the Site and to all relevant information regarding activities at the Site in accordance with the provisions of ECL § 27-1431. Applicant agrees to provide the Department upon request with proof of access if it is not the owner of the site.

B. The Department shall have the right to periodically inspect the Site to ensure that the use of the property complies with the terms and conditions of this Agreement. The Department will generally conduct such inspections during business hours, but retains the right to inspect at any time.

C. Failure to provide access as provided for under this Paragraph may result in termination of this Agreement pursuant to Paragraph XII.

#### V. Payment of State Costs

A. Within forty-five (45) days after receipt of an itemized invoice from the Department, Applicant shall pay to the Department a sum of money which shall represent reimbursement for State Costs as provided by 6 NYCRR § 375-1.5 (b)(3)(i).

B. Costs shall be documented as provided by 6 NYCRR § 375-1.5(b)(3)(ii). The Department shall not be required to provide any other documentation of costs, provided however, that the Department's records shall be available consistent with, and in accordance with, Article 6 of the Public Officers Law.

C. Each such payment shall be made payable to the New York State Department of Environmental Conservation and shall be sent to:

Director, Bureau of Program Management  
Division of Environmental Remediation  
New York State Department of Environmental  
Conservation  
625 Broadway  
Albany, New York 12233-7012

D. The Department shall provide written notification to the Applicant of any change in the foregoing addresses.

E. If Applicant objects to any invoiced costs under this Agreement, the provisions of 6 NYCRR §§ 375-1.5 (b)(3)(v) and (vi) shall apply. Objections shall be sent to the Department as provided under subparagraph V.C above.

F. In the event of non-payment of any invoice within the 45 days provided herein, the Department may seek enforcement of this provision pursuant to Paragraph III or the Department may commence an enforcement action for non-compliance with ECL § 27-1423 and ECL § 71-4003.

#### VI. Liability Limitation

Subsequent to the issuance of a Certificate of Completion pursuant to this Agreement, Applicant shall be entitled to the Liability Limitation set forth at ECL § 27-1421, subject to the terms and conditions stated therein and to the provisions of 6 NYCRR §§ 375-1.9 and 375-3.9.

#### VII. Reservation of Rights

A. Except as provided in Subparagraph VII.B, Applicant reserves all rights and defenses under applicable law to contest, defend against, dispute, or disprove any action, proceeding, allegation, assertion, determination, or order of the Department, including any assertion of remedial liability by the Department against Applicant, and further reserves all rights including the rights to notice, to be heard, to appeal, and to any other due process respecting any action or proceeding by the Department, including the enforcement of this Agreement. The existence of this Agreement or Applicant's compliance with it shall not be construed as an admission of any liability, fault, wrongdoing, or violation of law by Applicant, and shall not give rise to any presumption of law or finding of fact which shall inure to the benefit of any third party.

B. Notwithstanding the foregoing, Applicant hereby waives any right it may have to make a claim pursuant to Article 12 of the Navigation Law with respect to the Site and releases the State and the New York Environmental Protection and Spill Compensation Fund from any and all legal or equitable claims, suits, causes of action, or demands whatsoever with respect to the Site that Applicant may have as a result of Applicant's entering into or fulfilling the terms of this Agreement.

#### VIII. Indemnification

Applicant shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless from any claim, suit, action, and cost of every name and description arising out of or resulting from the fulfillment or attempted fulfillment of this Agreement by Applicant prior to the Termination Date except for those claims, suits, actions, and costs arising from the State's gross negligence or willful or intentional misconduct by the Department, the State of New York, and/or their representatives and employees during the course of any activities conducted pursuant to this



Agreement. In the event that the Applicant is a Participant, this provision shall also include the Trustee of the State's Natural Resources. The Department shall provide Applicant with written notice no less than thirty (30) days prior to commencing a lawsuit seeking indemnification pursuant to this Paragraph.

#### IX. Change of Use

Applicant shall notify the Department at least sixty (60) days in advance of any change of use, as defined in ECL § 27-1425, which is proposed for the Site, in accordance with the provisions of 6 NYCRR § 375-1.11(d). In the event the Department determines that the proposed change of use is prohibited, the Department shall notify Applicant of such determination within forty-five (45) days of receipt of such notice.

#### X. Environmental Easement

A. Within thirty (30) days after the Department's approval of a Remedial Work Plan which relies upon one or more institutional and/or engineering controls, or within sixty (60) days after the Department's determination pursuant to Subparagraph II.E.2 that additional remediation is not needed based upon use restrictions, Applicant shall submit to the Department for approval an Environmental Easement to run with the land in favor of the State which complies with the requirements of ECL Article 71, Title 36 and 6 NYCRR § 375-1.8(h)(2). Applicant shall cause such instrument to be recorded with the recording officer for the county in which the Site is located within thirty (30) days after the Department's approval of such instrument. Applicant shall provide the Department with a copy of such instrument certified by the recording officer to be a true and faithful copy within thirty (30) days of such recording (or such longer period of time as may be required to obtain a certified copy provided Applicant advises the Department of the status of its efforts to obtain same within such thirty (30) day period), which shall be deemed to be incorporated into this Agreement.

B. Applicant or the owner of the Site may petition the Department to modify or extinguish the Environmental Easement filed pursuant to this Agreement at such time as it can certify that the Site is protective of public health and the environment without reliance upon the restrictions set forth in such instrument. Such certification shall be made by a Professional Engineer or Qualified Environmental Professional as defined at 6 NYCRR § 375-1.2(ak) approved by the Department. The Department will not unreasonably withhold its consent.

#### XI. Progress Reports

Applicant shall submit a written progress report of its actions under this Agreement to the parties identified

in Subparagraph III.A.1 of the Agreement by the 10th day of each month commencing with the month subsequent to the approval of the first Work Plan and ending with the Termination Date, unless a different frequency is set forth in a Work Plan. Such reports shall, at a minimum, include: all actions relative to the Site during the previous reporting period and those anticipated for the next reporting period; all approved activity modifications (changes of work scope and/or schedule); all results of sampling and tests and all other data received or generated by or on behalf of Applicant in connection with this Site, whether under this Agreement or otherwise, in the previous reporting period, including quality assurance/quality control information; information regarding percentage of completion; unresolved delays encountered or anticipated that may affect the future schedule and efforts made to mitigate such delays; and information regarding activities undertaken in support of the Citizen Participation Plan during the previous reporting period and those anticipated for the next reporting period.

#### XII. Termination of Agreement

Applicant or the Department may terminate this Agreement consistent with the provisions of 6 NYCRR §§ 375-3.5(b), (c), and (d) by providing written notification to the parties listed in Paragraph IV of the Agreement.

#### XIII. Dispute Resolution

A. In the event disputes arise under this Agreement, Applicant may, within fifteen (15) days after Applicant knew or should have known of the facts which are the basis of the dispute, initiate dispute resolution in accordance with the provisions of 6 NYCRR § 375-1.5(b)(2).

B. All cost incurred by the Department associated with dispute resolution are State costs subject to reimbursement pursuant to this Agreement.

C. Notwithstanding any other rights otherwise authorized in law or equity, any disputes pursuant to this Agreement shall be limited to Departmental decisions on remedial activities. In no event shall such dispute authorize a challenge to the applicable statute or regulation.

#### XIV. Miscellaneous

A. If the information provided and any certifications made by Applicant are not materially accurate and complete, this Agreement, except with respect to Applicant's obligations pursuant to Paragraphs V, VII.B, and VIII, shall be null and void ab initio fifteen (15) days after the Department's notification of such inaccuracy or incompleteness or fifteen (15) days after issuance of a final decision



resolving a dispute pursuant to Paragraph XIII, whichever is later, unless Applicant submits information within that fifteen (15) day time period indicating that the information provided and the certifications made were materially accurate and complete. In the event this Agreement is rendered null and void, any Certificate of Completion and/or Liability Limitation that may have been issued or may have arisen under this Agreement shall also be null and void ab initio, and the Department shall reserve all rights that it may have under law.

B. By entering into this Agreement, Applicant agrees to comply with and be bound by the provisions of 6 NYCRR §§ 375-1, 375-3 and 375-6; the provisions of such subparts that are referenced herein are referenced for clarity and convenience only and the failure of this Agreement to specifically reference any particular regulatory provision is not intended to imply that such provision is not applicable to activities performed under this Agreement.

C. The Department may exempt Applicant from the requirement to obtain any state or local permit or other authorization for any activity conducted pursuant to this Agreement in accordance with 6 NYCRR §§ 375-1.12(b), (c), and (d).

D. 1. Applicant shall use "best efforts" to obtain all Site access, permits, easements, approvals, institutional controls, and/or authorizations necessary to perform Applicant's obligations under this Agreement, including all Department-approved Work Plans and the schedules contained therein. If, despite Applicant's best efforts, any access, permits, easements, approvals, institutional controls, or authorizations cannot be obtained, Applicant shall promptly notify the Department and include a summary of the steps taken. The Department may, as it deems appropriate and within its authority, assist Applicant in obtaining same.

2. If an interest in property is needed to implement an institutional control required by a Work Plan and such interest cannot be obtained, the Department may require Applicant to modify the Work Plan pursuant to 6 NYCRR § 375-1.6(d)(3) to reflect changes necessitated by Applicant's inability to obtain such interest.

E. The paragraph headings set forth in this Agreement are included for convenience of reference only and shall be disregarded in the construction and interpretation of any provisions of this Agreement.

F. 1. The terms of this Agreement shall constitute the complete and entire agreement between the Department and Applicant concerning the implementation of the activities required by this Agreement. No term, condition, understanding, or agreement purporting to modify or vary any term of this

Agreement shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department shall be construed as relieving Applicant of its obligation to obtain such formal approvals as may be required by this Agreement. In the event of a conflict between the terms of this Agreement and any Work Plan submitted pursuant to this Agreement, the terms of this Agreement shall control over the terms of the Work Plan(s). Applicant consents to and agrees not to contest the authority and jurisdiction of the Department to enter into or enforce this Agreement.

2. i. Except as set forth herein, if Applicant desires that any provision of this Agreement be changed, Applicant shall make timely written application to the Commissioner with copies to the parties in Subparagraph IV.A.1 of the Agreement.

ii. If Applicant seeks to modify an approved Work Plan, a written request shall be made to the Department's project manager, with copies to the parties listed in Subparagraph IV.A.1 of the Agreement.

iii. Requests for a change to a time frame set forth in this Agreement shall be made in writing to the Department's project attorney and project manager; such requests shall not be unreasonably denied and a written response to such requests shall be sent to Applicant promptly.

G. 1. If there are multiple parties signing this Agreement, the term "Applicant" shall be read in the plural, the obligations of each such party under this Agreement are joint and several, and the insolvency of or failure by any Applicant to implement any obligations under this Agreement shall not affect the obligations of the remaining Applicant(s) under this Agreement.

2. If Applicant is a partnership, the obligations of all general partners (including limited partners who act as general partners) under this Agreement are joint and several and the insolvency or failure of any general partner to implement any obligations under this Agreement shall not affect the obligations of the remaining partner(s) under this Agreement.

3. Notwithstanding the foregoing Subparagraphs XIV.G.1 and 2, if multiple parties sign this Agreement as Applicants but not all of the signing parties elect to implement a Work Plan, all Applicants are jointly and severally liable for each and every obligation under this Agreement through the completion of activities in such Work Plan that all such parties consented to; thereafter, only those Applicants electing to perform additional work shall be jointly and severally liable under this Agreement for the obligations and activities under such additional Work



Plan(s). The parties electing not to implement the additional Work Plan(s) shall have no obligations under this Agreement relative to the activities set forth in such Work Plan(s). Further, only those Applicants electing to implement such additional Work Plan(s) shall be eligible to receive the Liability Limitation referenced in Paragraph VI.

4. Any change to parties pursuant to this Agreement, including successors and assigns through acquisition of title, is subject to approval by the Department, after submittal of an application acceptable to the Department.

H. Applicant shall be entitled to receive contribution protection and/or to seek contribution to the extent authorized by ECL § 27-1421(6) and 6 NYCRR § 375-1.5(b)(5).

I. Applicant shall not be considered an operator of the Site solely by virtue of having executed and/or implemented this Agreement.

J. Applicant and Applicant's agents, grantees, lessees, sublessees, successors, and assigns shall be bound by this Agreement. Any change in ownership of Applicant including, but not limited to, any transfer of assets or real or personal property, shall in no way alter Applicant's responsibilities under this Agreement.

K. Unless otherwise expressly provided herein, terms used in this Agreement which are defined in ECL

Article 27 or in regulations promulgated thereunder shall have the meaning assigned to them under said statute or regulations.

L. Applicant's obligations under this Agreement represent payment for or reimbursement of State costs, and shall not be deemed to constitute any type of fine or penalty.

M. In accordance with 6 NYCRR § 375-1.6(a)(4), the Department shall be notified at least 7 days in advance of, and be allowed to attend, any field activities to be conducted under a Department approved work plan, as well as any pre-bid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting; provided, however that the Department may be excluded from portions of meetings where privileged matters are discussed.

N. In accordance with 6 NYCRR § 375-1.11(a), all work plans; reports, including all attachments and appendices, and certifications, submitted by a remedial party shall be submitted in print, as well as in an electronic format acceptable to the Department.

O. This Agreement may be executed for the convenience of the parties hereto, individually or in combination, in one or more counterparts, each of which shall be deemed to have the status of an executed original and all of which shall together constitute one and the same.



# New York State Department of Environmental Conservation

## Division of Environmental Remediation, 12<sup>th</sup> Floor

625 Broadway, Albany, New York 12233-7011

Phone: (518) 402-9706 Fax: (518) 402-9020

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

APR 30 2014

### *Certified Mail, Return Receipt Requested*

George Man  
c/o Timothy Li, R.A.  
957 56th Street  
Brooklyn, NY 11219



**Re: 11-28 31st Drive**  
Tax Map ID No.: 502-22  
Property County: Queens  
Site No.: C241159

Dear Applicant:

Your application for the above-referenced Brownfield Cleanup Program ("BCP") project has been reviewed by the New York State Department of Environmental Conservation ("Department"). I am pleased to inform you that your request is accepted. The acceptance is based upon your participation as follows:

George Man is a Volunteer as defined in ECL 27-1405(1)(b).

Based upon the facts and information in the application, information contained in the Department's records, and a timely return of the signed Brownfield Cleanup Agreements (BCAs), the Department is prepared to execute a BCA for the above-described property. Enclosed are three original proposed BCAs. Please have an authorized representative sign all three originals where indicated and return them to my attention at 625 Broadway, Albany, New York, **along with proof that the party executing the BCA is authorized to bind the Requestor. This would be documentation from corporate organizational papers, which are updated, showing the authority to bind the corporation, or a Corporate Resolution showing the same, or an Operating Agreement or Resolution for an LLC.** The BCA shall not be effective until it is fully executed by the parties. A reassessment of eligibility may result in a denial of the application if there are any changes to material facts and information before the BCA is fully executed. **Please note, if the BCA is not signed and returned to the Department within 60 days, the Department will consider the Application withdrawn and the offer to enter the BCP will be deemed rescinded.**

The Department looks forward to working with you on this project. The Department's project manager will assist you in completing your project. You can arrange a meeting to discuss the program's requirements and work plan. The work plan will determine the scope of work to be conducted and completed. You may contact the Department's project team as set forth in Paragraph IV of the attached draft BCA to discuss the next steps.

Sincerely,

Robert W. Schick, P.E., Director  
Division of Environmental Remediation



Enclosures:

Department's Copies:

ec: Michael J. Ryan, P.E.  
Robert Cozzy  
Jane O'Connell  
Benjamin Conlon  
Kelly Lewandowski  
Andrew Guglielmi  
Sondra Martinkat  
John Byrne

Applicant's Copies:

ec: Timothy Li, R.A. ([tli.architect@gmail.com](mailto:tli.architect@gmail.com))  
Lawrence Schnapf ([larry@schnapflaw.com](mailto:larry@schnapflaw.com))  
Paul Matli ([pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com))



**ATTACHMENT E**  
**Daily and Monthly Status Reports**



# Daily Reports



## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	<b>x</b>	Bright Sun	
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>9-19-2017</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp. AMC Engineering, PLLC. - Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Schulman Industries, Inc.	<b>Site Manager/ Supervisor:</b> George Man
<b>Work Activities Performed (Since Last Report):</b>  Removal and stockpiling of existing concrete slab Coordination with a permitted facility to dispose the concrete as C&D	
<b>Working In Grid #:</b> Southern portion	
<b>Samples Collected (Since Last Report):</b> None collected.	
<b>Air Monitoring (Since Last Report):</b>  Not applicable due to rain	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b>  Removal and stockpiling of existing concrete slab	

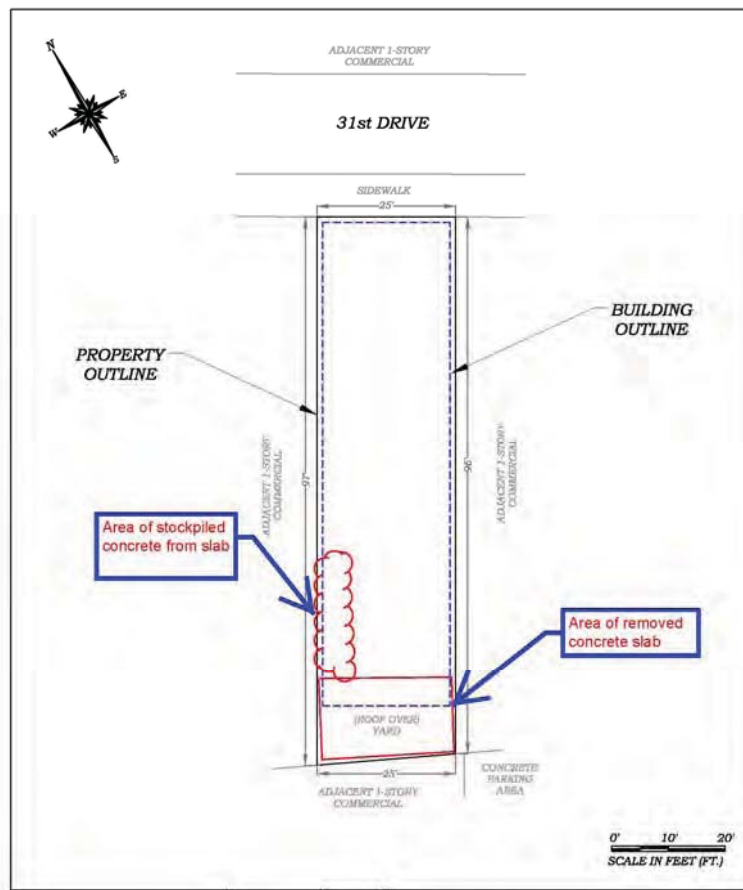


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ									
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total										

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

## Site Map





## Photo Log

Housekeeping activities following  
site demolition



Removal of concrete slab





**Stockpiling of removed concrete  
from slab**





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	<b>X</b>	Bright Sun	
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>9-20-2017</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp. AMC Engineering, PLLC. - Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Schulman Industries, Inc.	<b>Site Manager/ Supervisor:</b> George Man
<b>Work Activities Performed (Since Last Report):</b>  Removal and stockpiling of existing concrete slab Coordination with a permitted facility to dispose the concrete as C&D	
<b>Working In Grid #:</b> Southern portion	
<b>Samples Collected (Since Last Report):</b> None collected.	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Up gradient – 0.012 mg/m <sup>3</sup> Downgradient – 0.014 mg/m <sup>3</sup> Highest Condition: Up gradient - 0.027 mg/m <sup>3</sup> Downgradient – 0.022 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b>  Removal and stockpiling of existing concrete slab	

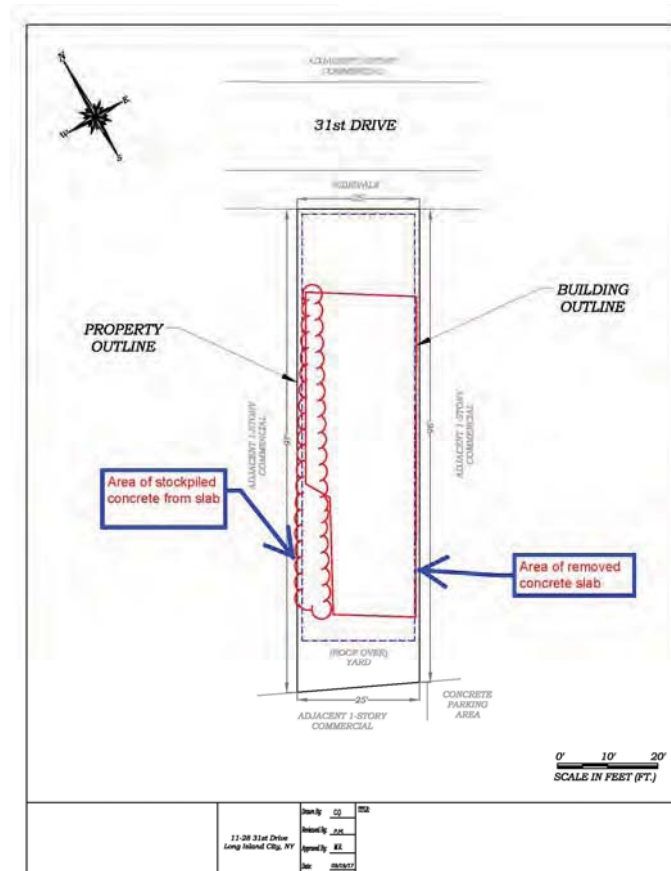


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ									
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total										

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

## Site Map





## Photo Log

CAMP station



Removal of concrete slab



**Stockpiling of removed concrete  
from slab**









## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	<b>X</b>	Bright Sun	
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>10-11-2017</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp. AMC Engineering, PLLC. - Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Schulman Industries, Inc.	<b>Site Manager/ Supervisor:</b> George Man
<b>Work Activities Performed (Since Last Report):</b>  Disposal of 5 loads of stockpiled concrete as C&D at Evergreen Recycling	
<b>Working In Grid #:</b> Southern portion	
<b>Samples Collected (Since Last Report):</b> None collected.	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Up gradient – 0.021 mg/m <sup>3</sup> Downgradient – 0.031 mg/m <sup>3</sup> Highest Condition: Up gradient - 0.037 mg/m <sup>3</sup> Downgradient – 0.037 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b>  Excavation and disposal of soil-fill material	

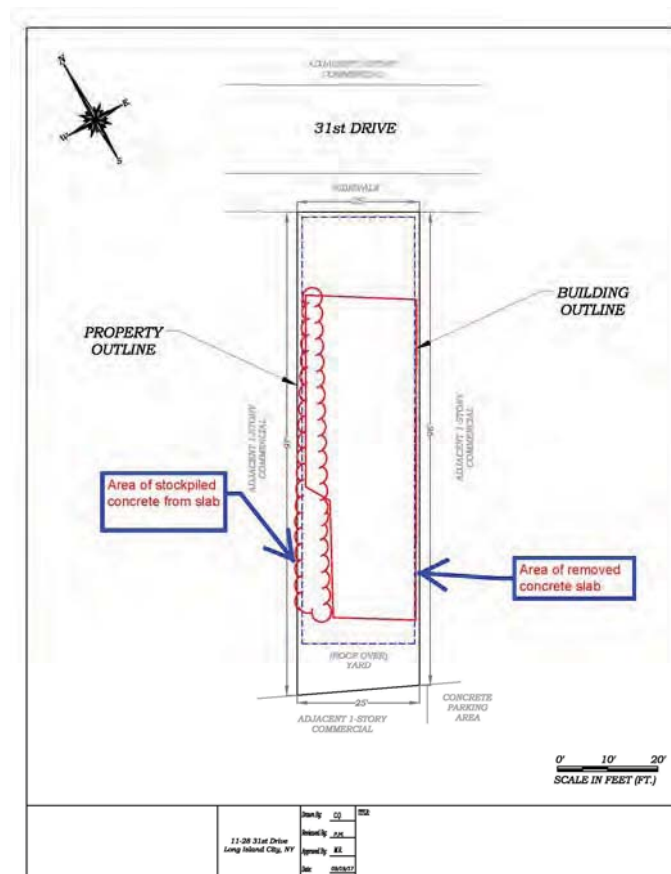


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today			5	150						
Total			5	150						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

## Site Map





## Photo Log

Truck loading with C&D



Disposal of C&D





Truck loading with C&D





# SOIL DISPOSAL AND TRUCKING LOG SHEET

Shipment Date	Manifest #	Transporter Name/Truck Name	License Plate	On Site Location (Approx. Depth)	Off-Site Disposal Facility	Tonnage	Truck #
10/11/2017		WILSON'S CONTRACTORS	60704 MK		EVERGREEN RECYCLING		1
			60704 MK				2
			23261 MB				3
			41393 MC				4
			23264 MB				5
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## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	<b>X</b>	Bright Sun	
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>10-12-2017</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp. AMC Engineering, PLLC. - Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Schulman Industries, Inc.	<b>Site Manager/ Supervisor:</b> George Man
<b>Excavation of southern and central portions of the site to 3 feet bgs</b> <b>Disposal of 8 loads of soil/fill material at Clean Earth of Carteret</b>	
<b>Working In Grid #:</b> Southern portion	
<b>Samples Collected (Since Last Report):</b> None collected.	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Up gradient – 0.018 mg/m <sup>3</sup> Downgradient – 0.030 mg/m <sup>3</sup> Highest Condition: Up gradient - 0.038 mg/m <sup>3</sup> Downgradient – 0.037 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b>  Excavation and disposal of soil-fill material	

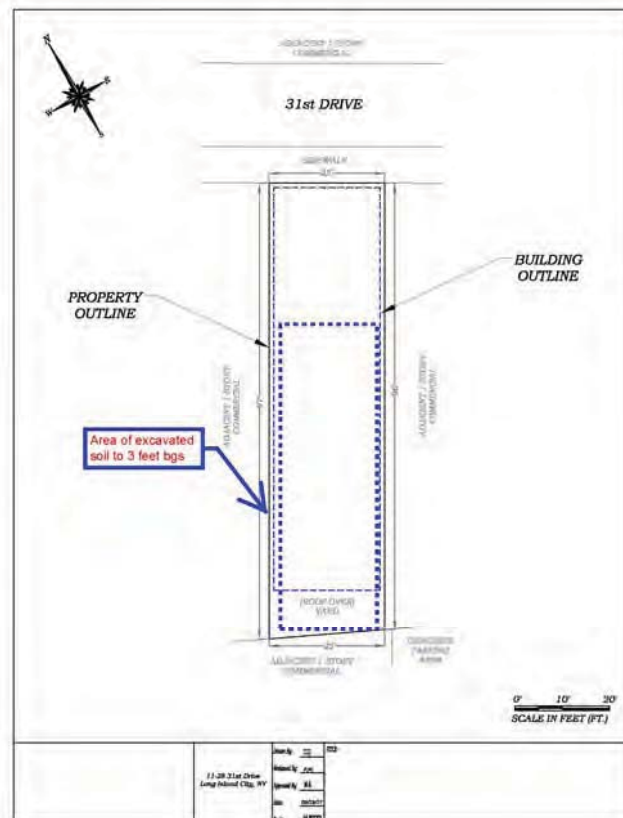


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today	8	160	5	150						
Total	8	160	5	150						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

## Site Map





## Photo Log

Soil excavation



Soil loading





View of excavated area





# SOIL DISPOSAL AND TRUCKING LOG SHEET

Shipment Date	Manifest #	Transporter Name / Truck Name	License Plate	On-Site Location (Approx. Depth)	Off-Site Disposal Facility	Tonnage	Truck #
10/12/2017	1288779	LOGITECH	AS369X	10'-2'	CHARTERET NJ	23	1
	1288780	SHARLEY	AS116A			23	2
	1288791	SHARLEY	AS125C			23	3
	1614904	SHARLEY	AS317W			23	4
	1612570	SHARLEY	AS125C	10'-4'		23	5
	1614907	SHARLEY	AS317W			23	6
	1618451	SHARLEY	AS116A			23	7
	1618448	LOGITECH				23	8
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 03



## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	<b>X</b>	Bright Sun	
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>10-13-2017</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp. AMC Engineering, PLLC. - Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Schulman Industries, Inc.	<b>Site Manager/ Supervisor:</b> George Man
<b>Excavation of northern portion of the site to 3 feet bgs</b> <b>Disposal of 4 loads of soil/fill material at Clean Earth of Carteret</b>	
<b>Working In Grid #:</b> Southern portion	
<b>Samples Collected (Since Last Report):</b> None collected.	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Up gradient – 0.020 mg/m <sup>3</sup> Downgradient – 0.025 mg/m <sup>3</sup> Highest Condition: Up gradient - 0.037 mg/m <sup>3</sup> Downgradient – 0.037 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b>  Excavation and disposal of additional concrete load Removal of UST	







## Photo Log

Soil excavation



Soil loading





Exposed UST





# SOIL DISPOSAL AND TRUCKING LOG SHEET

Shipment Date	Manifest #	Transporter Name / Truck Name	License Plate	On-Site Location (Approx. Depth)	Off-Site Disposal Facility	Tonnage	Truck #
10/13/2017	#1612582	SHIRLEY EXPRESS	AS116B	(01-41)	LAURETTE NJ	23	1
	1612583	SHIRLEY EXP	AS317W			23	2
	1612584	SHIRLEY EXP	AS116B			23	3
	1612577	SHIRLEY EXP	AS317W			23	4
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10/13/17  
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12  
44



## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast	x	Partly Cloudy		Bright Sun	
TEMP.	< 32		32-50		50-70	x	70-85		>85	

BCP Project No.:	C241159	Date:	10-16-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp. AMC Engineering, PLLC. - Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Schulman Industries, Inc.	<b>Site Manager/ Supervisor:</b> George Man
<b>-Vacuum removal of liquid accumulated inside the tank following its exposure during demolition activities from rainfall. Approx. 100 gallons of liquid was removed from the UST</b> <b>- Tank also contained sediment from falling soil material during demolition.</b> <b>-Excavation and removal of UST in the northern portion of the Site. Tank was buried in dirt with no evidence of spill. Soil was brown silty sand with fill material. The excavation was 5 feet wide, 9 feet long and 6 feet deep and is set-back 2 feet from northern and also from eastern site boundary lines. No groundwater was encountered at tank bottom and no PID readings (0.1 ppm) was detected in screened soil from sidewalls or bottom.</b> <b>-Collected 5 end points samples around the tank pit</b> <b>-clean and dispose the tank as scrap metal. Sediment was placed in one 55-gal drum</b> <b>-Disposal of 1 load of C&amp;D</b>	
<b>Working In Grid #:</b> Southern portion	
<b>Samples Collected (Since Last Report):</b> EP-1, EP-2 (MS/MSD), EP-3, EEP-4 and EP-5.	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm <b>Dust:</b> Pre start Condition: Up gradient – 0.029 mg/m <sup>3</sup> Downgradient – 0.016 mg/m <sup>3</sup> Highest Condition: Up gradient - 0.045 mg/m <sup>3</sup> Downgradient – 0.026 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Survey of site excavation bottom and tank excavation pit prior to import of backfill	

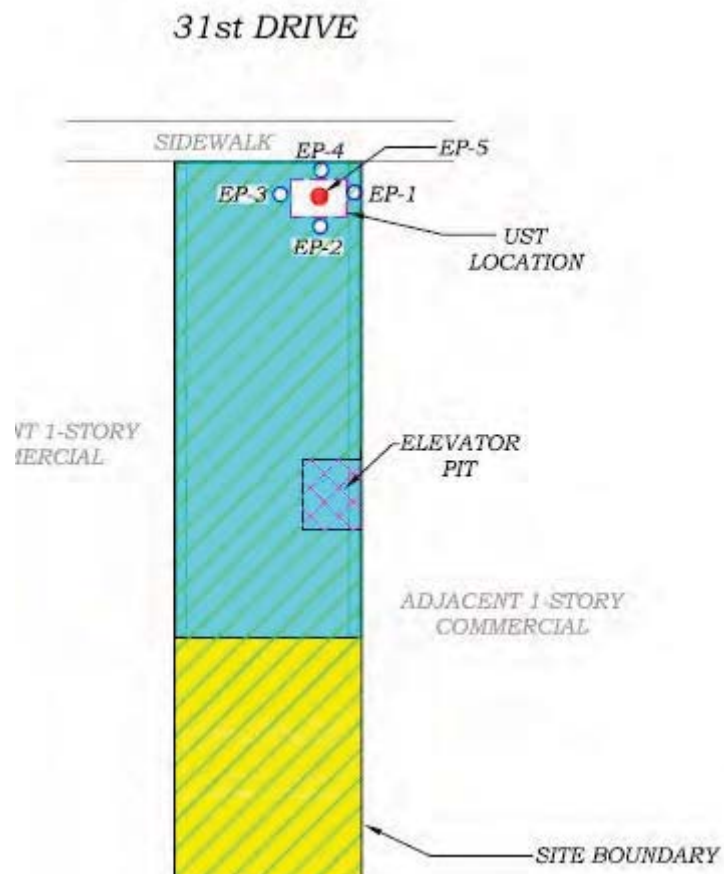


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today			1	30						
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Exposed UST



Vacuum removal of liquid accumulated inside the UST



Exposed UST





View of tank excavation pit



55-gal drum containing  
cleaning waste from UST





C&D disposal





11-28 31st Dr L.L.C, NY 11106

SOIL DISPOSAL AND TRUCKING LOG SHEET

Shipment Date	Manifest #	Transporter Name / Truck Name	License Plate	On-Site Location (Approx. Depth)	Off-Site Disposal Facility	Tonnage	Truck #
10-16-17	100777708	Two Cousins 18	59283HA	concrete	Evugram	20	1
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## DAILY STATUS REPORT

Prepared By: Paul Matli

WEATHER	Snow		Rain		Overcast	x	Partly Cloudy		Bright Sun	
TEMP.	< 32		32-50		50-70	x	70-85		>85	

BCP Project No.:	C241159	Date:	10-27-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. - Ariel Czemerinski P. E.	<b>Safety Officer:</b> Site is closed as no remedial construction activities are taking place
<b>General Contractor:</b> Site is closed as no remedial construction activities are taking place	<b>Site Manager/ Supervisor:</b> Site is closed as no remedial construction activities are taking place
<b>Activities:</b> <ul style="list-style-type: none"><li>- Site is vacant and no equipment are staged on property</li><li>- At the request of NYSDEC, Hydro Tech Environmental collected a sample of the sediments removed during the cleaning of the interior of the closed and removed UST. The sample was shipped to laboratory for analysis for VOCs, SVOCs and TCLP full suite.</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b> Sampled Sediments from UST	
<b>Air Monitoring (Since Last Report):</b>  Not performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Survey of site excavation bottom and tank excavation pit prior to import of backfill Perform shoring around elevator pit and tank pit	

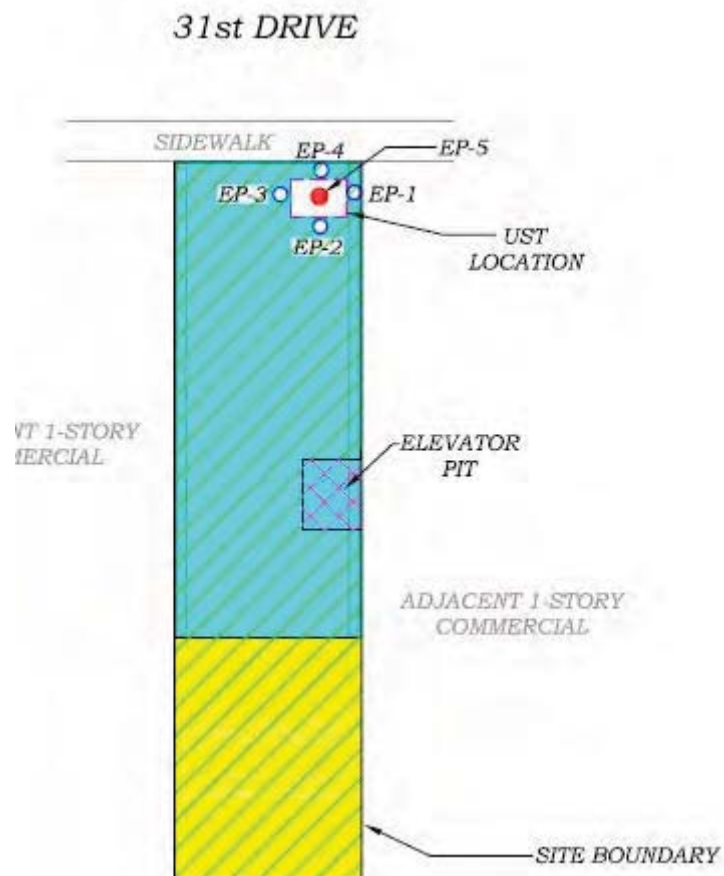


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

55-gal drum containing cleaning  
waste from UST





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast	x	Partly Cloudy		Bright Sun	
TEMP.	< 32		32-50		50-70	x	70-85		>85	

BCP Project No.:	C241159	Date:	11-22-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Eli Duncan/Luis Rosales	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Excavation a pit for underpinning for elevator pit. Underpinning pit is 2 feet deep and 3 feet wide and required excavation 3 feet wide and 5 feet deep below current floor of excavation.</li><li>- Tools used included a jack hammer and shovels</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.060 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.091 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Continue underpinning	

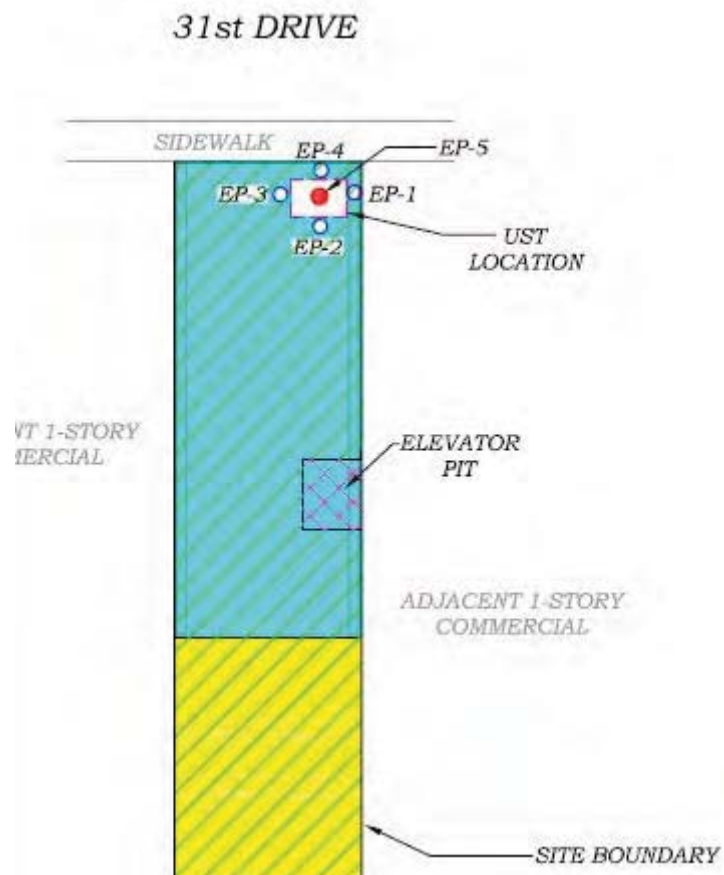


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Breaking edges of former slab along existing southern wall in preparation for underpinning



Hand excavated pit for underpinning



Form placed for concrete underlining under footing of south-adjacent building





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast	x	Partly Cloudy		Bright Sun	
TEMP.	< 32		32-50		50-70	x	70-85		>85	

BCP Project No.:	C241159	Date:	11-28-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Eli Duncan/Luis Rosales	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Excavation a second pit for underpinning for elevator pit. Underpinning pit is 2 feet deep and 3 feet wide and required excavation 3 feet wide and 5 feet deep below current floor of excavation.</li><li>- Tools used included a jack hammer and shovels</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.015 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.031 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Continue underpinning	

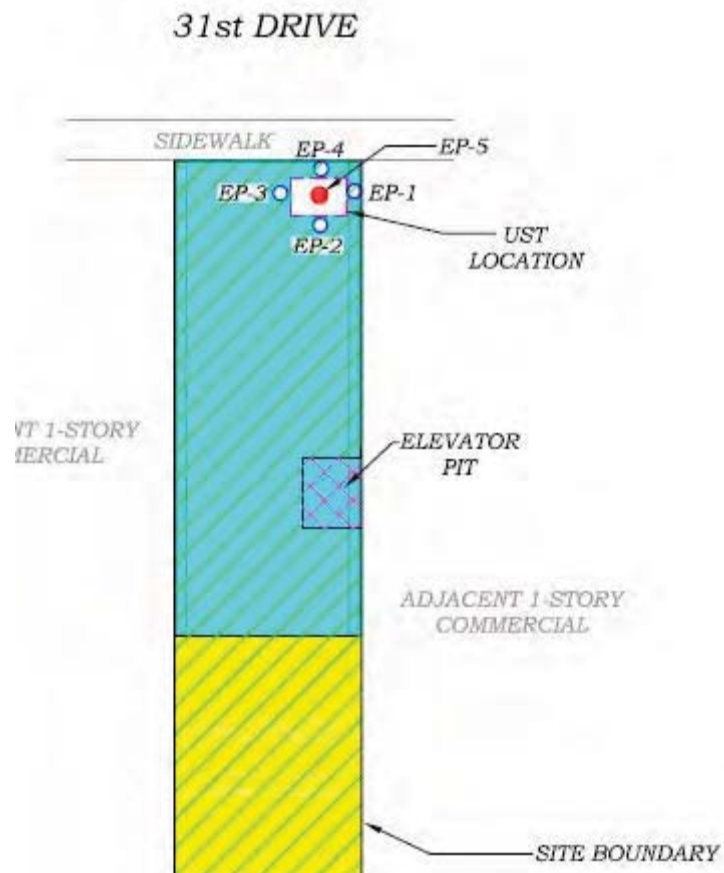


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Site View



Hand excavation of underpinning pits



View of underpinning pits





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast	x	Partly Cloudy		Bright Sun	
TEMP.	< 32		32-50		50-70	x	70-85		>85	

BCP Project No.:	C241159	Date:	11-30-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Eli Duncan/Luis Rosales	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Excavation a third pit for underpinning for elevator pit. Underpinning pit is 2 feet deep and 2 feet wide and required excavation 3 feet wide and 5 feet deep below current floor of excavation.</li><li>- Tools used included a jack hammer and shovels</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.015 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.091 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Excavation of a pit for elevator foundations	

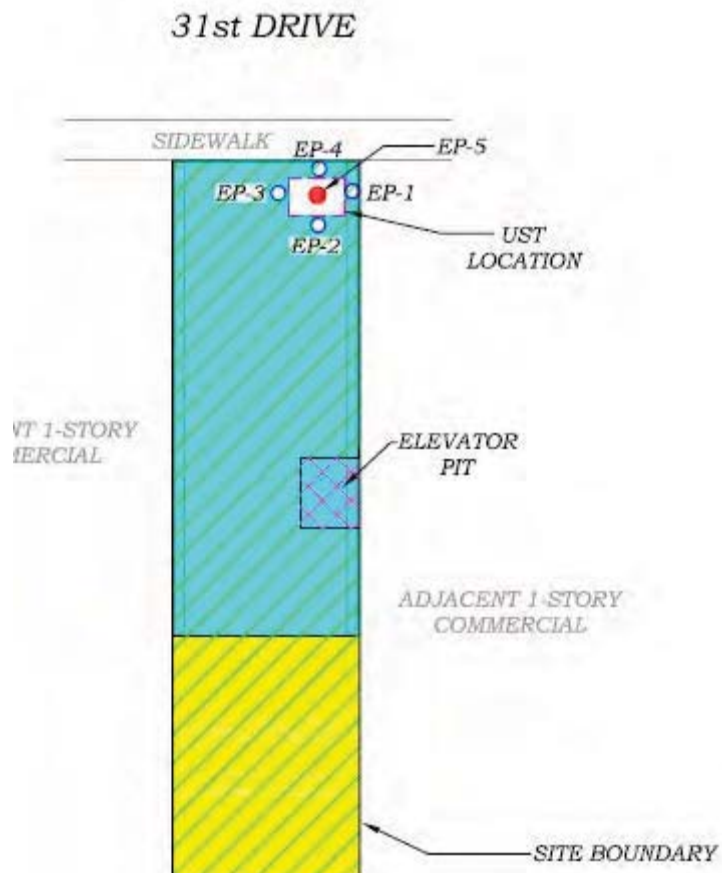


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Site View

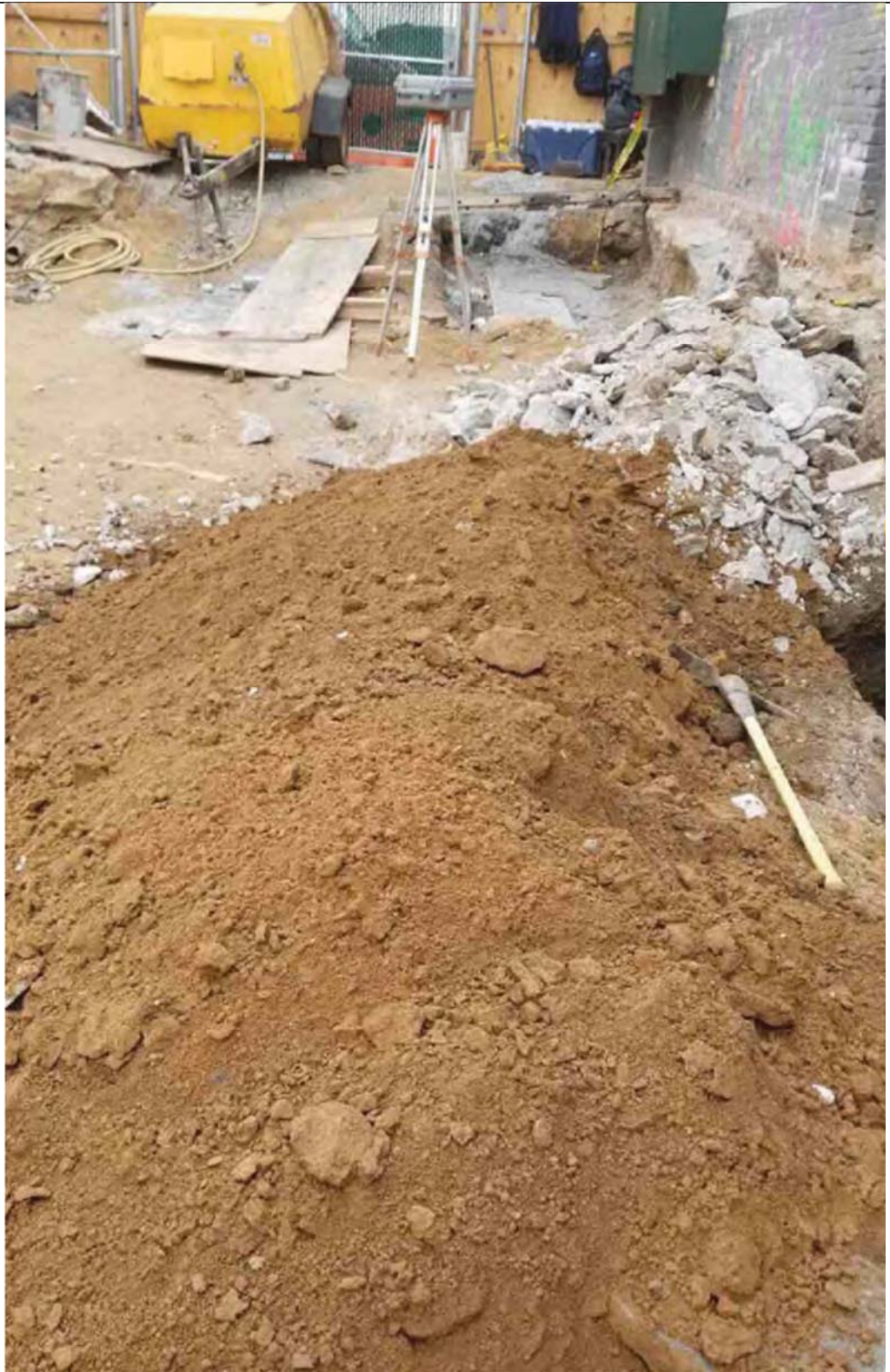


Hand excavation of underpinning pits





Excavated  
soil from  
underpinning  
activities





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	
TEMP.	< 32	x	32-50		50-70		70-85		>85	

BCP Project No.:	C241159	Date:	12-13-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Gerald De France – excavator Operator Elijah Duncan Jr.- Helper	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Excavation of a pit for the layout of footings of elevator and surrounding building footings using Bobcat excavator 335. Excavation is 6.6 feet bgs and is 13 feet long and 16 feet wide.</li><li>- Stockpile of excavated soil along northern side of site</li><li>- Delivery of a load of ¾-inch stone for the SSDS</li><li>- Placement of a 6-inch thick layer of ¾-inch bluestone at bottom of excavated pit. Bluestone was imported from North Church Gravel, Inc.</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.0 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.045 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.058 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Placement of vapor barrier under footings of elevator pit	

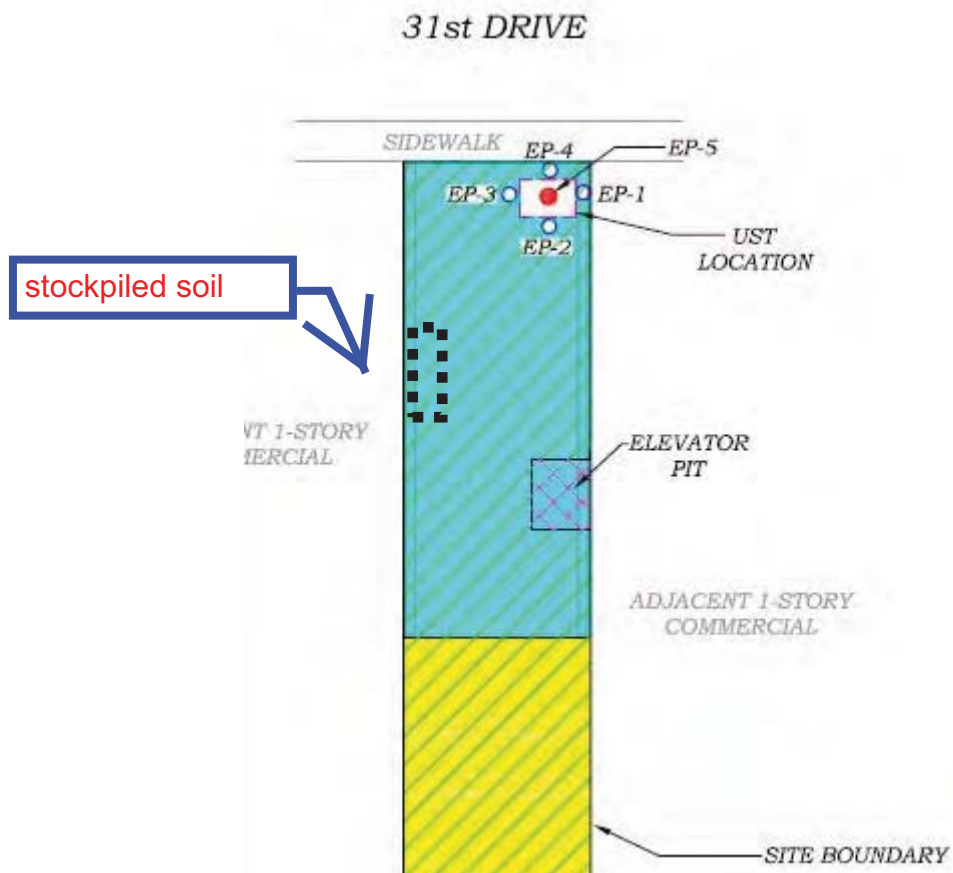


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

View of excavated pit for elevator foundations and surrounding building footings



Stockpiled soil from elevator pit excavation





Placement of  $\frac{3}{4}$ -inch  
bluestone at bottom of  
elevator pit





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	
TEMP.	< 32	x	32-50		50-70		70-85		>85	

BCP Project No.:	C241159	Date:	12-18-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Gerald De France Elijah Duncan Jr.- Helper	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b>  - Installation of vapor barrier in elevator pit	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  Not performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Reuse of stockpiled soil that is excavated from elevator pit to backfill the rear yard	

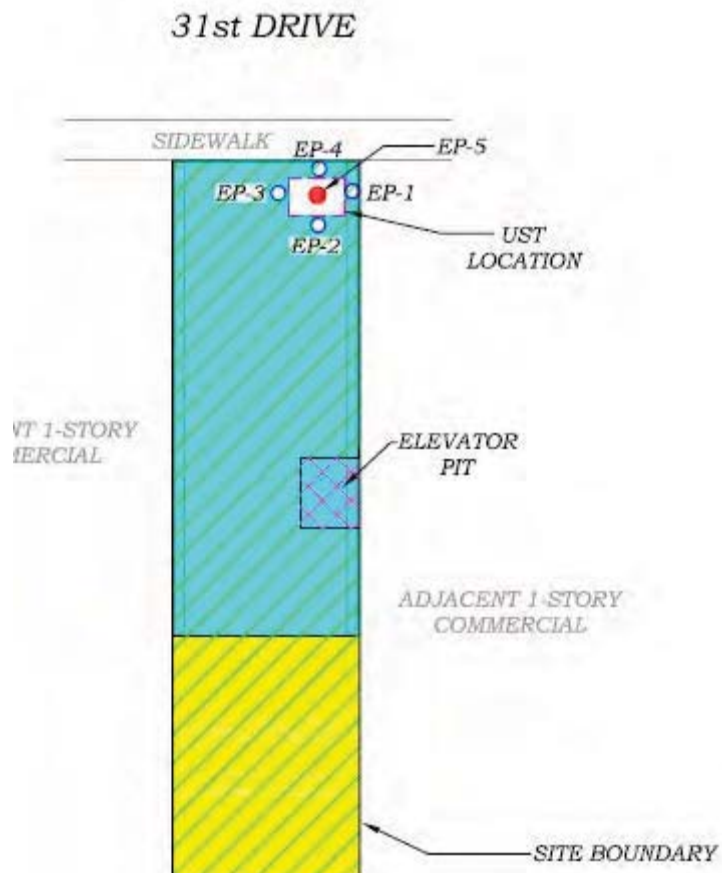


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Installation of vapor barrier in elevator pit



Completed installation of vapor barrier in elevator pit





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	x	Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	C241159	Date:	12-19-2017
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Gerald De France – excavator Operator Elijah Duncan Jr.- Helper	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- On-site reuse of stockpiled soil from excavation of elevator pit to backfill rear yard</li><li>- Backfilling with on-site soil in rear yard was performed for a layer 1 foot above excavation floor</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.1 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.015 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.041 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Forming and pouring of elevator pit foundations	

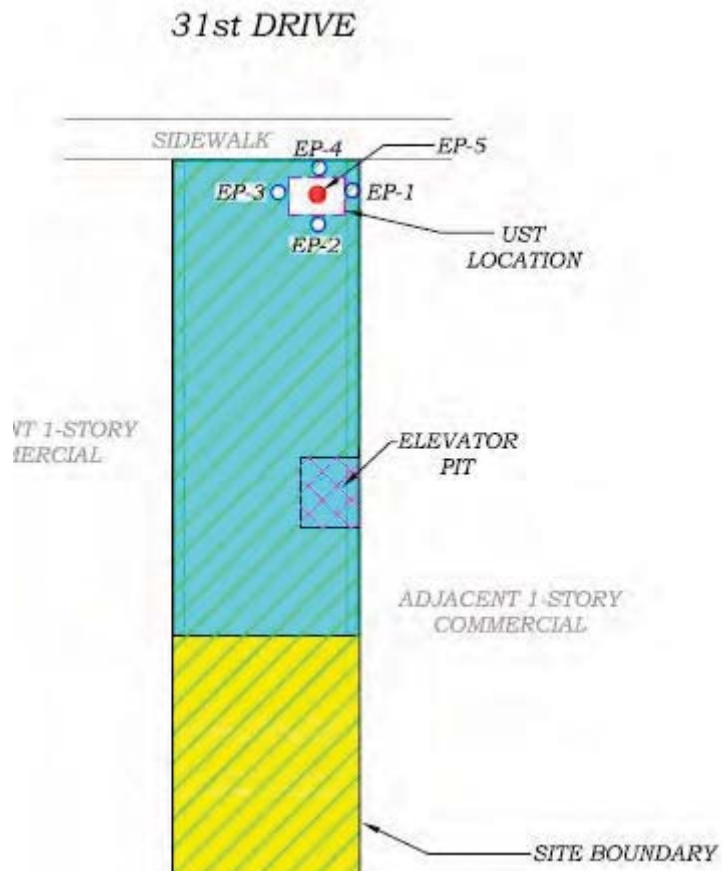


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

View of demarcation layer prior to backfill in rear yard



Movement of previously stockpiled excavated soil for on-site reuse as backfill



Completed backfilling in rear yard with reused on-site soil





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	x	Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>1-18-2018</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Gerald De France – Skid steer (bobcat) Operator Elijah Duncan Jr.- Helper	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b>  - Installation of vapor barrier around elevator pit	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b> Not performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> Import of backfill to restore site excavation elevation	

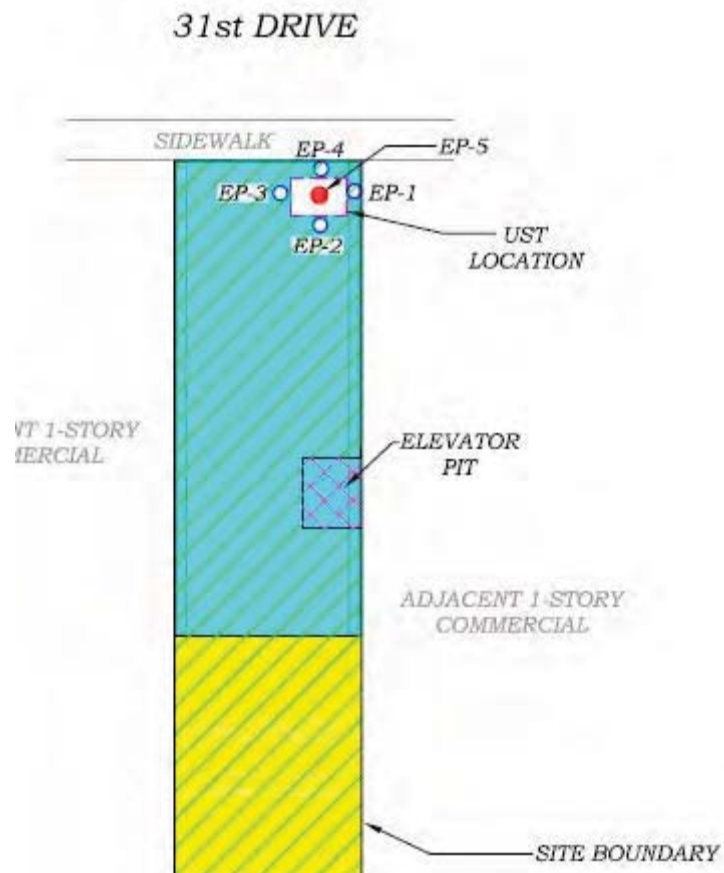


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Vapor barrier around  
elevator pit









## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	x	Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>1-25-2018</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Gerald De France – Skid steer (bobcat) Operator Elijah Duncan Jr.- Helper	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Import of 1 load of <math>\frac{3}{4}</math> inch stone from North Church Gravel to use as backfill to restore Site elevation following excavation</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.1 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.009 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.038 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Import of bluestone backfill	

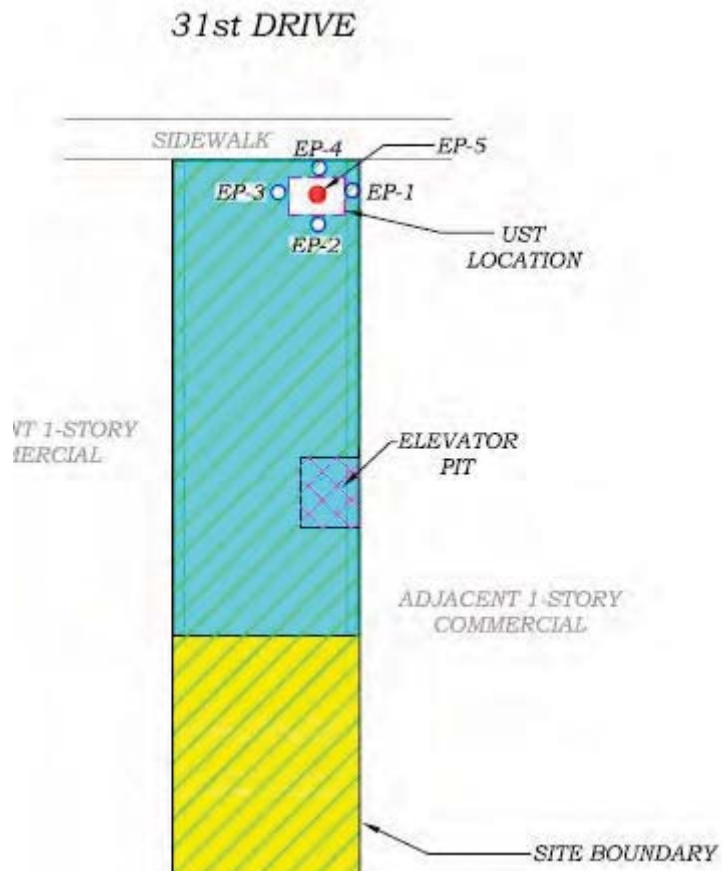


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

View of imported bluestone





View of imported bluestone





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	x	Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>1-26-2018</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Gerald De France – Skid steer (bobcat) Operator Elijah Duncan Jr.- Helper	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Import of 9 load of ¾ inch stone from North Church Gravel to use as backfill to restore Site elevation following excavation</li><li>- Import of 2 load of 1.5 inch bluestone from Impact Materials to use as backfill to restore Site elevation following excavation</li><li>- Stockpile 2 loads ¾ inch stone from North Church Gravel to be used for the 6 inch layer of the SSDS beneath the building</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.1 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.011 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.087 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week:</b> Import of bluestone backfill	

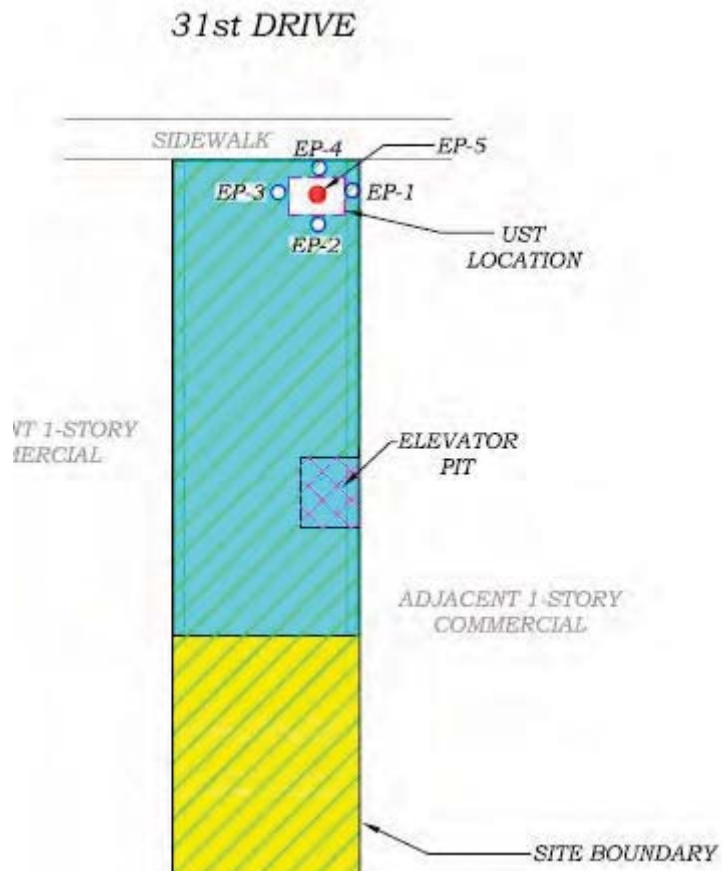


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





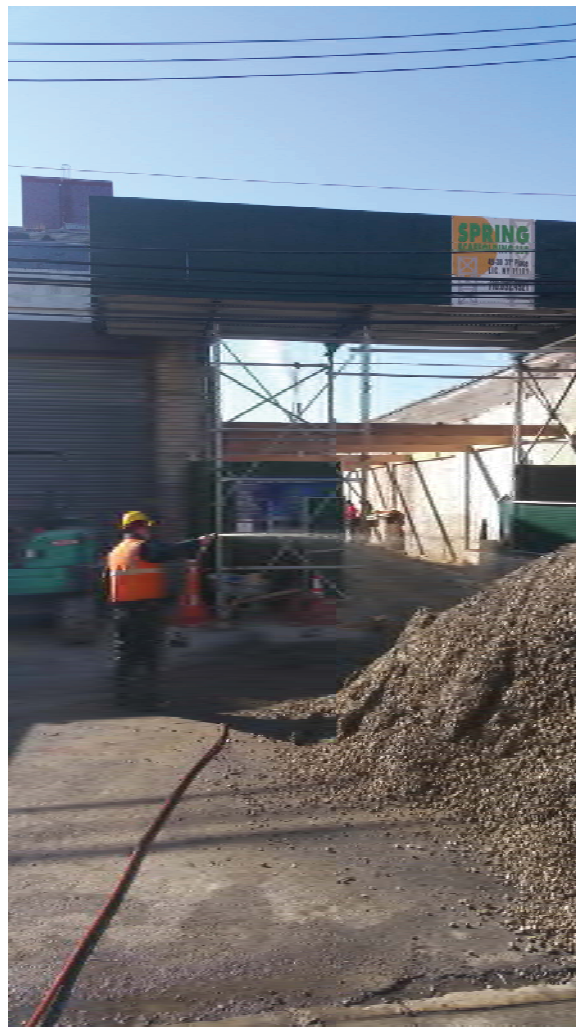
## Photo Log

Backfilling the Site with bluestone





View of imported bluestone





## DAILY STATUS REPORT

Prepared By: Paul Matli

WEATHER	Snow		Rain		Overcast		Partly Cloudy	x	Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	C241159	Date:	1-29-2018
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E.	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc: Gerald De France – Skid steer (bobcat) Operator Elijah Duncan Jr.- Helper	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Import of 2 load of ¾ inch stone from North Church Gravel to use as backfill to restore Site elevation following excavation</li><li>-</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  <b>PID:</b> 0.1 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.022 mg/m <sup>3</sup> Highest Condition: Downgradient – 0.060 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> Installation of monitoring wells and ISCO Injections	

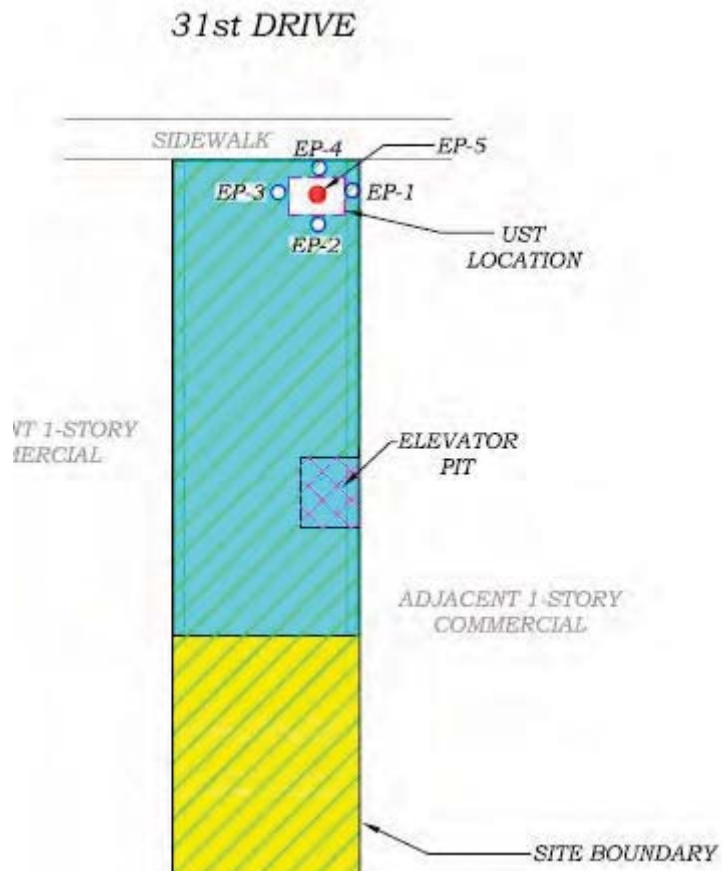


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	x	Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	C241159	Date:	2-14-2018
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Milanesi – Geoprobe Model 7822	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b>  - Installation of 3 monitoring wells MW-1 MW-2 and MW-3 on-site	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b> <b>PID:</b> 0.1 ppm  <b>Dust:</b> Pre start Condition: Downgradient – 0.009mg/m <sup>3</sup> Highest Condition: Downgradient – 0.041 mg/m <sup>3</sup>	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> Development of 3 installed monitoring wells	

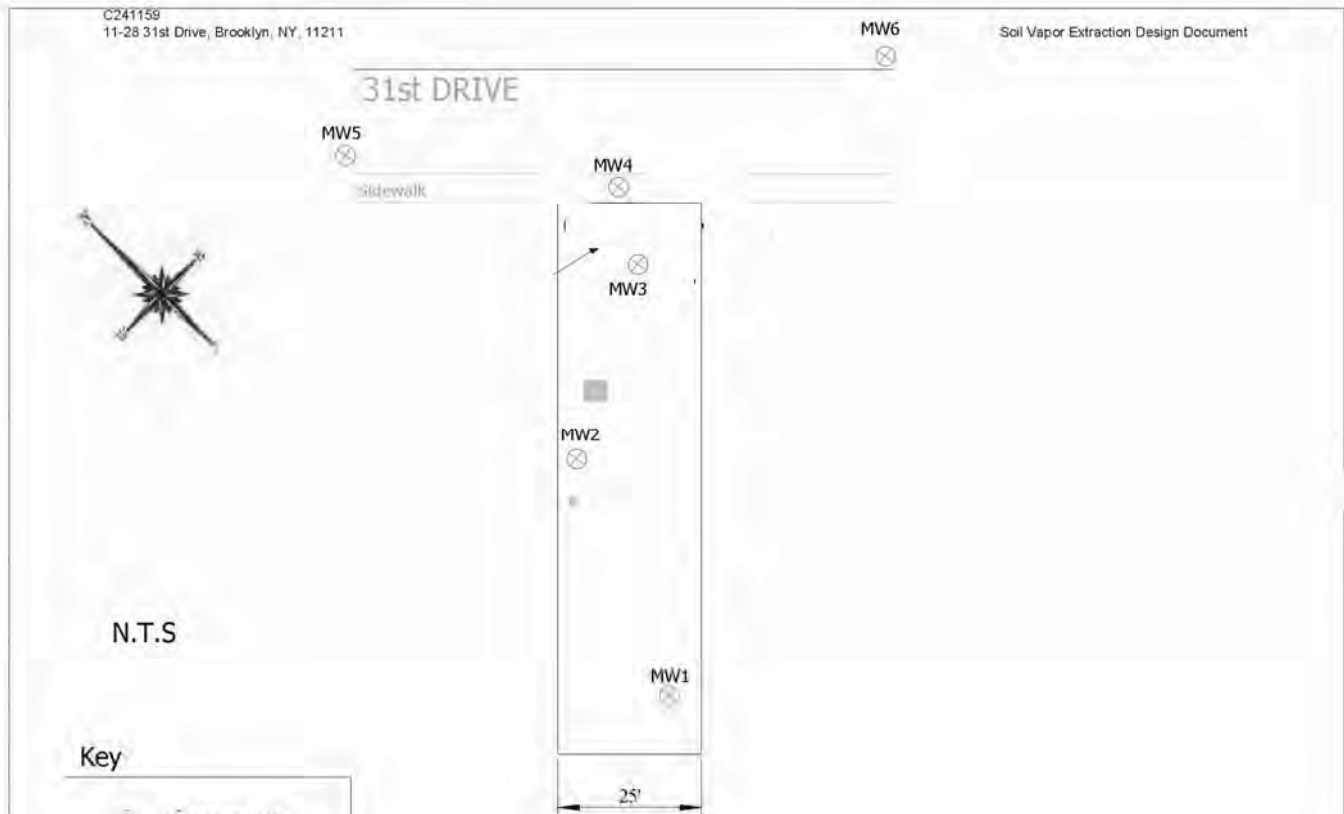


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Installation of monitoring wells





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy	x	Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	C241159	Date:	2-15-2018
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Milanesi – Surge block/Horiba U-52 Flow cell	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b>  - Development of installation of 3 monitoring wells MW-1 MW-2 and MW-3 on-site	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b> PID: 0.1 ppm	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> Groundwater sampling	

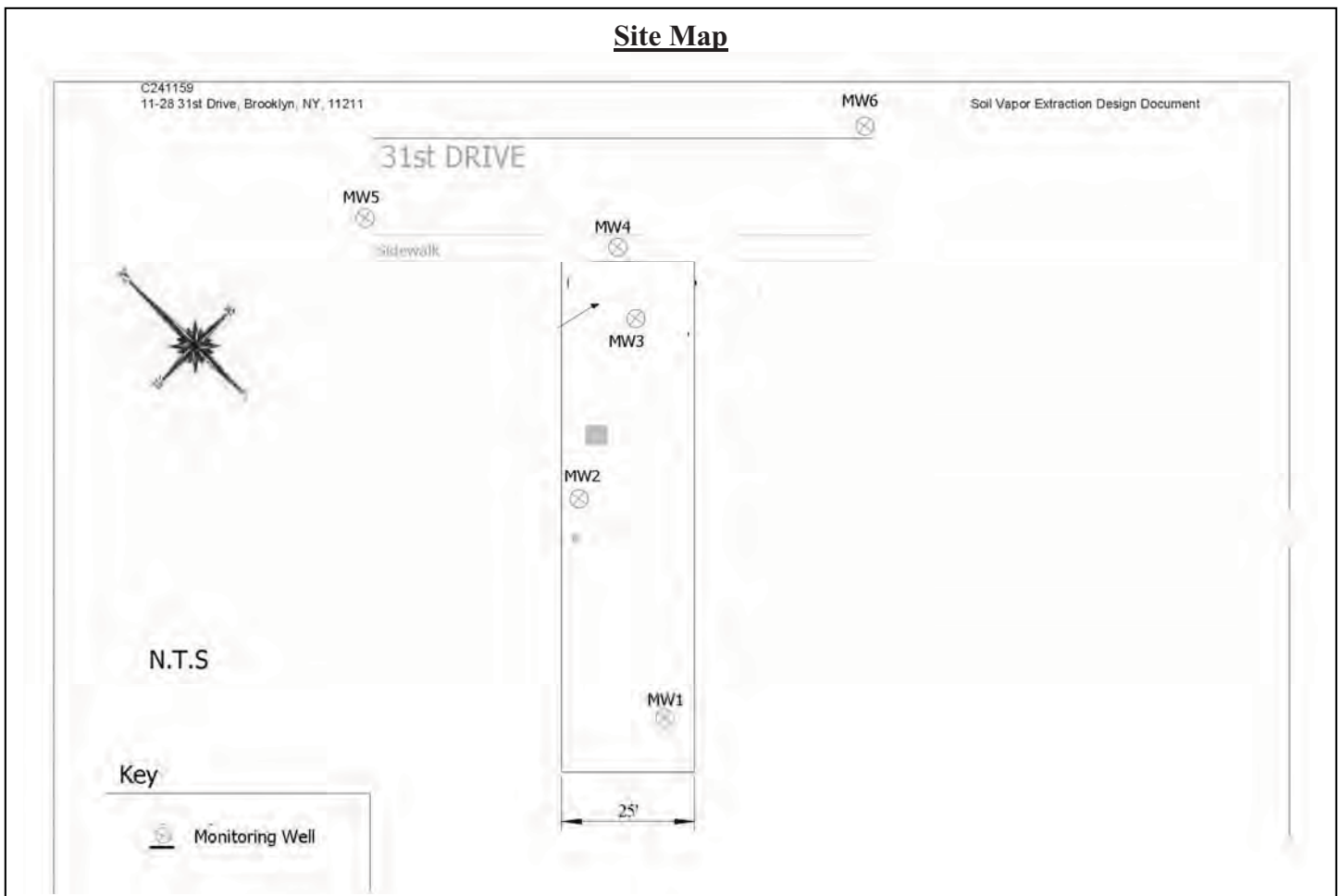


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

Development of monitoring wells





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast	x	Partly Cloudy		Bright Sun	
TEMP.	< 32		32-50	x	50-70		70-85		>85	

BCP Project No.:	C241159	Date:	2-19-2018
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Matli and James Stamm – Geopump/Horiba/Interface probe	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Sampling of 6 target monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6 to provide the baseline [PCE] and [TEC] prior to ISCO injections</li><li>- MW-5 was not sampled as it was considered destroyed behind a construction fence over sidewalk at a nearby development site.</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b> MW-1 (MS/MSD), MW-2, MW-3, MW-4, MW-6, Field Blank and Trip Blank	
<b>Air Monitoring (Since Last Report):</b> <b>PID:</b> 0.1 ppm on All wells  <b>Dust:</b> Not Performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> ISCO Injections	

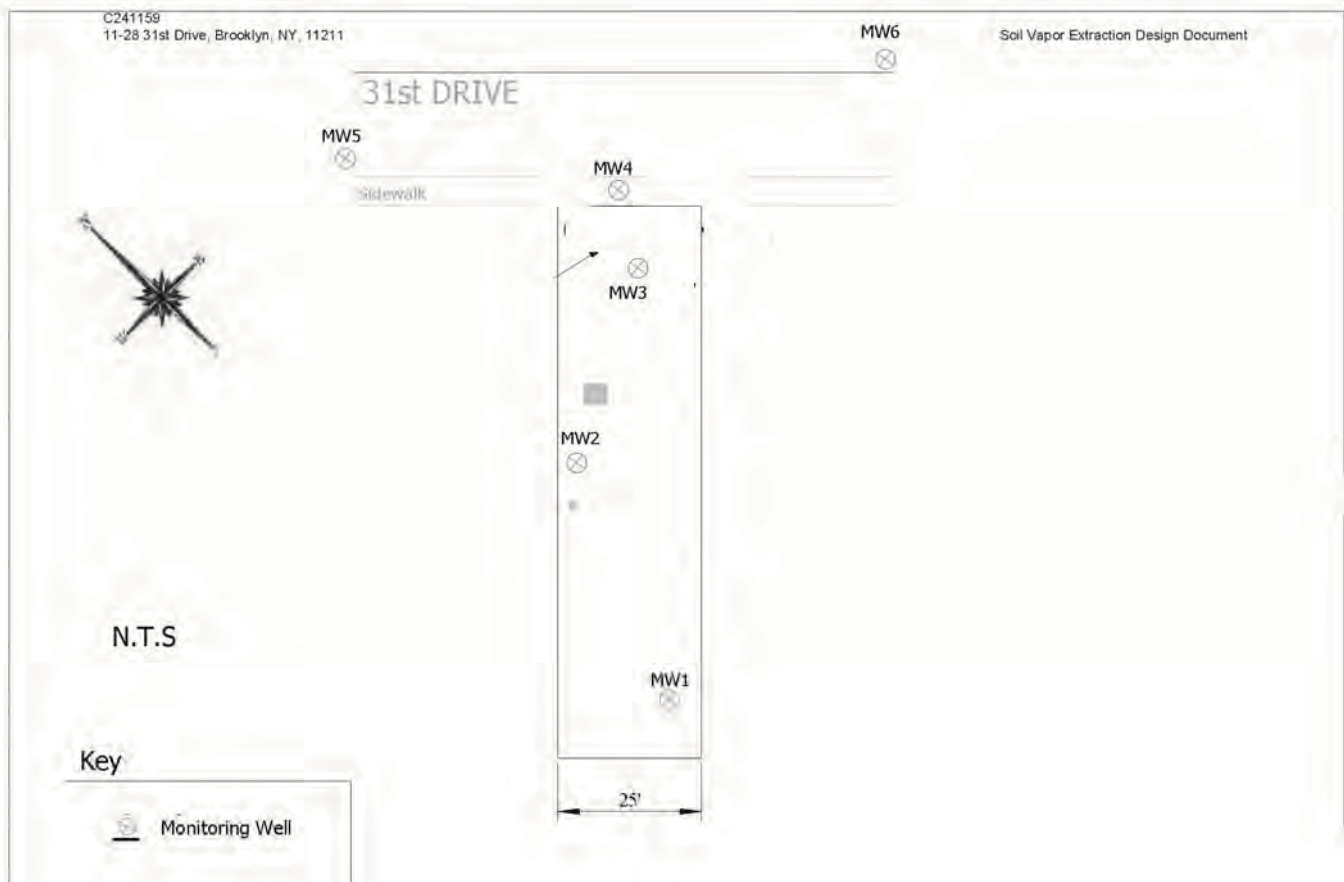


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

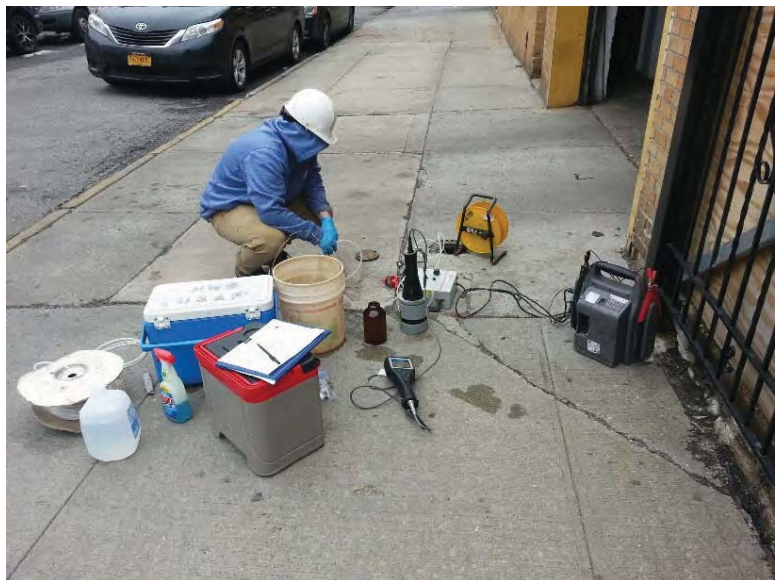
### Site Map





## Photo Log

Sampling of monitoring wells





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	x
TEMP.	< 32		32-50		50-70	x	70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>5-28-2018</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Matli and James Stamm – Geopump/Horiba/Interface probe	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b>  - Completed ISCO injections in 3 points in sidewalk	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b> <b>PID:</b> 0.1 ppm <b>Dust:</b> Not Performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> ISCO Injections	

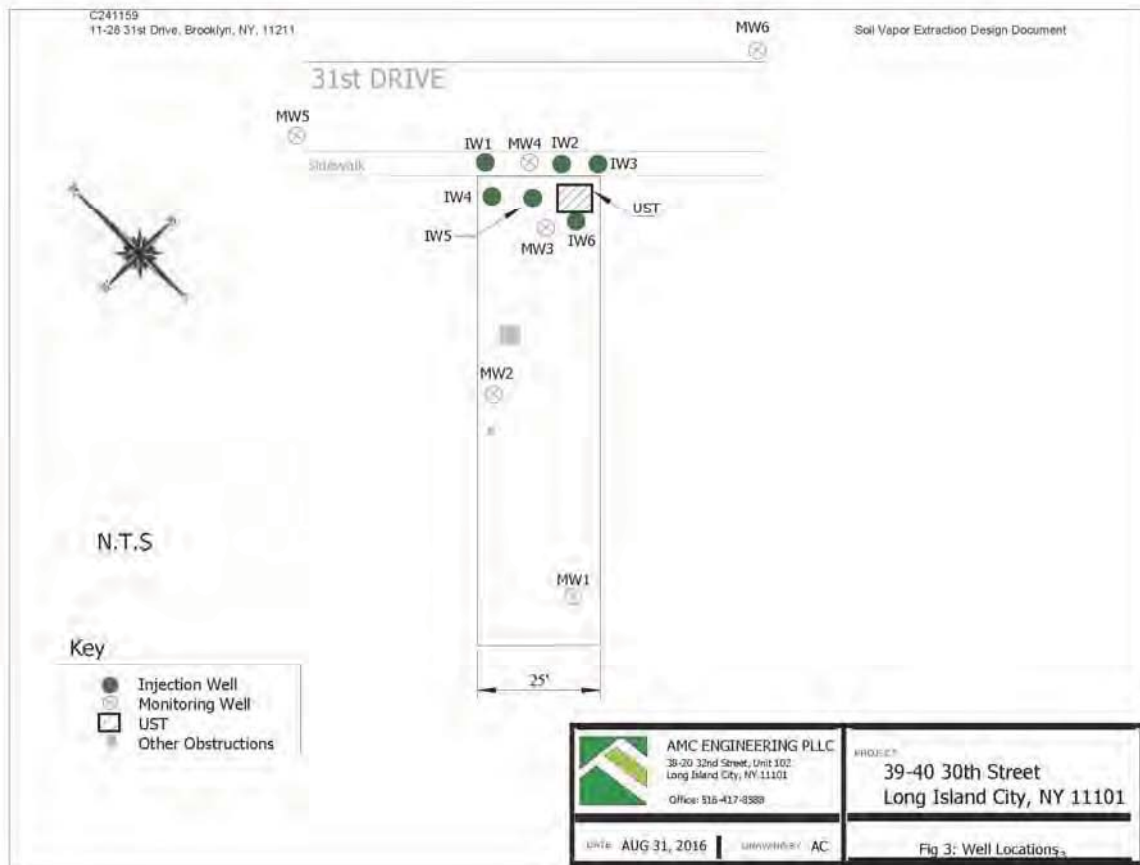


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

ISCO injections in sidewalk





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	x
TEMP.	< 32		32-50		50-70	x	70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>5-29-2018</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Matli and James Stamm – Geopump/Horiba/Interface probe	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b>  - Completed ISCO injections in 3 points inside the site	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b> <b>PID:</b> 0.1 ppm <b>Dust:</b> Not Performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> Groundwater monitoring and sampling 6 weeks after this injection on July 2 <sup>nd</sup> by placing PDBs on June 18 and also monitor Peroxide levels in groundwater and also sample for PFOAs on June 18	

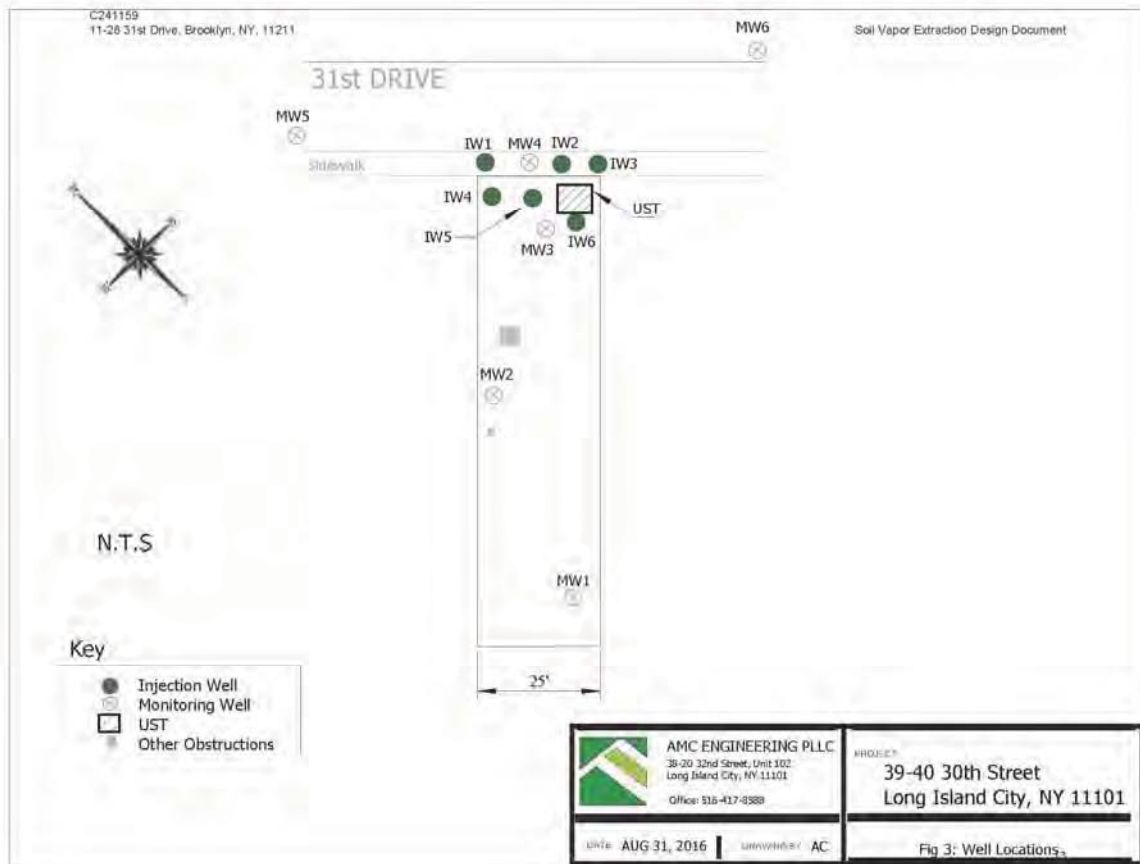


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map





## Photo Log

ISCO injections in sidewalk





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	x
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	C241159	Date:	7/3/2018
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Matli and James Stamm – Geopump/Horiba/Interface probe	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Gauged the depth to water and placed PDB samplers in MW-1 to MW-4 and MW-6</li><li>- Collected a groundwater sample and MS/MSD samples from MW-3 for PFC analysis. This sample was collected following low flow EP method using geopump fitted with poly-ethylene tubing and Horiba</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b> MW-3 for PFC analysis	
<b>Air Monitoring (Since Last Report):</b> <b>PID:</b> 0.1 ppm <b>Dust:</b> Not Performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b> Groundwater sampling on or after 7/17/2018	

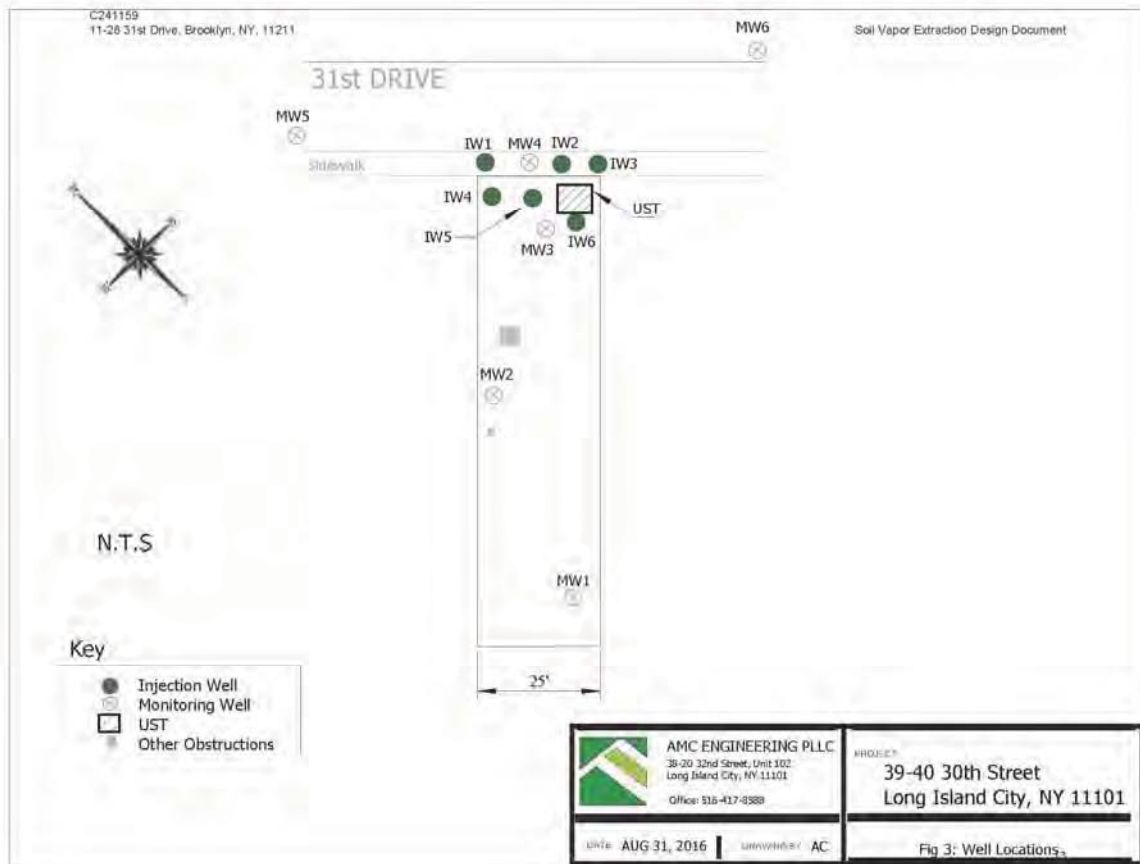


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map







## WELL MONITORING LOG SHEET

Project Name 11-28 3 Drive Date 7-2-2018

Client George Man Instrument \_\_\_\_\_

Site Location 11-28 31 Drive Spill No. \_\_\_\_\_

Monitoring Schedule Monthly : \_\_\_\_\_ Quartely : \_\_\_\_\_ Bi-Annually : \_\_\_\_\_

Legend  
S = Snow D = Dry G = Gone C = Can't Locate  
DTW = Depth to Water DTP = Depth to Product PT = Product Thickness ND = None Detected

Monitoring Well	D.T.P.	D.T.W.	Riser abovegrund
MW-1		12.59	1.97
MW-2		12.72	1.98
MW-3		12.54	1.96
MW-4		9.82	
MW-6		10.20	

Notes: All measurements in feet, below the northern top of well casing

Notes:

All measurements are reported in feet

ND=none detected

D=destroyed

Reported By:

Paul I. Matli





Well Volume: \_\_\_\_\_ Total Volume Purged: \_\_\_\_\_

Sampling Personnel: Paul + Javiera

Low Flow Sampling required ?

pumping rate less than 0.5 L /minute

### Order of stabilization

[illegible]



## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	x
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	C241159	Date:	7/24/2018
Project Name:	11-28 31 Drive, LIC, NY		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Matli and James Stamm – Geopump/Horiba/Interface probe	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Collected a groundwater sample from the PDBs placed in MW-1 to MW-4 and MW-6 along with with the QA/QC samples from MW-4.</li><li>- Performed a test on groundwater samples collected from the wells to determine the post-injection levels of Klosur Persulfate in the wells. The levels of Klosur Persulfate were determined as follows:  MW-1 = 0 g/L MW-2 = 28.74 g/L MW-3 = 34.68 g/L MW-4 = 40.62 g/L MW-6 = 0 g/L</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b> MW-1 to MW-4 and MW-6	
<b>Air Monitoring (Since Last Report):</b> <b>PID:</b> 0.1 ppm <b>Dust:</b> Not Performed	
<b>Problems Encountered:</b> No problems encountered	



## Planned Activities for the Next Day/ Week

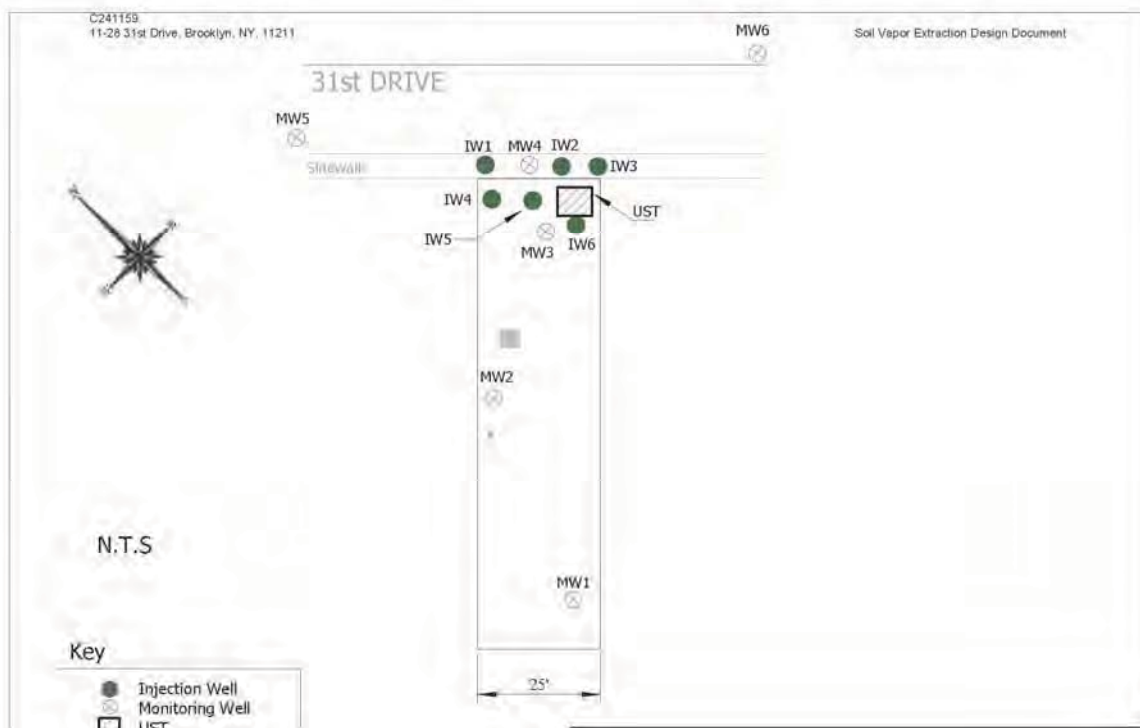
Evaluate the GW results and determine the need for second round of injections  
Installation of SSDS and vapor barrier and cover slab

Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

## Site Map









## DAILY STATUS REPORT

Prepared By: Nick Randazzo

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	X
TEMP.	< 32		32-50		50-70		70-85	X	>85	

Project Name:	11-28 31 <sup>st</sup> Drive (NYSDEC Site # C241159)	Date:	8/2/2018
---------------	--	-------	----------

Consultant:  AMC Engineering, PLLC – Ariel Czemerinski P.E., Nick Randazzo	Safety Officer:  George Man
General Contractor:  Shulman Home Inc	Site Manager/ Supervisor:  George Man
Work Activities Performed: <ul style="list-style-type: none"><li>• Inspection of SSDS prior to laying of blue stone and installation of the vapor barrier; ensured that SSDS pipe was perforated as required</li><li>• Inspected stone to be used as backfill throughout the site and ensured that stone was clean</li><li>• Work was proceeding according to plan; no issues were encountered</li></ul>	

Samples Collected (Since Last Report):  N/A
Air Monitoring (Since Last Report):  N/A
Problems Encountered:  None
Planned Activities for the Next Day/ Week:  Inspect the vapor barrier after it is installed



## Photo Log

**Photo 1 –**  
SSDS  
Riser





**Photo 2–**  
View of  
Site, Rear  
Yard, and  
SSDS  
Pipe





**Photo 3–**  
SSDS  
Pipe





## DAILY STATUS REPORT

Prepared By: **Paul Matli**

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	x
TEMP.	< 32		32-50		50-70		70-85	x	>85	

BCP Project No.:	<b>C241159</b>	Date:	<b>8/3/2018</b>
Project Name:	<b>11-28 31 Drive, LIC, NY</b>		

<b>Consultants:</b> Hydro Tech Environmental Corp.- Paul I. Matli AMC Engineering, PLLC. Ariel Czemerinski P. E. Paul Matli and James Stamm – Geopump/Horiba/Interface probe	<b>Safety Officer:</b> George Man
<b>General Contractor:</b> Shulman Home Inc:	<b>Site Manager/ Supervisor:</b> George Man
<b>Activities:</b> <ul style="list-style-type: none"><li>- Installation of 6-inch layer of bluestone for the SSDS covering the building footprint. The bluestone was previously brought and stockpiled at the site</li><li>- Installation of 4-inch diameter perforated PVC pipe in the layer of bluestone</li></ul>	
<b>Working In Grid #:</b> not applicable	
<b>Samples Collected (Since Last Report):</b>	
<b>Air Monitoring (Since Last Report):</b>  Not Performed	
<b>Problems Encountered:</b> No problems encountered	
<b>Planned Activities for the Next Day/ Week</b>  Installation of vapor barrier and cover slab on-grade across entire lot	

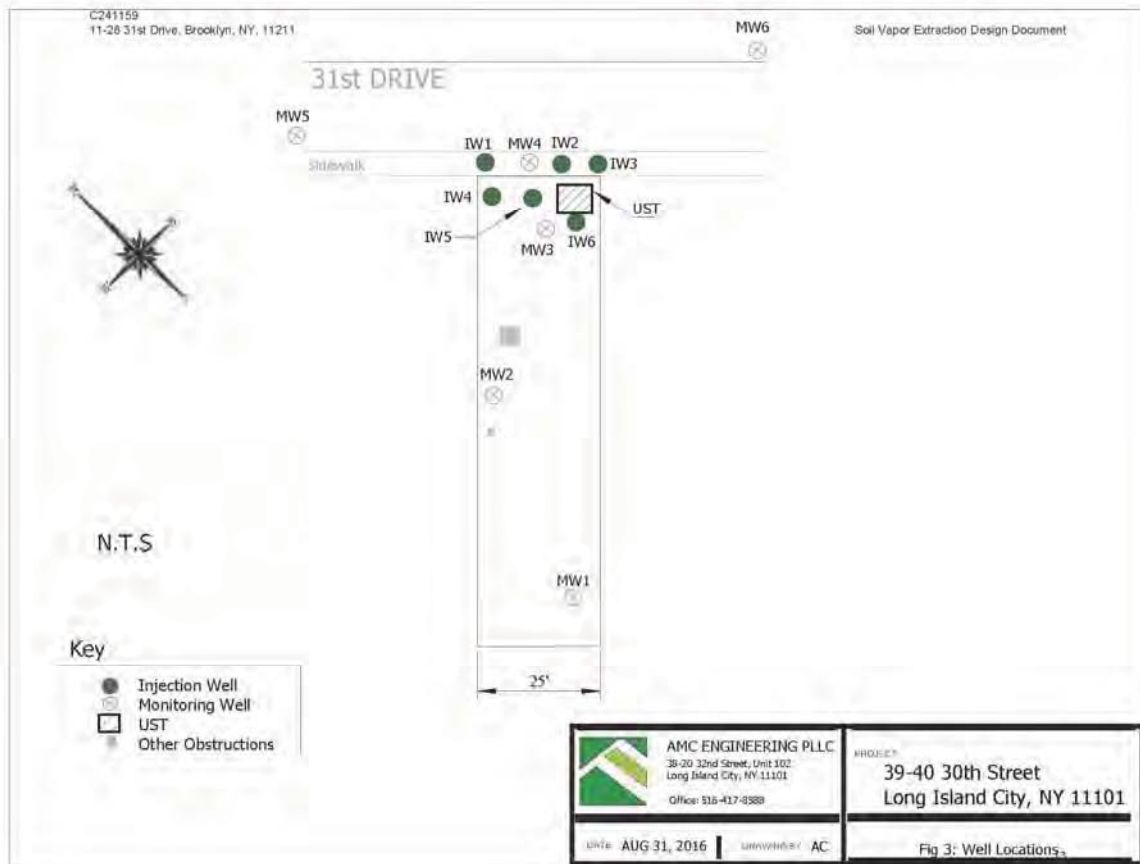


Example:

Facility # Name/ Location Type of Waste Solid <u>Or</u> Liquid	Clean Earth of Carteret, NJ		Evergreen Recycling							
(Trucks, Cu.Yds. <u>Or</u> Gallons)	Trucks	Cu. Yds.	Trucks	Cu. Yds.			Trucks	Cu. Yds.	Trucks	Cu. Yds.
Today										
Total	12	240	6	180						

Imported Backfill/ Facility	(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)		(Cu. Yds.)	
Today										

### Site Map









## DAILY STATUS REPORT

Prepared By: Nick Randazzo

WEATHER	Snow		Rain		Overcast		Partly Cloudy		Bright Sun	X
TEMP.	< 32		32-50		50-70		70-85		>85	X

Project Name:	11-28 31 <sup>st</sup> Drive (NYSDEC Site # C241159)	Date:	8/8/2018
---------------	--	-------	----------

Consultant:  AMC Engineering, PLLC – Ariel Czemerinski P.E., Nick Randazzo	Safety Officer:  George Man
General Contractor:  Shulman Home Inc	Site Manager/ Supervisor:  George Man
Work Activities Performed: <ul style="list-style-type: none"><li>• Inspection of vapor barrier as it was being installed over the ¾-inch blue stone that was previously laid across the site</li><li>• Ensured that there were no leaks or perforations in vapor barrier</li><li>• Work was proceeding according to plan; no issues were encountered</li></ul>	

Samples Collected (Since Last Report):  N/A
Air Monitoring (Since Last Report):  N/A
Problems Encountered:  None
Planned Activities for the Next Day/ Week:  None



## Photo Log

**Photo 1 –**  
View of  
vapor  
barrier  
across  
entire site





**Photo 2–**  
Vapor  
barrier  
near  
elevator pit





**Photo 3—**  
Tape used  
to secure  
vapor  
barrier and  
prevent  
opening  
from  
forming in  
between  
barrier  
pieces





## Monthly Reports





# Hydro Tech Environmental, Corp.

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---

September 10, 2017

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza  
47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – August 2017**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- NYC DOB permits for alterations associated with the remedial developments were issued on Sept 6, 2017
- Installed the construction fence along the northern property line on 31<sup>st</sup> Drive on Sept. 1, 2017

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Demolition of the 1-story building that is scheduled to start between Sept. 11 and 15, 2017
- Breaking of building slab in preparation of its removal
- Performance of CAMP during the breaking of building slab
- Coordination in preparation of remedial ISCO injections and removal of the UST

Approved Activity Modifications:

- None

Estimated Percentage of Project Completion:

- 50 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- The start of remedial activities at this Site are likely toward end of September 2017 following building demolition and the removal of concrete slab.
-



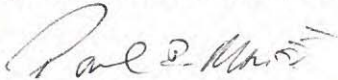
Monthly Progress Report – September 2017  
11-28 31<sup>st</sup> Drive LIC, New York  
BCP Site #C241159

Actions Undertaken to Resolve Delays:

- None.

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,  
**Hydro Tech Environmental, Corp.**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/tj

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





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---

October 10, 2017

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza  
47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – September 2017**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Demolition of the 1-story building was completed on September 15, 2017
- Broke, removed and stockpiled the concrete slab on September 19 and 20, 2017
- Performed CAMP during the breaking of building slab
- Collected and analyzed 2 concrete waste characterization samples on September 29, 2017 at the recommendation of Evergreen Recycling located in Queens, New York. A Concrete waste testing report dated October 5, 2017 was communicated with Evergreen Recycling and an acceptance letter from this facility was issued on October 6, 2017 for the disposal of this concrete as concrete and demolition material.
- Transmitted the C&D acceptance letter from Evergreen Recycling to NYSDEC on October 6, 2017. In a response dated October 10, 2017, NYSDEC expressed no comments on this concrete disposal.
- Transmitted the soil/fill material acceptance letter from Clean Earth of Catered to NYSDEC on September 22, 2017. In a response dated October 10, 2017, NYSDEC expressed no comments on this soil/fill disposal.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Disposal of stockpiled concrete from building slab as C&D at Evergreen Recycling
- Excavation of the top 3 feet of soil/fill material across the site perimeter and disposal of excavated material at Clean Earth of Carteret
- Performance of CAMP during the disposal of building slab and soil/fill material
- Coordination in preparation of remedial ISCO injections and removal of the UST

Approved Activity Modifications:

- None
-



Estimated Percentage of Project Completion:

- 50 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

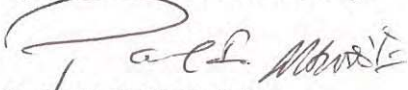
- None.

Actions Undertaken to Resolve Delays:

- None.

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,  
**Hydro Tech Environmental, Corp.**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





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---

November 10, 2017

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza  
47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – October 2017**  
**11-28 31st Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Removed the former building slab and disposed a total of 6 loads of C&D at Evergreen Recycling on October 11 and 16, 2017
- Excavated the entire site to the depth of 3 feet bgs and disposed 12 loads of soil/fill at Clean Earth of Cratered on October 12 and 13, 2017
- Excavated and removed the 550 gallon UST located in the northern portion of the Site on October 16, 2017. A total of 100 gallons of rain water that most recently seeped into the tank through an opening made on the tank shell during an RI tank exploration exercise was removed via vacuum truck. Sediments the accumulated from falling material inside the tank during slab removal was placed in 55-gallon drum awaiting disposal
- Collected a sample from the sediment removed from the tank and contained in the 55-gallon drum per NYSDEC requirement on October 27, 2017.
- Performed CAMP during the removal and disposal of building slab and also during the excavation and disposal of soil/fill material at the Site and tank excavation. No exceedances of CAMP thresholds were reported during these activities
- Collected 5 endpoint soil samples around the removed UST on October 16, 2017. No impact associated with chlorinated hydrocarbons was identified in the area of the removed UST. Endpoint soil samples analytical results are provided in Attachment A.
- Tank was buried in dirt with no evidence of spill. Tank excavation pit was 5 feet wide, 9 feet long and 6 feet deep. No groundwater was encountered at the bottom of the tank pit.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Coordination in preparation of remedial ISCO injections
-



Monthly Progress Report - November 2017  
11-28 31<sup>st</sup> Drive LIC, New York  
BCP Site #C241159

- Coordination with NYSDEC to approve ¾-inch bleustone for use as backfill to restore site elevation following excavation and also for the SSDS. The bleustone will be supplied from North Church Sand & Gravel Franklin, NJ

Approved Activity Modifications:

- None

Estimated Percentage of Project Completion:

- 55 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

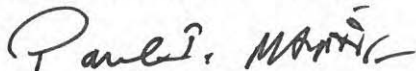
- Obtain permit from DOB to use the excavation at the tank pit for the installation of footing foundation for the new building

Actions Undertaken to Resolve Delays:

- None.

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,  
Hydro Tech Environmental, Corp.



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





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---

December 6, 2017

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza  
47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – November 2017**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Performed underpinning beneath the foundations of the existing brick wall in the area of the proposed elevator pit in the southern portion of the Site. The underpinning was performed on November 22, 28 and 30, 2017 and involved the excavation of a pit that is 9 feet wide and 5 feet deep to place a 2-foot concrete reinforcement under the existing wall foundations.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Coordination in preparation of remedial ISCO injections
- Coordination with NYSDEC to approve ¾-inch blue stone for use as backfill to restore site elevation following excavation and also for the SSDS. The blue stone will be supplied from North Church Sand & Gravel Franklin, NJ

Approved Activity Modifications:

- None

Estimated Percentage of Project Completion:

- 55 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None
-



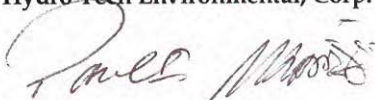
Monthly Progress Report - December 2017  
11-28 31<sup>st</sup> Drive LIC, New York  
BCP Site #C241159

Actions Undertaken to Resolve Delays:

- None.

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,  
**Hydro Tech Environmental, Corp.**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





# Hydro Tech Environmental

## Engineering and Geology, DPC

### NYC Office

15 Ocean Avenue, 2<sup>nd</sup> Floor  
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January 09, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza  
47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – December 2017**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Excavated an elevator pit elevator within an area that is 13 feet long, 16 feet wide and 6.6 feet bgs. All excavated soil was stockpiled and reused in proposed rear yard upon approval by NYSDEC.
- Delivery 1 load of ¾-inch stone from North Church Gravel, located at 17-68 River Road in Fair Lawn, NJ and placement of 6-inch layer of ¾-inch bluestone at bottom of excavated pit.
- Installed vapor barrier on top of bluestone at the location of the elevator pit

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Coordination in preparation of remedial ISCO injections

Approved Activity Modifications:

- None

Estimated Percentage of Project Completion:

- 55 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None

Actions Undertaken to Resolve Delays:

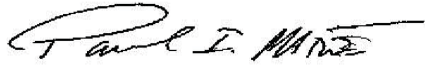
- None.
-



If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**Hydro Tech Environmental Engineering and Geology, DPC**

A handwritten signature in black ink, appearing to read "Paul I. Matli". The signature is fluid and cursive, with a long horizontal stroke at the end.

Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





# Hydro Tech Environmental

## Engineering and Geology, DPC

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---

February 07, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza  
47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – January 2018**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Installed vapor barrier around elevator pit on 1/18/2018
- NYSDEC approved 1.5-inch bluestone manufactured at Impact Reuse and Recovery Center, located at 1000 Page Avenue in Lyndhurst, New Jersey to backfill the site excavation. This approval was communicated via email dated 1/22/2018
- Delivery of a total of 12 load of ¾-inch stone from North Church Gravel, located at 17-68 River Road in Fair Lawn, NJ to backfill the site excavation elevation. 2 loads were stockpiled in rear yard area for later use for the SSDS system. These loads were delivered on 1/25, 26 and 29/2018
- Delivery of a total of 2 load of 1.5-inch stone from Impact Reuse and Recovery Center to backfill the site excavation elevation. These loads were delivered on 1/26/2018

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Scheduling of on-site monitoring well installation and the sampling of target on-site and off-site wells prior to ISCO injections
- Coordination for the remedial ISCO injections

Approved Activity Modifications:

- None

Estimated Percentage of Project Completion:

- 55 percent.
-



Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None

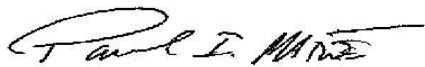
Actions Undertaken to Resolve Delays:

- None.

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**Hydro Tech Environmental Engineering and Geology, DPC**

A handwritten signature in black ink, appearing to read "Paul I. Matli". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





# Hydro Tech Environmental Engineering and Geology, DPC

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March 08, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza 47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – February 2018**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Re-installed 3 on-site monitoring wells MW-1, MW-2 and MW-3 on 2/14/2018
- Developed MW-1, MW-2 and MW-3 on 2/15/2018
- Collected groundwater samples for baseline data of PCE and TCE prior to ISCO injections from monitoring wells MW-1 to MW-4 and MW-6 on 2/19/2018 via EPA Low flow method. MW-5, which is located off-site could not be located and is deemed destroyed during by a nearby construction site.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Coordination for the remedial ISCO injections

Approved Activity Modifications:

- None

Estimated Percentage of Project Completion:

- 55 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None

Actions Undertaken to Resolve Delays:

- None.
-



If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**Hydro Tech Environmental Engineering and Geology, DPC**

Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





# Hydro Tech Environmental

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---

April 06, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza 47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – March 2018**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Received the laboratory analytical report for the baseline data of PCE and TCE for groundwater samples collected from monitoring wells MW-1 to MW-4 and MW-6 on 2/19/2018.
- Transmitted to NYSDEC Revised the RAWP QAPP on March 28, 2018. The RAWP QAPP was revised to update the method for groundwater sampling for PCE and TCE analysis via Passive Diffusion Bag (BDB samplers) and also to include the groundwater sampling and analytical methods for additional analysis for emerging contaminants including 1,4 dioxane and PFOas.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- NYSDEC approval of the revised RAWP QAPP
- Coordination for the remedial ISCO injections

Approved Activity Modifications:

- None

Results of sampling and tests and all other data received or generated by or on behalf of Applicant in connection with this Site

- The February 19, 2018 groundwater sampling exercise performed prior to ISCO injections indicated PCE, TCE and cis-1,2-DCE concentrations detected in the most impacted monitoring well MW-4 were significantly reduced to 75 µg/L, 0.7 µg/L and 0.9 µg/L compared to their respective levels of 3,799 µg/L, 17 µg/L and 20 µg/L detected during January 2015. PCE, TCE and cis-1,2-DCE concentrations detected in the off-site upgradient monitoring well MW-6 and also in groundwater beneath the Site
-



were consistent with the January 2015 investigation. (Table 1 provides a tabulation of laboratory analytical results of groundwater samples).

Estimated Percentage of Project Completion:

- 55 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None
- 

Actions Undertaken to Resolve Delays:

- None

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**Hydro Tech Environmental Engineering and Geology, DPC**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
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Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.



**Tabel 1**  
**Groundwater Samples Analytical Results for VOCs**  
**11-28 31st Drive, Queens, NY**

Sample ID	MW-1		MW-2		MW-3		MW-4		MW-6		Field Blank		Trip Blank		NYSDEC TOGS Standards and Guidance Values - GA
Sampling Date	2/19/2018		2/19/2018		2/19/2018		2/19/2018		2/19/2018		2/19/2018		2/19/2018		
Matrix	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
Compound	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	
1,1,1,2-Tetrachloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,1,1-Trichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,1,2,2-Tetrachloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,1,2-Trichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1
1,1-Dichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,1-Dichloroethylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,1-Dichloropropylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,2,3-Trichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,2,3-Trichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.04
1,2,4,5-Tetramethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS
1,2,4-Trichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,2,4-Trimethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,2-Dibromo-3-chloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.04
1,2-Dibromoethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.0006
1,2-Dichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	3
1,2-Dichloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.6
1,2-Dichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1
1,3,5-Trimethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,3-Dichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	3
1,3-Dichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
1,4-Dichlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	3
2,2-Dichloropropane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
2-Butanone	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50
2-Chlorotoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
2-Hexanone	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50
4-Chlorotoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
4-Methyl-2-pentanone	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS
Acetone	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5.6		1.0	U	50
Benzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	1
Bromobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Bromochloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Bromodichloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50
Bromoform	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50
Bromomethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Carbon disulfide	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS
Carbon tetrachloride	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Chlorobenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Chloroethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Chloroform	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	7
Chloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
cis-1,2-Dichloroethylene	0.2	U	0.6		0.2	U	0.9		57		0.2	U	0.2	U	5
cis-1,3-Dichloropropylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.4
Dibromochloromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	50
Dibromomethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS
Dichlorodifluoromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Ethyl Benzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Hexachlorobutadiene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.5
Isopropylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Methyl tert-butyl ether (MTBE)	0.2	U	0.9		0.2	U	0.2	U	0.3	J	0.2	U	0.2	U	10
Methylene chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	5
Naphthalene	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	10
n-Butylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
n-Propylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
o-Xylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
p- & m- Xylenes	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5
p-Diethylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS
p-Ethyltoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	NS
p-Isopropyltoluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
sec-Butylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Styrene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
tert-Butylbenzene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Tetrachloroethylene	0.3	J	25		4.1		70		75		0.2	U	0.2	U	5
Toluene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
trans-1,2-Dichloroethylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	J	0.2	U	0.2	U	5
trans-1,3-Dichloropropylene	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.4
Trichloroethylene	0.2	U	0.4	J	0.2	U	0.7		15		0.2	U	0.2	U	5
Trichlorofluoromethane	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	5
Vinyl Chloride	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	2
Xylenes, Total	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	5

**NOTES:**

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

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





# Hydro Tech Environmental

## Engineering and Geology, DPC

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[WWW.HYDROTECHENVIRONMENTAL.COM](http://WWW.HYDROTECHENVIRONMENTAL.COM)

---

May 08, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza 47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – April 2018**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- The Site was represented by Hydro Tech during the BCP COC Seminar, which was held by NYSDEC on April 24, 2018.
- NYSDEC provided review comments on the Revised RAWP QAPP on April 17, 2018.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Revised and finalized the RAWP QAPP per NYSDEC comments
- Coordination for the remedial ISCO injections

Approved Activity Modifications:

- None

Results of sampling and tests and all other data received or generated by or on behalf of Applicant in connection with this Site

- None

Estimated Percentage of Project Completion:

- 55 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None
-



Actions Undertaken to Resolve Delays:

- None

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**Hydro Tech Environmental Engineering and Geology, DPC**

A handwritten signature in black ink, appearing to read "Paul I. Matli". The signature is fluid and cursive, with a long horizontal stroke at the end.

Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/lr

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





## HydroTech Environmental

ENGINEERING AND GEOLOGY, DPC

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June 07, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza 47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – May 2018**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Transmitted NYSDEC to the revised RAWP QAPP on May 16, 2018.
- Performed the first round of ISCO injections on May 28 and 29, 2018.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Receive NYSDEC approval of revised RAWP QAPP
- Schedule on June 18, 2018 the monitoring of groundwater depth in target MWs and the sampling of groundwater in MW-3 to be analyzed for emerging contaminant.
- Place PDB samplers in target monitoring wells on June 18, 2018 to be collected for laboratory analysis 14 days later.

Approved Activity Modifications:

- None
-



Results of sampling and tests and all other data received or generated by or on behalf of Applicant in connection with this Site

- Received the DUSR for the baseline groundwater data collected prior to ISCO injections. Overall data is deemed usable (**see attached**).
- Received the DUSR for the endpoint soil samples collected around the UST. All data is deemed usable (**see attached**).

Estimated Percentage of Project Completion:

- 55 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None

Actions Undertaken to Resolve Delays:

- None

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**HydroTech Environmental Engineering and Geology, DPC**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/as

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





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April 30, 2018

Mr. Paul I. Matli, Ph.D.  
Hydro Tech Environmental, Corp.  
15 Ocean Ave., 2<sup>nd</sup> Floor  
Brooklyn, NY 11225

Re: Data Validation Report  
October 2017 Soil Sampling Event  
11-28 31 Drive, LIC, NY

Dear Dr. Matli:

The data usability summary report and data validation summaries are attached to this letter for the above referenced project. The data for York Analytical Laboratories, Inc. SDG 17J0671 were mostly acceptable with some issues that are identified in the validation summary. There were data that were qualified as unusable (R) in the data pack. The reasons for rejecting data are outlined in the associated DUSR and QA/QC reviews. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

We have attached lists of data validation acronyms and data qualifiers to assist you in the interpretation of the reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Hydro Tech Environmental, Corp.

Sincerely,  
Alpha Geoscience

Donald Anné  
Senior Chemist

DCA:dca  
attachments



## Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation



## Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.





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**Data Usability Summary Report for  
York Analytical Laboratories, Inc., SDG: 17J0671**

**5 Soil Samples and 1 Trip Blank  
Collected October 16, 2017**

Prepared by: Donald Anné  
April 30, 2018

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile and semi-volatile analyses for 5 soil samples and volatile analyses only for 1 trip blank.

The overall performance of the analysis is acceptable. York Analytical Laboratories, Inc. did not fulfill the requirements of the methods.

The data are mostly acceptable with issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The “not detected” volatile results for 1,4-dioxane were qualified as “rejected, unusable” (R) in all 5 soil samples because average RRF and RRF for 1,4-dioxane were below the allowable minimum in the associated initial and continuing calibrations.
- The “not detected” volatile result for 1,1,1-trichloroethane was qualified as “rejected, unusable” (R) in the Trip Blank because 1 of 2 percent recoveries for 1,1,1-trichloroethane was below QC limits and below 30% in the associated aqueous LCS/LCSD.
- The “not detected” semi-volatile result for hexachlorocyclopentadiene was qualified as “rejected, unusable” (R) in sample EP-3 (5 ft) because 2 of 2 percent recoveries for hexachlorocyclopentadiene were below QC limits and below 10% in soil MS/MSD sample EP-3 (5 ft).

All data that are not qualified rejected, unusable (R) are considered usable. Detailed information on data quality is included in the data validation reviews.





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**QA/QC Review of Method 8260C Volatiles Data for  
York Analytical Laboratories, Inc., SDG: 17J0671**

**5 Soil Samples and 1 Trip Blank  
Collected October 16, 2017**

Prepared by: Donald Anné  
April 30, 2018

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Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRF for 2-butanone was below the method minimums for VOA No.3 on 09-14-17. The average RRFs for 2-butanone and 2-hexanone were below the method minimums for VOA No.8 on 10-05-17. The %RSDs for methyl acetate and acetone were above the method maximum for VOA No.3 on 09-14-17. The %RSDs for bromomethane and cyclohexane were above the method maximum for VOA No.8 on 10-05-17. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration.

The %RSDs for methyl acetate and acetone were above the allowable maximum (30%) for VOA No.3 on 09-14-17. Positive results for these compounds should be considered estimated (J) in associated samples.

The average RRF for 1,4-dioxane was below the allowable minimum (0.005) for VOA No.3 on 09-14-17. Positive results for 1,4-dioxane should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated samples.

Continuing Calibration: The RRFs for 2-butanone and 2-hexanone were below the method minimums on 10-17-17 (V801633.D). The %Ds for 7 compounds (circled red on attached FORM VII) were above the method maximum on 10-17-17 (V801633.D). The %Ds for 2-butanone and 1,2,4-trichlorobenzene were above the method maximum on 10-18-17 (V3128543.D). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration.



The RRF for 1,4-dioxane was below the allowable minimum (0.005) on 10-17-17 (V801633.D). The RRF for 1,4-dioxane was below the allowable minimum (0.005) on 10-18-17 (V3128543.D). Positive results for 1,4-dioxane should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated samples.

The %Ds for dichlorodifluoromethane, bromomethane, trichlorofluoromethane, and cyclohexane were above the allowable maximum (25%) on 10-17-17 (V801633.D). The %D for 2-butanone was above the allowable maximum (25%) on 10-18-17 (V3128543.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for 5 compounds (circled red on the attached MS/MSD from) were above the allowable maximum and 1 of 2 percent recoveries for 1,1-dichloroethylene was above QC limits for soil MS/MSD sample EP-3 (5 ft). Positive results for compounds with RPDs above the allowable maximum should be considered estimated (J) and positive results for 1,1-dichloroethylene estimated, biased high (J+). Sample EP-3 (5 ft) reported these compounds as "not detected"; therefore, no action is taken.

Laboratory Control Sample: The relative percent difference (RPD) for 1,1,1-trichloroethane was above the allowable maximum; 2 of 2 percent recoveries (%Rs) for 1,1-dichloroethylene, dichlorodifluoromethane, and vinyl acetate and 1 of 2 %Rs for hexachlorobutadiene were above the QC limits; and 1 of 2 for 1,1,1-trichloroethane was below QC limits and below 30% for aqueous samples BJ70847-BS1/BSD1. Positive results for 1,1-dichloroethylene, dichlorodifluoromethane, vinyl acetate, and hexachlorobutadiene should be considered estimated, biased high (J+); positive results for 1,1,1-trichloroethane should be considered estimated, biased low (J-); and "not detected" results for 1,1,1-trichloroethane should be considered rejected, unusable (R) in associated aqueous samples.



The RPDs for target compounds were below the allowable maximum, but 2 of 2%Rs for 1,1-dichloroethylene and 1 of 2 %Rs for 2-butanone were above the QC limits for soil samples BJ70939-BS1/BSD1. Positive results for 1,1-dichloroethylene and 2-butanone should be considered estimated, biased high (J+) in associated soil samples.

Compound ID: Checked surrogates were within GC quantitation limits. The analyses of soil samples reported target compounds as not detected.



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BS1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	10.8	108	70 - 132
1,1,1-Trichloroethane	10.0	11.9	119	68 - 138
1,1,2,2-Tetrachloroethane	10.0	8.89	88.9	73 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	12.6	126	67 - 136
1,1,2-Trichloroethane	10.0	9.36	93.6	79 - 125
1,1-Dichloroethane	10.0	10.8	108	78 - 128
1,1-Dichloroethylene	5.00	11.1	222 *	68 - 134
1,1-Dichloropropylene	10.0	11.0	110	74 - 130
1,2,3-Trichlorobenzene	10.0	9.54	95.4	77 - 140
1,2,3-Trichloropropane	10.0	9.26	92.6	79 - 127
1,2,4-Trichlorobenzene	10.0	10.1	101	75 - 141
1,2,4-Trimethylbenzene	10.0	10.6	106	78 - 127
1,2-Dibromo-3-chloropropane	10.0	9.24	92.4	60 - 150
1,2-Dibromoethane	10.0	9.42	94.2	86 - 123
1,2-Dichlorobenzene	10.0	9.74	97.4	79 - 125
1,2-Dichloroethane	10.0	10.9	109	69 - 133
1,2-Dichloropropane	10.0	9.48	94.8	76 - 124
1,3,5-Trimethylbenzene	10.0	10.3	103	78 - 128
1,3-Dichlorobenzene	10.0	10.4	104	81 - 124
1,3-Dichloropropane	10.0	9.32	93.2	79 - 125
1,4-Dichlorobenzene	10.0	10.1	101	82 - 124
2,2-Dichloropropane	10.0	11.9	119	61 - 139
2-Butanone	10.0	6.22	62.2	44 - 169
2-Chlorotoluene	10.0	10.4	104	74 - 130
4-Chlorotoluene	10.0	9.82	98.2	75 - 127
Acetone	10.0	10.3	103	29 - 163
Benzene	10.0	10.3	103	72 - 134
Bromobenzene	10.0	9.48	94.8	74 - 129
Bromochloromethane	10.0	11.1	111	69 - 134
Bromodichloromethane	10.0	10.0	100	76 - 127



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BS1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Bromoform	10.0	9.63	96.3	77 - 137
Bromomethane	10.0	6.06	60.6	50 - 156
Carbon tetrachloride	10.0	12.4	124	62 - 145
Chlorobenzene	10.0	10.2	102	85 - 119
Chloroethane	10.0	12.6	126	49 - 143
Chloroform	10.0	10.5	105	74 - 131
Chloromethane	10.0	10.7	107	43 - 134
cis-1,2-Dichloroethylene	10.0	10.6	106	73 - 134
cis-1,3-Dichloropropylene	10.0	9.78	97.8	77 - 128
Dibromochloromethane	10.0	9.98	99.8	79 - 130
Dibromomethane	10.0	9.38	93.8	78 - 128
Dichlorodifluoromethane	10.0	18.0	180 *	38 - 139
Ethyl Benzene	10.0	11.0	110	80 - 129
Hexachlorobutadiene	10.0	13.5	135	72 - 141
Isopropylbenzene	10.0	11.1	111	76 - 128
Methyl tert-butyl ether (MTBE)	10.0	9.82	98.2	64 - 142
Methylene chloride	10.0	10.3	103	56 - 142
Naphthalene	10.0	9.23	92.3	79 - 144
n-Butylbenzene	10.0	11.5	115	74 - 132
n-Propylbenzene	10.0	11.1	111	72 - 135
o-Xylene	10.0	10.7	107	81 - 123
p- & m- Xylenes	20.0	22.7	114	79 - 130
p-Isopropyltoluene	10.0	11.2	112	80 - 127
sec-Butylbenzene	10.0	10.8	108	78 - 127
Styrene	10.0	10.5	105	82 - 124
tert-Butylbenzene	10.0	10.6	106	75 - 131
Tetrachloroethylene	10.0	11.0	110	78 - 133
Toluene	10.0	10.3	103	83 - 122
trans-1,2-Dichloroethylene	10.0	10.6	106	59 - 145
trans-1,3-Dichloropropylene	10.0	9.77	97.7	74 - 131



Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BS1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Trichloroethylene	10.0	10.1	101	81 - 125
Trichlorofluoromethane	10.0	14.4	144	61 - 144
Vinyl acetate	10.0	16.6	166 *	32 - 165
Vinyl Chloride	10.0	13.0	130	42 - 136

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BSD1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	10.8	108	0.371	30	70 - 132
1,1,1-Trichloroethane	10.0	2.22	22.2 *	137 *	30	68 - 138
1,1,2,2-Tetrachloroethane	10.0	9.01	90.1	1.34	30	73 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.8	128	1.18	30	67 - 136
1,1,2-Trichloroethane	10.0	9.75	97.5	4.08	30	79 - 125
1,1-Dichloroethane	10.0	10.9	109	1.01	30	78 - 128
1,1-Dichloroethylene	5.00	11.2	224 *	0.717	30	68 - 134
1,1-Dichloropropylene	10.0	11.2	112	2.25	30	74 - 130
1,2,3-Trichlorobenzene	10.0	12.4	124	25.9	30	77 - 140
1,2,3-Trichloropropane	10.0	9.31	93.1	0.539	30	79 - 127
1,2,4-Trichlorobenzene	10.0	11.2	112	10.4	30	75 - 141
1,2,4-Trimethylbenzene	10.0	10.0	100	5.35	30	78 - 127
1,2-Dibromo-3-chloropropane	10.0	9.26	92.6	0.216	30	60 - 150
1,2-Dibromoethane	10.0	9.79	97.9	3.85	30	86 - 123
1,2-Dichlorobenzene	10.0	9.67	96.7	0.721	30	79 - 125
1,2-Dichloroethane	10.0	11.5	115	4.82	30	69 - 133
1,2-Dichloropropane	10.0	9.62	96.2	1.47	30	76 - 124
1,3,5-Trimethylbenzene	10.0	9.83	98.3	4.86	30	78 - 128
1,3-Dichlorobenzene	10.0	10.0	100	3.53	30	81 - 124
1,3-Dichloropropane	10.0	9.76	97.6	4.61	30	79 - 125
1,4-Dichlorobenzene	10.0	9.97	99.7	0.899	30	82 - 124
2,2-Dichloropropane	10.0	11.8	118	0.677	30	61 - 139
2-Butanone	10.0	7.06	70.6	12.7	30	44 - 169
2-Chlorotoluene	10.0	9.84	98.4	5.15	30	74 - 130
4-Chlorotoluene	10.0	9.44	94.4	3.95	30	75 - 127
Acetone	10.0	11.0	110	6.46	30	29 - 163
Benzene	10.0	10.5	105	1.93	30	72 - 134
Bromobenzene	10.0	9.20	92.0	3.00	30	74 - 129
Bromochloromethane	10.0	11.6	116	3.97	30	69 - 134
Bromodichloromethane	10.0	10.2	102	1.48	30	76 - 127



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BSD1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromoform	10.0	10.2	102	6.24	30	77 - 137
Bromomethane	10.0	6.85	68.5	12.2	30	50 - 156
Carbon tetrachloride	10.0	12.4	124	0.564	30	62 - 145
Chlorobenzene	10.0	10.1	101	0.197	30	85 - 119
Chloroethane	10.0	12.5	125	0.557	30	49 - 143
Chloroform	10.0	10.9	109	4.03	30	74 - 131
Chloromethane	10.0	10.3	103	3.14	30	43 - 134
cis-1,2-Dichloroethylene	10.0	9.50	95.0	11.4	30	73 - 134
cis-1,3-Dichloropropylene	10.0	10.0	100	2.42	30	77 - 128
Dibromochloromethane	10.0	10.4	104	4.03	30	79 - 130
Dibromomethane	10.0	9.79	97.9	4.28	30	78 - 128
Dichlorodifluoromethane	10.0	18.0	180 *	0.0556	30	38 - 139
Ethyl Benzene	10.0	10.8	108	1.46	30	80 - 129
Hexachlorobutadiene	10.0	16.1	161 *	17.5	30	72 - 141
Isopropylbenzene	10.0	10.4	104	6.61	30	76 - 128
Methyl tert-butyl ether (MTBE)	10.0	10.7	107	8.67	30	64 - 142
Methylene chloride	10.0	10.6	106	3.45	30	56 - 142
Naphthalene	10.0	10.4	104	12.4	30	79 - 144
n-Butylbenzene	10.0	11.1	111	3.64	30	74 - 132
n-Propylbenzene	10.0	10.4	104	6.88	30	72 - 135
o-Xylene	10.0	10.7	107	0.00	30	81 - 123
p- & m- Xylenes	20.0	22.3	112	1.73	30	79 - 130
p-Isopropyltoluene	10.0	10.7	107	4.49	30	80 - 127
sec-Butylbenzene	10.0	10.2	102	5.62	30	78 - 127
Styrene	10.0	10.6	106	0.852	30	82 - 124
tert-Butylbenzene	10.0	10.0	100	6.11	30	75 - 131
Tetrachloroethylene	10.0	10.7	107	2.49	30	78 - 133
Toluene	10.0	10.2	102	0.878	30	83 - 122
trans-1,2-Dichloroethylene	10.0	10.8	108	1.77	30	59 - 145
trans-1,3-Dichloropropylene	10.0	10.1	101	3.02	30	74 - 131



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BSD1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Trichloroethylene	10.0	9.96	99.6	1.79	30	81 - 125
Trichlorofluoromethane	10.0	14.2	142	1.33	30	61 - 144
Vinyl acetate	10.0	17.1	171 *	3.27	30	32 - 165
Vinyl Chloride	10.0	13.0	130	0.154	30	42 - 136

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	54.4	109	75 - 129
1,1,1-Trichloroethane	50.0	54.3	109	71 - 137
1,1,2,2-Tetrachloroethane	50.0	54.8	110	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50.0	53.3	107	58 - 146
1,1,2-Trichloroethane	50.0	53.1	106	83 - 123
1,1-Dichloroethane	50.0	52.3	105	75 - 130
1,1-Dichloroethylene	25.0	52.3	209 *	64 - 137
1,1-Dichloropropylene	50.0	52.1	104	77 - 127
1,2,3-Trichlorobenzene	50.0	55.6	111	81 - 140
1,2,3-Trichloropropane	50.0	57.3	115	81 - 126
1,2,4-Trichlorobenzene	50.0	61.3	123	80 - 141
1,2,4-Trimethylbenzene	50.0	53.9	108	84 - 125
1,2-Dibromo-3-chloropropane	50.0	54.5	109	74 - 142
1,2-Dibromoethane	50.0	53.3	107	86 - 123
1,2-Dichlorobenzene	50.0	55.3	111	85 - 122
1,2-Dichloroethane	50.0	50.9	102	71 - 133
1,2-Dichloropropane	50.0	52.2	104	81 - 122
1,3,5-Trimethylbenzene	50.0	52.4	105	82 - 126
1,3-Dichlorobenzene	50.0	55.9	112	84 - 124
1,3-Dichloropropane	50.0	49.0	98.0	83 - 123
1,4-Dichlorobenzene	50.0	55.6	111	84 - 124
1,4-Dioxane	1000	1010	101	10 - 228
2,2-Dichloropropane	50.0	52.3	105	67 - 136
2-Butanone	50.0	74.6	149 *	58 - 147
2-Chlorotoluene	50.0	53.9	108	78 - 127
4-Chlorotoluene	50.0	53.2	106	79 - 125
Acetone	50.0	39.3	78.6	36 - 155
Benzene	50.0	48.5	96.9	77 - 127
Bromobenzene	50.0	52.7	105	77 - 129
Bromochloromethane	50.0	51.6	103	74 - 129



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Bromodichloromethane	50.0	53.6	107	81 - 124
Bromoform	50.0	57.0	114	80 - 136
Bromomethane	50.0	45.4	90.8	32 - 177
Carbon tetrachloride	50.0	54.6	109	66 - 143
Chlorobenzene	50.0	54.0	108	86 - 120
Chloroethane	50.0	49.8	99.6	51 - 142
Chloroform	50.0	51.3	103	76 - 131
Chloromethane	50.0	50.4	101	49 - 132
cis-1,2-Dichloroethylene	50.0	49.4	98.8	74 - 132
cis-1,3-Dichloropropylene	50.0	53.9	108	81 - 129
Dibromochloromethane	50.0	55.5	111	10 - 200
Dibromomethane	50.0	53.1	106	83 - 124
Dichlorodifluoromethane	50.0	52.4	105	28 - 158
Ethyl Benzene	50.0	53.7	107	84 - 125
Hexachlorobutadiene	50.0	51.4	103	83 - 133
Isopropylbenzene	50.0	52.8	106	81 - 127
Methyl tert-butyl ether (MTBE)	50.0	49.1	98.2	74 - 131
Methylene chloride	50.0	48.9	97.8	57 - 141
Naphthalene	50.0	56.0	112	86 - 141
n-Butylbenzene	50.0	57.7	115	80 - 130
n-Propylbenzene	50.0	54.0	108	74 - 136
o-Xylene	50.0	54.0	108	83 - 123
p- & m- Xylenes	100	105	105	82 - 128
p-Isopropyltoluene	50.0	55.5	111	85 - 125
sec-Butylbenzene	50.0	55.4	111	83 - 125
Styrene	50.0	52.4	105	86 - 126
tert-Butylbenzene	50.0	53.3	107	80 - 127
Tetrachloroethylene	50.0	49.2	98.4	80 - 129
Toluene	50.0	54.2	108	85 - 121
trans-1,2-Dichloroethylene	50.0	48.0	96.1	72 - 132



Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
trans-1,3-Dichloropropylene	50.0	55.4	111	78 - 132
Trichloroethylene	50.0	52.1	104	84 - 123
Trichlorofluoromethane	50.0	49.8	99.7	62 - 140
Vinyl acetate	50.0	57.0	114	67 - 136
Vinyl Chloride	50.0	46.4	92.9	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	50.0	53.3	107	2.12	30	75 - 129
1,1,1-Trichloroethane	50.0	49.4	98.9	9.32	30	71 - 137
1,1,2,2-Tetrachloroethane	50.0	52.6	105	4.13	30	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.9	104	2.72	30	58 - 146
1,1,2-Trichloroethane	50.0	53.3	107	0.433	30	83 - 123
1,1-Dichloroethane	50.0	50.6	101	3.46	30	75 - 130
1,1-Dichloroethylene	25.0	44.4	177 *	16.4	30	64 - 137
1,1-Dichloropropylene	50.0	51.5	103	1.10	30	77 - 127
1,2,3-Trichlorobenzene	50.0	55.5	111	0.108	30	81 - 140
1,2,3-Trichloropropane	50.0	58.4	117	1.97	30	81 - 126
1,2,4-Trichlorobenzene	50.0	58.3	117	5.15	30	80 - 141
1,2,4-Trimethylbenzene	50.0	50.4	101	6.71	30	84 - 125
1,2-Dibromo-3-chloropropane	50.0	54.3	109	0.367	30	74 - 142
1,2-Dibromoethane	50.0	51.3	103	3.75	30	86 - 123
1,2-Dichlorobenzene	50.0	54.7	109	1.11	30	85 - 122
1,2-Dichloroethane	50.0	51.9	104	2.00	30	71 - 133
1,2-Dichloropropane	50.0	49.4	98.7	5.61	30	81 - 122
1,3,5-Trimethylbenzene	50.0	54.0	108	2.93	30	82 - 126
1,3-Dichlorobenzene	50.0	57.9	116	3.55	30	84 - 124
1,3-Dichloropropane	50.0	50.5	101	3.14	30	83 - 123
1,4-Dichlorobenzene	50.0	57.0	114	2.43	30	84 - 124
1,4-Dioxane	1000	1010	101	0.0287	30	10 - 228
2,2-Dichloropropane	50.0	51.2	102	2.01	30	67 - 136
2-Butanone	50.0	72.3	145	3.20	30	58 - 147
2-Chlorotoluene	50.0	55.9	112	3.72	30	78 - 127
4-Chlorotoluene	50.0	56.4	113	5.88	30	79 - 125
Acetone	50.0	30.7	61.5	24.5	30	36 - 155
Benzene	50.0	49.8	99.5	2.67	30	77 - 127
Bromobenzene	50.0	51.6	103	2.11	30	77 - 129
Bromochloromethane	50.0	48.1	96.3	6.96	30	74 - 129



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromodichloromethane	50.0	54.3	109	1.30	30	81 - 124
Bromoform	50.0	54.8	110	3.92	30	80 - 136
Bromomethane	50.0	48.3	96.7	6.25	30	32 - 177
Carbon tetrachloride	50.0	53.6	107	1.88	30	66 - 143
Chlorobenzene	50.0	53.1	106	1.72	30	86 - 120
Chloroethane	50.0	49.2	98.5	1.17	30	51 - 142
Chloroform	50.0	50.9	102	0.783	30	76 - 131
Chloromethane	50.0	50.6	101	0.356	30	49 - 132
cis-1,2-Dichloroethylene	50.0	49.8	99.6	0.847	30	74 - 132
cis-1,3-Dichloropropylene	50.0	53.4	107	0.839	30	81 - 129
Dibromochloromethane	50.0	57.3	115	3.21	30	10 - 200
Dibromomethane	50.0	52.3	105	1.56	30	83 - 124
Dichlorodifluoromethane	50.0	49.8	99.7	5.03	30	28 - 158
Ethyl Benzene	50.0	54.8	110	1.94	30	84 - 125
Hexachlorobutadiene	50.0	53.8	108	4.47	30	83 - 133
Isopropylbenzene	50.0	52.4	105	0.627	30	81 - 127
Methyl tert-butyl ether (MTBE)	50.0	49.2	98.4	0.203	30	74 - 131
Methylene chloride	50.0	43.4	86.9	11.8	30	57 - 141
Naphthalene	50.0	52.2	104	7.08	30	86 - 141
n-Butylbenzene	50.0	57.8	116	0.156	30	80 - 130
n-Propylbenzene	50.0	55.2	110	2.23	30	74 - 136
o-Xylene	50.0	50.5	101	6.62	30	83 - 123
p- & m- Xylenes	100	107	107	2.06	30	82 - 128
p-Isopropyltoluene	50.0	55.8	112	0.557	30	85 - 125
sec-Butylbenzene	50.0	56.5	113	1.93	30	83 - 125
Styrene	50.0	52.3	105	0.172	30	86 - 126
tert-Butylbenzene	50.0	56.3	113	5.49	30	80 - 127
Tetrachloroethylene	50.0	52.3	105	6.07	30	80 - 129
Toluene	50.0	53.1	106	2.05	30	85 - 121
trans-1,2-Dichloroethylene	50.0	47.8	95.6	0.501	30	72 - 132



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
trans-1,3-Dichloropropylene	50.0	55.2	110	0.235	30	78 - 132
Trichloroethylene	50.0	52.4	105	0.536	30	84 - 123
Trichlorofluoromethane	50.0	50.3	101	0.998	30	62 - 140
Vinyl acetate	50.0	56.9	114	0.211	30	67 - 136
Vinyl Chloride	50.0	47.4	94.8	2.00	30	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EP-3 (5 ft)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MS1

Preparation: EPA 5035A

Initial/Final: 5.6 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	0.00	52.7	105	15 - 161
1,1,1-Trichloroethane	50.0	0.00	48.7	97.3	42 - 145
1,1,2,2-Tetrachloroethane	50.0	0.00	56.3	113	16 - 167
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.00	48.9	97.7	11 - 160
1,1,2-Trichloroethane	50.0	0.00	51.7	103	44 - 145
1,1-Dichloroethane	50.0	0.00	48.9	97.7	46 - 142
1,1-Dichloroethylene	25.0	0.00	44.8	179 *	30 - 153
1,1-Dichloropropylene	50.0	0.00	47.1	94.3	40 - 133
1,2,3-Trichlorobenzene	50.0	0.00	31.8	63.7	10 - 157
1,2,3-Trichloropropane	50.0	0.00	61.7	123	38 - 155
1,2,4-Trichlorobenzene	50.0	0.00	34.1	68.1	10 - 151
1,2,4-Trimethylbenzene	50.0	0.00	54.4	109	10 - 170
1,2-Dibromo-3-chloropropane	50.0	0.00	44.6	89.3	36 - 138
1,2-Dibromoethane	50.0	0.00	44.8	89.5	40 - 142
1,2-Dichlorobenzene	50.0	0.00	46.6	93.3	10 - 147
1,2-Dichloroethane	50.0	0.00	49.9	99.8	48 - 133
1,2-Dichloropropane	50.0	0.00	52.8	106	47 - 141
1,3,5-Trimethylbenzene	50.0	0.00	52.2	104	10 - 150
1,3-Dichlorobenzene	50.0	0.00	46.2	92.5	10 - 144
1,3-Dichloropropane	50.0	0.00	47.9	95.7	43 - 142
1,4-Dichlorobenzene	50.0	0.00	44.7	89.3	10 - 160
1,4-Dioxane	1000	0.00	952	95.2	10 - 191
2,2-Dichloropropane	50.0	0.00	50.2	100	38 - 130
2-Butanone	50.0	0.00	72.9	146	10 - 189
2-Chlorotoluene	50.0	0.00	52.8	106	14 - 144
4-Chlorotoluene	50.0	0.00	49.3	98.6	15 - 138
Acetone	50.0	2.47	58.9	113	10 - 196
Benzene	50.0	0.00	47.2	94.5	43 - 139
Bromobenzene	50.0	0.00	49.7	99.4	23 - 142
Bromochloromethane	50.0	0.00	47.8	95.6	38 - 145
Bromodichloromethane	50.0	0.00	50.8	102	38 - 147
Bromoform	50.0	0.00	55.1	110	29 - 156



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MS1

Preparation: EPA 5035A

Initial/Final: 5.6 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Bromomethane	50.0	0.00	47.6	95.2	10 - 166
Carbon tetrachloride	50.0	0.00	50.5	101	35 - 145
Chlorobenzene	50.0	0.00	46.9	93.9	21 - 154
Chloroethane	50.0	0.00	51.2	102	15 - 160
Chloroform	50.0	0.00	51.1	102	47 - 142
Chloromethane	50.0	0.00	45.5	90.9	10 - 159
cis-1,2-Dichloroethylene	50.0	0.00	48.5	97.0	42 - 144
cis-1,3-Dichloropropylene	50.0	0.00	48.8	97.5	18 - 159
Dibromochloromethane	50.0	0.00	50.7	101	10 - 179
Dibromomethane	50.0	0.00	48.6	97.2	47 - 143
Dichlorodifluoromethane	50.0	0.00	42.3	84.6	10 - 145
Ethyl Benzene	50.0	0.00	49.0	98.1	11 - 158
Hexachlorobutadiene	50.0	0.00	35.2	70.4	10 - 158
Isopropylbenzene	50.0	0.00	56.6	113	10 - 162
Methyl tert-butyl ether (MTBE)	50.0	0.00	50.0	100	42 - 152
Methylene chloride	50.0	0.00	47.8	95.5	28 - 151
Naphthalene	50.0	0.00	33.6	67.1	10 - 158
n-Butylbenzene	50.0	0.00	47.7	95.4	10 - 162
n-Propylbenzene	50.0	0.00	54.3	109	10 - 155
o-Xylene	50.0	0.00	47.3	94.7	10 - 158
p- & m- Xylenes	100	0.00	99.2	99.2	10 - 156
p-Isopropyltoluene	50.0	0.00	51.7	103	10 - 147
sec-Butylbenzene	50.0	0.00	55.1	110	10 - 157
Styrene	50.0	0.00	42.6	85.2	13 - 171
tert-Butylbenzene	50.0	0.00	59.4	119	10 - 160
Tetrachloroethylene	50.0	0.00	54.7	109	30 - 167
Toluene	50.0	0.00	48.5	97.1	21 - 160
trans-1,2-Dichloroethylene	50.0	0.00	46.2	92.4	29 - 153
trans-1,3-Dichloropropylene	50.0	0.00	46.7	93.3	18 - 155
Trichloroethylene	50.0	0.00	48.0	96.0	24 - 169
Trichlorofluoromethane	50.0	0.00	46.3	92.6	35 - 142
Vinyl acetate	50.0	0.00	34.0	68.1	10 - 119



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-MS1Preparation: EPA 5035AInitial/Final: 5.6 g / 5 mlSource Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Vinyl Chloride	50.0	0.00	43.7	87.4	12 - 160

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MSD1

Preparation: EPA 5035A

Initial/Final: 5.57 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	50.0	43.0	86.0	20.3	33	15 - 161
1,1,1-Trichloroethane	50.0	36.0	72.1	29.8	30	42 - 145
1,1,2,2-Tetrachloroethane	50.0	49.1	98.3	13.6	56	16 - 167
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	34.3	68.7	34.9 *	31	11 - 160
1,1,2-Trichloroethane	50.0	48.2	96.3	7.03	40	44 - 145
1,1-Dichloroethane	50.0	41.3	82.6	16.8	36	46 - 142
1,1-Dichloroethylene	25.0	34.5	138	25.8	31	30 - 153
1,1-Dichloropropylene	50.0	37.7	75.4	22.3	28	40 - 133
1,2,3-Trichlorobenzene	50.0	26.7	53.5	17.4	47	10 - 157
1,2,3-Trichloropropane	50.0	56.4	113	9.06	48	38 - 155
1,2,4-Trichlorobenzene	50.0	27.9	55.8	19.9	52	10 - 151
1,2,4-Trimethylbenzene	50.0	40.0	80.1	30.3	242	10 - 170
1,2-Dibromo-3-chloropropane	50.0	48.3	96.6	7.94	54	36 - 138
1,2-Dibromoethane	50.0	44.5	89.0	0.538	39	40 - 142
1,2-Dichlorobenzene	50.0	38.0	75.9	20.6	52	10 - 147
1,2-Dichloroethane	50.0	47.0	93.9	6.11	32	48 - 133
1,2-Dichloropropane	50.0	44.3	88.5	17.6	37	47 - 141
1,3,5-Trimethylbenzene	50.0	39.7	79.5	27.1	62	10 - 150
1,3-Dichlorobenzene	50.0	37.0	73.9	22.3	51	10 - 144
1,3-Dichloropropane	50.0	47.0	94.1	1.73	36	43 - 142
1,4-Dichlorobenzene	50.0	36.8	73.7	19.2	52	10 - 160
1,4-Dioxane	1000	1200	120	22.7	196	10 - 191
2,2-Dichloropropane	50.0	36.6	73.2	31.3 *	31	38 - 130
2-Butanone	50.0	81.9	164	11.6	67	10 - 189
2-Chlorotoluene	50.0	39.7	79.4	28.3	49	14 - 144
4-Chlorotoluene	50.0	39.4	78.8	22.3	39	15 - 138
Acetone	50.0	61.8	119	4.77	150	10 - 196
Benzene	50.0	39.4	78.9	18.0	64	43 - 139
Bromobenzene	50.0	38.8	77.7	24.5	44	23 - 142
Bromochloromethane	50.0	44.1	88.2	8.01	30	38 - 145
Bromodichloromethane	50.0	43.2	86.4	16.2	37	38 - 147
Bromoform	50.0	47.7	95.5	14.3	51	29 - 156
Bromomethane	50.0	38.3	76.6	21.7	42	10 - 166



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EP-3 (5 ft)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MSD1

Preparation: EPA 5035A

Initial/Final: 5.57 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Carbon tetrachloride	50.0	36.5	73.0	32.2 *	31	35 - 145
Chlorobenzene	50.0	38.1	76.3	20.7	32	21 - 154
Chloroethane	50.0	34.9	69.8	37.9	40	15 - 160
Chloroform	50.0	40.6	81.2	22.8	29	47 - 142
Chloromethane	50.0	37.3	74.5	19.8	31	10 - 159
cis-1,2-Dichloroethylene	50.0	37.9	75.9	24.4	30	42 - 144
cis-1,3-Dichloropropylene	50.0	43.6	87.1	11.3	39	18 - 159
Dibromochloromethane	50.0	46.1	92.1	9.65	41	10 - 179
Dibromomethane	50.0	44.1	88.2	9.66	41	47 - 143
Dichlorodifluoromethane	50.0	29.1	58.2	37.0 *	34	10 - 145
Ethyl Benzene	50.0	37.7	75.4	26.1	42	11 - 158
Hexachlorobutadiene	50.0	30.8	61.5	13.6	45	10 - 158
Isopropylbenzene	50.0	38.8	77.5	37.4	57	10 - 162
Methyl tert-butyl ether (MTBE)	50.0	46.6	93.2	7.06	47	42 - 152
Methylene chloride	50.0	40.8	81.6	15.7	49	28 - 151
Naphthalene	50.0	29.7	59.4	12.1	95	10 - 158
n-Butylbenzene	50.0	38.0	75.9	22.7	96	10 - 162
n-Propylbenzene	50.0	39.3	78.6	32.1	56	10 - 155
o-Xylene	50.0	39.9	79.9	17.0	51	10 - 158
p- & m- Xylenes	100	78.7	78.7	23.0	47	10 - 156
p-Isopropyltoluene	50.0	39.6	79.1	26.6	60	10 - 147
sec-Butylbenzene	50.0	39.7	79.4	32.4	56	10 - 157
Styrene	50.0	37.6	75.1	12.6	39	13 - 171
tert-Butylbenzene	50.0	41.8	83.5	34.9	79	10 - 160
Tetrachloroethylene	50.0	44.1	88.1	21.5	33	30 - 167
Toluene	50.0	39.7	79.4	20.1	50	21 - 160
trans-1,2-Dichloroethylene	50.0	35.1	70.2	27.4	30	29 - 153
trans-1,3-Dichloropropylene	50.0	41.6	83.1	11.6	30	18 - 155
Trichloroethylene	50.0	37.1	74.2	25.7	30	24 - 169
Trichlorofluoromethane	50.0	33.3	66.5	32.7 *	30	35 - 142
Vinyl acetate	50.0	28.7	57.4	17.0	82	10 - 119
Vinyl Chloride	50.0	35.3	70.5	21.4	35	12 - 160



# Response Factor Report VOA No. 8

October 5, 2017

Method Path : C:\msdchem\1\methods\  
 Method File : V8LO0058.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Fri Oct 06 10:28:22 2017  
 Response Via : Initial Calibration

## Calibration Files

0.5 =V801278.D 2.0 =V801279.D 4.0 =V801280.D 10.0 =V801281.D 40.0 =V801283.D 80.0 =V801284.D  
 120 =V801285.D 160 =V801286.D

Compound	0.5	2.0	4.0	10.0	40.0	80.0	120	160	Avg	%RSD
-----ISTD-----										
1) I FLUOROBENZENE (ISTD)										
2) T Dichlorodifluo...	0.997	0.972	0.994	0.820	1.013	0.574	0.830	0.923	0.890	16.64
3) T Chloromethane	1.647	1.310	1.293	1.201	1.329	1.343	1.518	1.536	1.397	10.86
4) T Vinyl Chloride	1.338	1.162	1.187	1.104	1.234	0.960	1.094	1.116	1.149	9.67
5) T Bromomethane	0.339	0.325	0.340	0.380	0.579	0.625	0.579	0.584	0.469	28.39
6) T Chloroethane	0.730	0.651	0.649	0.614	0.660	0.595	0.611	0.607	0.640	6.81
7) T Trichlorofluor...	1.992	1.827	1.860	1.775	1.828	1.078	1.507	1.643	1.689	16.97
8) T Ethanol		0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	30.19
9) T Freon-113	1.378	1.324	1.274	1.266	1.235	0.636	1.015	1.189	1.165	20.55
10) T 1,1-Dichloroet...	1.138	1.050	1.027	1.012	1.060	0.801	0.921	0.970	0.997	10.21
11) T Acrolein	0.100	0.074	0.080	0.078	0.081	0.084	0.080	0.075	0.081	10.12
12) T Acetone			0.158	0.144	0.127	0.123	0.122	0.121	0.132	11.50
13) T Iodomethane			0.480	0.794	1.221	1.202	1.025	0.997	0.953	29.28
14) T Methyl Acetate	0.345	0.376	0.369	0.355	0.356	0.353	0.342	0.332	0.354	4.04
15) T Carbon disulfide	4.189	3.257	3.029	2.925	3.042	2.533	2.789	2.864	3.079	16.10
16) T tert-Butyl Alc...	0.060	0.059	0.056	0.057	0.055	0.054	0.055	0.053	0.056	4.18
17) T Methylene Chlo...	2.038	1.846	1.688	1.634	1.616	1.617	1.534	1.472	1.680	10.80
18) T Acrylonitrile	0.126	0.167	0.154	0.159	0.157	0.164	0.161	0.158	0.156	8.01
19) T trans-1,2-Dich...	2.235	1.956	1.881	1.875	1.924	1.756	1.744	1.710	1.885	8.88
20) T tert-Butyl Met...	1.643	2.077	1.979	1.999	2.043	2.068	1.990	1.930	1.966	7.08
21) T 1,1-Dichloroet...	2.613	2.613	2.504	2.473	2.500	2.370	2.218	2.127	2.427	7.30
22) T Vinyl Acetate	1.126	1.255	1.342	1.252	1.305	1.240	1.288	1.168	1.247	5.67
23) T Diisopropyl et...	4.025	4.667	4.550	4.403	4.259	3.956	3.507	3.249	4.077	12.23
24) T Ethyl-tert-But...	2.850	3.533	3.426	3.368	3.473	3.442	3.274	3.139	3.313	6.77
25) T cis-1,2-Dichlo...	2.410	2.310	2.187	2.179	2.227	2.160	2.086	2.018	2.197	5.59
26) T 2-Butanone	0.053	0.061	0.058	0.052	0.050	0.053	0.051	0.049	0.053	7.33
27) T 2,2-Dichloropr...	2.355	2.153	2.072	2.043	2.074	1.754	1.874	1.903	2.029	9.15
28) T Tetrahydrofuran	0.055	0.048	0.048	0.044	0.044	0.044	0.044	0.043	0.046	9.13
29) T Bromochloromet...	0.929	0.984	0.947	0.929	0.869	0.825	0.768	0.737	0.874	10.23
30) T Chloroform	1.258	1.446	1.416	1.437	1.514	1.546	1.489	1.447	1.444	6.02



## Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
Method File : V8LO0058.M

Title : Volatile Organics EPA 8260C

31) T	1,1,1-Trichloro...	2.467	2.249	2.178	2.184	2.198	1.804	1.954	1.964	2.125	9.79
32) T	Cyclohexane	2.865	2.747	2.671	2.569	2.309	1.139	1.692	1.846	2.230	27.40
33) T	1,1-Dichloropr...	2.141	1.929	1.864	1.861	1.850	1.428	1.619	1.651	1.793	12.22
34) S	d4-1,2-Dichlor...	0.837	0.926	0.929	0.928	0.925	0.902	0.871	0.836	0.895	4.56
35) T	Carbon Tetrach...	2.155	1.991	1.945	1.960	1.975	1.422	1.710	1.801	1.870	11.99
36) T	tert-Amyl alco...	0.030	0.044	0.043	0.042	0.043	0.041	0.040	0.037	0.040	11.12
37) T	1,2-Dichloroet...	1.179	1.274	1.224	1.226	1.255	1.261	1.200	1.141	1.220	3.70
38) T	Benzene	5.349	5.204	4.939	4.854	4.907	4.674	4.435	4.227	4.824	7.73
39) T	tert-Amyl meth...	2.002	2.525	2.453	2.423	2.508	2.481	2.362	2.254	2.376	7.36
CHLOROBENZENE-d5 (.....ISTD-----)											
40) I	Trichloroethylene	0.491	0.423	0.399	0.396	0.409	0.380	0.387	0.397	0.410	8.54
41) T	Methyl Cyclohe...	0.749	0.710	0.682	0.662	0.605		0.488	0.599	0.642	13.48
42) T	Methyl Methacr...	0.172	0.215	0.207	0.214	0.226	0.232	0.226	0.225	0.215	8.90
43) T	Dibromomethane	0.129	0.137	0.129	0.128	0.135	0.141	0.136	0.135	0.134	3.39
44) T	Bromodichlorom...	0.396	0.440	0.424	0.429	0.456	0.470	0.452	0.446	0.439	5.22
45) T	1,2-Dichloropr...	0.368	0.392	0.367	0.365	0.378	0.383	0.364	0.355	0.371	3.26
46) T	1,4-Dioxane	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.87
47) T	2-Chloroethyl ...	0.162	0.159	0.146	0.019	0.020	0.019	0.020	0.020	0.071	99.67
48) T	cis-1,3-Dichlo...	0.486	0.526	0.497	0.503	0.528	0.537	0.512	0.503	0.512	3.42
49) T	4-Methyl-2-Pen...	0.210	0.266	0.254	0.255	0.262	0.263	0.254	0.249	0.251	7.08
50) T	Toluene-d8 (SURR)	1.422	1.368	1.364	1.364	1.378	1.380	1.370	1.378	1.378	1.38
51) S	Toluene	1.812	1.663	1.554	1.531	1.497	1.425	1.342	1.295	1.515	11.12
52) T	trans-1,3-Dich...	0.378	0.409	0.382	0.378	0.395	0.403	0.387	0.383	0.389	3.00
53) T	1,1,2-Trichlor...	0.165	0.193	0.183	0.179	0.185	0.188	0.182	0.180	0.182	4.51
54) T	1,3-Dichloropr...	0.296	0.342	0.318	0.318	0.327	0.333	0.322	0.318	0.322	4.15
55) T	Tetrachloroeth...	0.539	0.459	0.428	0.429	0.408	0.325	0.359	0.382	0.416	15.76
56) T	2-Hexanone	0.070	0.092	0.088	0.089	0.092	0.094	0.093	0.091	0.089	8.76
57) T	Dibromochlorom...	0.193	0.230	0.222	0.229	0.247	0.256	0.251	0.249	0.235	8.83
58) T	1,2-Dibromoeth...	0.163	0.183	0.172	0.171	0.179	0.183	0.180	0.179	0.176	4.01
59) T	Chlorobenzene	1.020	1.023	0.956	0.953	0.940	0.940	0.890	0.873	0.950	5.64
60) T	1,1,1,2-tetrac...	0.319	0.354	0.334	0.343	0.340	0.339	0.314	0.303	0.331	5.13
61) T	Ethyl Benzene	2.085	1.917	1.802	1.787	1.665	1.507	1.433	1.386	1.698	14.45
62) T	p- & m-Xylenes	1.607	1.495	1.396	1.376	1.258	1.122	1.011	0.944	1.276	18.41
63) T	o-Xylene	1.433	1.452	1.353	1.348	1.286	1.262	1.204	1.188	1.316	7.46
64) T	Styrene	0.936	1.031	0.993	0.994	0.967	0.960	0.899	0.872	0.956	5.50
65) T	Bromoform	0.087	0.103	0.100	0.108	0.118	0.126	0.126	0.128	0.112	13.33
1,2-DICHLOROBENZEN...-----ISTD-----											
67) I	1,2-DICHLOROBENZEN...	7.419	6.236	5.968	5.871	5.285	4.644	4.828	4.909	5.645	16.39
68) T	p-Ethyltoluene										

V8LO0058.M Fri Oct 06 10:28:29 2017



Method Path : C:\msdchem\1\methods\  
 Method File : V8LO0058.M

Title : Volatile Organics EPA 8260C

69) T	Isopropylbenzene	7.659	7.331	7.196	6.201	5.210	5.554	5.748	6.414	15.17
70) S	p-Bromofluorob...	1.819	1.675	1.689	1.639	1.652	1.705	1.744	1.703	3.35
71) T	1,1,2,2-Tetrac...	0.618	0.656	0.619	0.600	0.602	0.581	0.560	0.609	4.96
72) T	Bromobenzene	2.380	2.181	2.068	1.985	2.020	1.998	2.015	2.092	6.35
73) T	trans-1,4-Dich...	0.895	0.833	0.811	0.801	0.785	0.797	0.814	0.818	4.17
74) T	1,2,3-Trichlor...	0.199	0.198	0.187	0.176	0.179	0.176	0.175	0.184	5.25
75) T	n-Propylbenzene	8.591	8.258	8.117	7.051	5.799	6.196	6.307	7.189	15.74
76) T	2-Chlorotoluene	6.627	5.601	5.356	5.247	4.766	4.448	4.310	5.070	16.02
77) T	4-Chlorotoluene	5.625	4.898	4.688	4.613	4.318	4.224	4.145	4.587	10.90
78) T	1,3,5-Trimethy...	7.419	6.217	5.968	5.885	4.644	4.828	4.909	5.644	16.37
79) T	tert-Butylbenzene	6.106	5.079	4.915	4.284	3.382	3.947	4.279	4.613	17.96
80) T	1,2,4-Trimethy...	6.664	5.791	5.662	5.076	4.611	4.566	4.484	5.306	14.33
81) T	sec-Butylbenzene	8.674	7.250	7.009	6.926	6.085	4.404	5.352	5.751	20.47
82) T	1,3-Dichlorobe...	2.953	2.666	2.552	2.505	2.311	2.219	2.114	2.059	12.54
83) T	p-Isopropyltol...	7.303	6.257	6.058	6.071	5.312	3.966	4.572	4.751	19.63
84) T	1,4-Dichlorobe...	0.200	0.175	0.170	0.165	0.166	0.165	0.166	0.172	6.93
85) T	1,2,3-Trimethy...	5.019	4.847	4.875	4.953	4.449	4.276	4.220	4.615	7.38
86) T	p-Diethylbenzene	3.548	3.051	3.019	3.030	2.797	2.185	2.617	2.881	13.65
87) T	1,2-Dichlorobe...	2.070	1.991	1.892	1.878	1.801	1.827	1.833	1.891	4.93
88) T	n-Butylbenzene	6.957	6.019	5.931	5.961	5.381	3.968	4.858	5.190	16.24
89) T	1,2-Dibromo-3-...	0.072	0.083	0.082	0.081	0.085	0.088	0.092	0.091	7.66
90) T	1,2,4,5-Tetram...	3.209	3.344	3.392	3.440	3.309	2.870	3.261	3.384	5.50
91) T	1,2,4-Trichlor...	0.657	0.682	0.678	0.694	0.671	0.613	0.703	0.711	4.57
92) T	Hexachloro-1,3...	0.193	0.182	0.170	0.178	0.151	0.094	0.155	0.200	20.15
93) T	Naphthalene	0.901	0.995	0.976	1.010	0.999	0.971	1.040	1.034	4.44
94) T	1,2,3-Trichlor...	0.029	0.031	0.029	0.028	0.025	0.030	0.030	0.029	6.02

(#) = Out of Range



Data Path : C:\msdchem\1\data\V8101717\  
 Data File : V801633.D  
 Acq On : 17 Oct 2017 9:57 am  
 Operator : SR  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8101717A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 17 10:13:52 2017  
 Quant Method : C:\msdchem\1\methods\V8LO0058.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Oct 06 10:28:22 2017  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	70	0.00
2 T	Dichlorodifluoromethane	0.890	1.663	-86.8#	143	0.00
3 T	Chloromethane	1.397	1.440	-3.0	84	0.00
4 T	Vinyl Chloride	1.149	1.430	-24.4	91	0.00
5 T	Bromomethane	0.469	0.187	60.2#	35#	0.00
6 T	Chloroethane	0.640	0.784	-22.6	90	0.00
7 T	Trichlorofluoromethane	1.689	2.417	-43.1#	96	0.00
8	Ethanol	0.002	0.003	-18.2	83	0.00
9 T	Freon-113	1.165	1.464	NA -25.7#	81	0.00
10 T	1,1-Dichloroethylene	0.997	1.100	-10.3	77	0.00
11 T	Acrolein	0.081	0.062	NA 23.6	56	0.00
12 T	Acetone	0.132	0.143	-8.4	70	0.00
13 T	Iodomethane	0.953	0.679	NA 28.7#	60	0.00
14 T	Methyl Acetate	0.353	0.396	-11.9	78	0.00
15 T	Carbon disulfide	3.079	3.093	-0.5	74	0.00
16 T	tert-Butyl Alcohol (TBA)	0.056	0.054	3.9	66	0.00
17 T	Methylene Chloride	1.680	1.763	-4.9	76	0.00
18 T	Acrylonitrile	0.156	0.159	-2.1	70	0.00
19 T	trans-1,2-Dichloroethylene	1.885	1.992	-5.7	75	0.00
20 T	tert-Butyl Methyl Ether (MT)	1.966	2.051	-4.3	72	0.00
21 T	1,1-Dichloroethane	2.427	2.604	-7.3	74	0.00
22 T	Vinyl Acetate	1.247	1.329	-6.5	75	0.00
23 T	Diisopropyl ether (DIPE)	4.077	4.661	-14.3	74	0.00
24 T	Ethyl-tert-Butyl ether (ETB)	3.313	3.582	-8.1	75	0.00
25 T	cis-1,2-Dichloroethylene	2.197	2.362	-7.5	76	0.00
26 T	2-Butanone	0.053	0.047	12.4	63	0.00
27 T	2,2-Dichloropropane	2.029	2.445	-20.5	84	0.00
28 T	Tetrahydrofuran	0.046	0.042	9.7	67	0.00
29 T	Bromochloromethane	0.874	1.007	-15.2	76	0.00
30 T	Chloroform	1.444	1.535	-6.3	75	0.00
31 T	1,1,1-Trichloroethane	2.125	2.514	-18.3	81	0.00
32 T	Cyclohexane	2.230	2.888	-29.5#	79	0.00
33 T	1,1-Dichloropropylene	1.793	1.992	-11.1	75	0.00
34 S	d4-1,2-Dichloroethane (SURR	0.894	0.970	-8.5	74	0.00
35 T	Carbon Tetrachloride	1.870	2.321	-24.1	83	0.00
36 T	tert-Amyl alcohol (TAA)	0.040	0.045	-13.2	76	0.00
37 T	1,2-Dichloroethane	1.220	1.393	-14.2	80	0.00



Data Path : C:\msdchem\1\data\V8101717\  
 Data File : V801633.D  
 Acq On : 17 Oct 2017 9:57 am  
 Operator : SR  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8101717A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 17 10:13:52 2017  
 Quant Method : C:\msdchem\1\methods\V8LO0058.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Oct 06 10:28:22 2017  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
38 T	Benzene	4.824	4.936	-2.3	72	0.00
39 T	tert-Amyl methyl ether (TAM)	2.376	2.559	-7.7	74	0.00
40 I	CHLOROBENZENE-d5 (ISTD)	1.000	1.000	0.0	73	0.00
41 T	Trichloroethylene	0.410	0.406	0.9	75	0.00
42 T	Methyl Cyclohexane	0.642	0.694	-8.0	77	0.00
43 T	Methyl Methacrylate	0.215	0.201	6.3	69	0.00
44 T	Dibromomethane	0.134	0.130	2.9	74	0.00
45 T	Bromodichloromethane	0.439	0.441	-0.3	75	0.00
46 T	1,2-Dichloropropane	0.372	0.352	5.1	71	0.00
47 T	1,4-Dioxane	0.001	0.001	-14.3	82	0.00
48 T	2-Chloroethyl vinyl ether	0.071	0.097	NA-36.6#	366#	0.00
49 T	cis-1,3-Dichloropropene	0.512	0.504	1.4	73	0.00
50 T	4-Methyl-2-Pentanone	0.251	0.259	-3.0	74	0.00
51 S	Toluene-d8 (SURR)	1.378	1.335	3.1	72	0.00
52 T	Toluene	1.515	1.548	-2.2	74	0.00
53 T	trans-1,3-Dichloropropene	0.389	0.389	0.2	75	0.00
54 T	1,1,2-Trichloroethane	0.182	0.176	3.2	72	0.00
55 T	1,3-Dichloropropane	0.322	0.314	2.5	72	0.00
56 T	Tetrachloroethylene	0.416	0.447	-7.3	76	0.00
57 T	2-Hexanone	0.089	0.090	-1.5	74	0.00
58 T	Dibromochloromethane	0.235	0.239	-2.0	76	0.00
59 T	1,2-Dibromoethane	0.176	0.170	3.3	73	0.00
60 T	Chlorobenzene	0.950	0.959	-1.0	74	0.00
61 T	1,1,1,2-tetrachloroethane	0.331	0.359	-8.5	77	0.00
62 T	Ethyl Benzene	1.698	1.838	-8.2	75	0.00
63 T	p- & m-Xylenes	1.276	1.424	-11.6	76	0.00
64 T	o-Xylene	1.316	1.392	-5.8	75	0.00
65 T	Styrene	0.957	1.007	-5.3	74	0.00
66 T	Bromoform	0.112	0.115	-2.6	78	0.00
67 I	1,2-DICHLOROBENZENE-d4 (IST)	1.000	1.000	0.0	81	0.00
68 T	p-Ethyltoluene	5.645	5.594	0.9	78	0.00
69 T	Isopropylbenzene	6.414	6.741	-5.1	76	0.00
70 S	p-Bromofluorobenzene (SURR)	1.703	1.561	8.3	75	0.00
71 T	1,1,2,2-Tetrachloroethane	0.609	0.556	8.7	73	0.00
72 T	Bromobenzene	2.092	1.911	8.7	75	0.00



Data Path : C:\msdchem\1\data\V8101717\  
 Data File : V801633.D  
 Acq On : 17 Oct 2017 9:57 am  
 Operator : SR  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8101717A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 17 10:13:52 2017  
 Quant Method : C:\msdchem\1\methods\V8L00058.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Oct 06 10:28:22 2017  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
73 T	trans-1,4-Dichloro-2-butene	0.818	0.806	1.4	82	0.00
74 T	1,2,3-Trichloropropane	0.184	0.173	5.9	76	0.00
75 T	n-Propylbenzene	7.189	7.575	-5.4	76	0.00
76 T	2-Chlorotoluene	5.070	5.032	0.8	78	0.00
77 T	4-Chlorotoluene	4.587	4.363	4.9	77	0.00
78 T	1,3,5-Trimethylbenzene	5.644	5.594	0.9	77	0.00
79 T	tert-Butylbenzene	4.613	4.651	-0.8	77	0.00
80 T	1,2,4-Trimethylbenzene	5.306	5.386	-1.5	78	0.00
81 T	sec-Butylbenzene	6.431	6.637	-3.2	78	0.00
82 T	1,3-Dichlorobenzene	2.422	2.442	-0.8	79	0.00
83 T	p-Isopropyltoluene	5.536	5.937	-7.2	80	0.00
84 T	1,4-Dichlorobenzene	0.172	0.172	-0.1	85	0.00
85	1,2,3-Trimethylbenzene	4.614	4.572	0.9	75	0.00
86 T	p-Diethylbenzene	2.881	3.238	-12.4	87	0.00
87 T	1,2-Dichlorobenzene	1.891	1.803	4.6	78	0.00
88 T	n-Butylbenzene	5.533	6.097	-10.2	83	0.00
89 T	1,2-Dibromo-3-chloropropane	0.084	0.079	5.9	80	0.00
90 T	1,2,4,5-Tetramethylbenzene	3.276	3.782	-15.5	90	0.00
91 T	1,2,4-Trichlorobenzene	0.676	0.706	-4.4	83	0.00
92 T	Hexachloro-1,3-Butadiene	0.165	0.234	NA-41.3#	107	0.00
93 T	Naphthalene	0.991	0.972	1.9	78	0.00
94 T	1,2,3-Trichlorobenzene	0.029	0.030	-5.9	87	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



## Response Factor Report VOA No. 3

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Initial Calibration

## Calibration Files

5 =V3127773.D 10 =V3127774.D 20 =V3127775.D  
 50 =V3127776.D 100 =V3127777.D 200 =V3127778.D

Compound		5	10	20	50	100	200	Avg	%RSD
-----									
1)	FLUOROBENZENE (ISTD)	-----ISTD-----							
2)	Dichlorodifluoromet	1.319	1.285	1.369	1.313	1.311	1.248	1.308	3.07
3) P	Chloromethane	2.624	2.483	2.584	2.554	2.476	2.361	2.514	3.75
4) C	Vinyl Chloride	1.713	1.620	1.676	1.543	1.589	1.536	1.613	4.43#
5)	Bromomethane	0.776	0.736	0.708	0.763	0.733	0.776	0.749	3.67
6)	Chloroethane	0.739	0.767	0.764	0.758	0.748	0.765	0.757	1.49
7)	Trichlorofluorometh	1.239	1.148	1.193	1.205	1.235	1.197	1.203	2.76
8)	Ethyl Ether							0.000#	-1.00
9)	Freon-113	0.908	0.825	0.820	0.951	0.866	0.892	0.877	5.75
10) C,M	1,1-Dichloroethylen	0.686	0.678	0.677	0.727	0.650	0.674	0.682	3.70#
11)	Acrolein	0.060	0.071	0.074	0.092	0.081	0.079	0.076	13.99
12)	Iodomethane	0.904	0.974	1.068	1.246	1.120	1.237	1.092	12.65
13)	Methyl Acetate	0.023	0.727	0.647	0.620	0.622	0.557	0.533	47.97
14)	tert-Butyl Alcohol	0.048	0.069	0.095	0.102	0.109	0.094	0.086	26.96
15)	trans-1,2-Dichloroe	2.135	2.091	2.027	2.128	2.034	2.021	2.073	2.52
16)	Carbon Disulfide	3.377	3.063	3.147	3.433	2.989	3.193	3.200	5.45
17)	Methylene Chloride	1.632	1.381	1.266	1.350	1.271	1.309	1.368	9.98
18)	Acrylonitrile	0.343	0.314	0.320	0.341	0.352	0.356	0.338	4.99
19)	tert-Butyl Methyl E	2.370	2.542	2.334	2.464	2.419	2.390	2.420	3.07
20)	Acetone	0.457	0.380	0.276	0.252	0.213	0.209	0.298	33.53
21) P	1,1-Dichloroethane	2.621	2.653	2.578	2.711	2.603	2.562	2.621	2.07
22)	Vinyl Acetate	3.917	3.863	3.808	4.019	4.085	3.843	3.923	2.76
23)	cis-1,2-Dichloroeth	1.661	1.704	1.664	1.732	1.608	1.640	1.668	2.66
24)	2-Butanone	0.059	0.061	0.082	0.077	0.078	0.064	0.070	14.15
25)	2,2-Dichloropropane	1.650	1.884	1.638	1.905	1.571	1.830	1.746	8.22
26)	Bromochloromethane	1.295	1.247	1.307	1.316	1.241	1.219	1.271	3.19
27) C	Chloroform	2.269	2.101	2.114	2.226	2.115	2.032	2.143	4.09#
28)	Tetrahydrofuran	0.129	0.120	0.103	0.106	0.112	0.100	0.111	9.93
29)	1,1-Dichloropropyle	2.238	2.021	1.918	2.106	1.913	1.777	1.995	8.16
30)	1,1,1-Trichloroetha	1.702	1.616	1.633	1.728	1.589	1.556	1.637	4.04
31)	Cyclohexane	2.635	2.829	2.709	2.744	2.628	2.427	2.662	5.15
32) S	d4-1,2-Dichloroetha	1.068	1.069	1.083	1.073	1.009	0.988	1.049	3.75
33)	Carbon Tetrachlorid	1.558	1.468	1.425	1.578	1.493	1.420	1.490	4.44
34)	1,2-Dichloroethane	1.406	1.381	1.280	1.327	1.256	1.197	1.308	6.02
35) M	Benzene	5.679	5.256	5.179	5.168	4.797	4.710	5.131	6.79
-----									
36)	CHLOROBENZENE-d5 (ISTD)	-----ISTD-----							
37) M	Trichloroethylene	0.403	0.442	0.358	0.375	0.384	0.361	0.387	8.15
38)	Methyl Cyclohexane	0.607	0.718	0.630	0.636	0.646	0.562	0.633	8.11
39)	Dibromomethane	0.184	0.202	0.178	0.188	0.192	0.182	0.188	4.46
40)	Methyl Methacrylate	0.184	0.200	0.172	0.190	0.190	0.174	0.185	5.77
41)	Bromodichloromethan	0.390	0.413	0.398	0.423	0.407	0.400	0.405	2.91
42) C	1,2-Dichloropropane	0.405	0.453	0.391	0.393	0.386	0.377	0.401	6.72#

(#) = Out of Range

V3C00289.M

Thu Sep 14 16:07:40 2017

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## Response Factor Report VOA No. 3

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Initial Calibration

## Calibration Files

5 =V3127773.D 10 =V3127774.D 20 =V3127775.D  
 50 =V3127776.D 100 =V3127777.D 200 =V3127778.D

	Compound	5	10	20	50	100	200	Avg	%RSD
43)	1,4-Dioxane	0.002	0.003	0.002	0.002	0.002	0.002	0.002#	8.04
44)	2-Chloroethylvinyl	0.717	0.781	0.680	0.698	0.728	0.696	0.717	5.00
45)	cis-1,3-Dichloropro	0.590	0.597	0.536	0.572	0.549	0.558	0.567	4.18
46)	2-Hexanone	0.211	0.253	0.204	0.213	0.233	0.205	0.220	8.77
47) S	Toluene-d8 (SURR)	1.208	1.245	1.138	1.218	1.223	1.081	1.186	5.29
48) C,M	Toluene	1.436	1.421	1.285	1.315	1.257	1.147	1.310	8.25#
49)	trans-1,3-Dichlorop	0.421	0.415	0.406	0.438	0.446	0.442	0.428	3.81
50)	1,1,2-Trichloroetha	0.224	0.253	0.216	0.225	0.227	0.209	0.226	6.71
51)	1,3-Dichloropropane	0.478	0.482	0.447	0.448	0.470	0.428	0.459	4.64
52)	Tetrachloroethylene	0.583	0.591	0.508	0.489	0.478	0.415	0.511	13.08
53)	4-Methyl-2-Pentanone	0.585	0.666	0.558	0.574	0.639	0.519	0.590	9.09
54)	Dibromochloromethan	0.289	0.306	0.287	0.315	0.308	0.304	0.302	3.70
55)	1,2-Dibromoethane	0.273	0.287	0.255	0.261	0.279	0.251	0.268	5.33
56) P,M	Chlorobenzene	0.988	0.947	0.873	0.866	0.866	0.819	0.893	6.98
57) C	Ethyl Benzene	1.504	1.501	1.379	1.400	1.332	1.243	1.393	7.20#
58)	p- & m-Xylenes	1.136	1.133	0.967	1.022	0.938	0.826	1.004	11.95
59)	o-Xylene	1.134	1.183	0.991	1.034	0.981	0.920	1.041	9.55
60)	Styrene	0.987	1.008	0.883	0.895	0.870	0.812	0.909	8.21
61)	1,1,1,2-Tetrachloro	0.320	0.361	0.321	0.332	0.325	0.297	0.326	6.33
62)	1,2-DICHLOROBENZENE-d	-----ISTD-----							
63) p	Bromoform	0.446	0.415	0.442	0.541	0.557	0.593	0.499	14.79
64) S	p-Bromofluorobenzen	0.878	0.860	0.909	0.921	1.005	1.023	0.933	7.18
65)	p-Ethyltoluene	3.163	3.383	3.201	3.273	3.212	2.863	3.182	5.47
66)	p-Diethylbenzene	1.492	1.458	1.505	1.562	1.515	1.391	1.487	3.88
67) P	1,1,2,2-Tetrachloro	0.776	0.791	0.787	0.848	0.889	0.865	0.826	5.74
68)	1,2,3-Trichloroprop	0.148	0.184	0.176	0.202	0.198	0.179	0.181	10.55
69)	Isopropylbenzene	3.696	3.345	3.363	3.804	3.556	3.563	3.555	5.08
70)	1,2-Dibromo-3-Chlor	0.082	0.093	0.092	0.103	0.102	0.101	0.095	8.23
71)	Bromobenzene	1.268	1.259	1.240	1.282	1.311	1.262	1.270	1.90
72)	trans-1,4-Dichloro-	0.764	0.721	0.713	0.804	0.827	1.190	0.836	21.41
73)	n-Propylbenzene	4.270	4.047	3.956	4.252	4.108	4.012	4.108	3.14
74)	2-Chlorotoluene	2.554	2.437	2.406	2.538	2.391	2.287	2.435	4.08
75)	4-Chlorotoluene	2.518	2.450	2.293	2.497	2.274	2.343	2.396	4.43
76)	tert-Butylbenzene	2.387	2.398	2.191	2.423	2.254	2.220	2.312	4.40
77)	1,3,5-trimethylbenz	3.046	2.659	2.672	2.743	2.556	2.594	2.712	6.49
78)	1,2,4-trimethylbenz	2.749	2.663	2.570	2.652	2.454	2.354	2.574	5.70
79)	sec-Butylbenzene	3.336	3.611	3.558	3.801	3.498	3.484	3.548	4.36
80)	1,3-Dichlorobenzene	1.755	1.610	1.602	1.667	1.480	1.418	1.588	7.73
81)	1,4-Dichlorobenzene	1.668	1.642	1.540	1.626	1.522	1.472	1.579	4.93
82)	1,2-Dichlorobenzene	1.524	1.476	1.437	1.448	1.333	1.377	1.433	4.79
83)	p-Isopropyltoluene	3.160	3.014	2.806	3.028	2.627	2.562	2.866	8.37
84)	n-Butylbenzene	3.149	3.184	2.991	3.182	2.981	2.936	3.071	3.68
85)	1,2,4,5-Tetramethyl	2.286	2.416	2.253	2.316	2.337	2.208	2.303	3.12

(#) = Out of Range



## Response Factor Report VOA No. 3

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
Title : VOCs BY GC/MS EPA SW846-8260  
Last Update : Thu Sep 14 15:49:54 2017  
Response via : Initial Calibration

## Calibration Files

5 =V3127773.D 10 =V3127774.D 20 =V3127775.D  
50 =V3127776.D 100 =V3127777.D 200 =V3127778.D

	Compound	5	10	20	50	100	200	Avg	%RSD
86)	1,2,4-Trichlorobenz	0.899	0.855	0.837	0.877	0.871	0.988	0.888	5.99
87)	Naphthalene	1.879	1.688	1.695	1.847	1.824	1.800	1.789	4.45
88)	Hexachloro-1,3-Buta	0.545	0.510	0.476	0.522	0.501	0.549	0.517	5.37
89)	1,2,3-Trichlorobenz	0.832	0.747	0.731	0.757	0.740	0.786	0.765	4.95



Data File : C:\HPCHEM\1\DATA\V3101817\V3128543.D  
 Acq On : 18 Oct 2017 10:02 am  
 Sample : SEQ-CCV1  
 Misc : QBV3101817A  
 MS Integration Params: RTEINT1.P

Vial: 2  
 Operator: SR  
 Inst : VOA No. 3  
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	107	-0.02
2	Dichlorodifluoromethane	1.308	1.316	-0.6	107	-0.01
3 P	Chloromethane	2.514	2.528	-0.6	106	-0.01
4 C	Vinyl Chloride	1.613	1.626	-0.8	113	-0.01
5	Bromomethane	0.749	0.702	6.3	98	-0.02
6	Chloroethane	0.757	0.702	7.3	99	-0.02
7	Trichlorofluoromethane	1.203	1.142	5.1	101	-0.02
8	Ethyl Ether	0.000	0.000#	0.0	126	-0.02
9	Freon-113	0.877	0.932	-6.3	105	-0.01
10 C,M	1,1-Dichloroethylene	0.682	0.694	-1.8	102	-0.02
11	Acrolein	0.076	0.080	-5.3	94	-0.02
12	Iodomethane	1.092	1.058	3.1	91	-0.02
13	Methyl Acetate	0.533	0.614	-15.2	106	-0.02
14	tert-Butyl Alcohol (TBA)	0.086	0.110	27.9#	115	-0.01
15	trans-1,2-Dichloroethylene	2.073	2.045	1.4	103	-0.02
16	Carbon Disulfide	3.200	2.961	7.5	92	-0.02
17	Methylene Chloride	1.368	1.297	5.2	103	-0.02
18	Acrylonitrile	0.338	0.353	-4.4	111	-0.02
19	tert-Butyl Methyl Ether (MT)	2.420	2.494	-3.1	108	-0.02
20	Acetone	0.298	0.247	17.1	105	-0.02
21 P	1,1-Dichloroethane	2.621	2.717	-3.7	107	-0.02
22	Vinyl Acetate	3.923	4.457	-13.6	119	-0.02
23	cis-1,2-Dichloroethylene	1.668	1.678	-0.6	104	-0.02
24	2-Butanone	0.070	0.116	65.7#	162	0.00
25	2,2-Dichloropropane	1.746	1.862	-6.6	105	-0.02
26	Bromochloromethane	1.271	1.302	-2.4	106	-0.02
27 C	Chloroform	2.143	2.260	-5.5	109	-0.02
28	Tetrahydrofuran	0.111	0.113	-1.8	114	-0.02
29	1,1-Dichloropropylene	1.995	1.996	-0.1	101	-0.02
30	1,1,1-Trichloroethane	1.637	1.757	-7.3	109	-0.03
31	Cyclohexane	2.662	2.859	-7.4	111	-0.02
32 S	d4-1,2-Dichloroethane (SURR)	1.049	1.121	-6.9	112	-0.02
33	Carbon Tetrachloride	1.490	1.523	-2.2	103	-0.02
34	1,2-Dichloroethane	1.308	1.403	-7.3	113	-0.02
35 M	Benzene	5.131	4.968	3.2	103	-0.02
36	CHLOROBENZENE-d5 (ISTD)	1.000	1.000	0.0	104	-0.02
37 M	Trichloroethylene	0.387	0.400	-3.4	110	-0.02
38	Methyl Cyclohexane	0.633	0.652	-3.0	106	-0.02
39	Dibromomethane	0.188	0.196	-4.3	108	-0.02
40	Methyl Methacrylate	0.185	0.194	-4.9	106	-0.02

(#) = Out of Range

V3128543.D V3C00289.M

Thu Oct 19 14:23:53 2017

Page 1

Page 239 of 520



Data File : C:\HPCHEM\1\DATA\V3101817\V3128543.D  
 Acq On : 18 Oct 2017 10:02 am  
 Sample : SEQ-CCV1  
 Misc : QBV3101817A  
 MS Integration Params: RTEINT1.P

Vial: 2  
 Operator: SR  
 Inst : VOA No. 3  
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	Bromodichloromethane	0.405	0.430	-6.2	105	-0.02
42 C	1,2-Dichloropropane	0.401	0.398	0.7	105	-0.02
43	1,4-Dioxane	0.002	0.002#	0.0	108	-0.02
44	2-Chloroethylvinyl ether	0.717	0.722	-0.7	107	-0.02
45	cis-1,3-Dichloropropene	0.567	0.597	-5.3	108	-0.02
46	2-Hexanone	0.220	0.224	-1.8	109	-0.02
47 S	Toluene-d8 (SURR)	1.186	1.122	5.4	95	-0.02
48 C,M	Toluene	1.310	1.322	-0.9	104	-0.02
49	trans-1,3-Dichloropropene	0.428	0.458	-7.0	108	-0.02
50	1,1,2-Trichloroethane	0.226	0.235	-4.0	108	-0.02
51	1,3-Dichloropropane	0.459	0.470	-2.4	109	-0.02
52	Tetrachloroethylene	0.511	0.497	2.7	105	-0.02
53	4-Methyl-2-Pentanone	0.590	0.616	-4.4	111	-0.02
54	Dibromochloromethane	0.302	0.338	-11.9	111	-0.02
55	1,2-Dibromoethane	0.268	0.269	-0.4	107	-0.02
56 P,M	Chlorobenzene	0.893	0.944	-5.7	113	-0.02
57 C	Ethyl Benzene	1.393	1.436	-3.1	106	-0.03
58	p- & m-Xylenes	1.004	1.007	-0.3	102	-0.02
59	o-Xylene	1.041	1.071	-2.9	107	-0.02
60	Styrene	0.909	0.946	-4.1	110	-0.02
61	1,1,1,2-Tetrachloroethane	0.326	0.343	-5.2	107	-0.02
62	1,2-DICHLOROBENZENE-d4 (ISTD	1.000	1.000	0.0	104	-0.02
63 p	Bromoform	0.499	0.582	-16.6	112	-0.02
64 S	p-Bromofluorobenzene (SURR)	0.933	0.922	1.2	104	-0.02
65	p-Ethyltoluene	3.182	3.683	-15.7	117	-0.03
66	p-Diethylbenzene	1.487	1.942	NA-30.6#	129	-0.02
67 P	1,1,2,2-Tetrachloroethane	0.826	0.876	-6.1	108	-0.02
68	1,2,3-Trichloropropane	0.181	0.203	-12.2	104	-0.02
69	Isopropylbenzene	3.555	3.878	-9.1	106	-0.02
70	1,2-Dibromo-3-Chloropropane	0.095	0.111	-16.8	113	-0.02
71	Bromobenzene	1.270	1.335	-5.1	108	-0.02
72	trans-1,4-Dichloro-2-butene	0.836	0.896	-7.2	116	-0.02
73	n-Propylbenzene	4.108	4.471	-8.8	109	-0.02
74	2-Chlorotoluene	2.435	2.738	-12.4	112	-0.02
75	4-Chlorotoluene	2.396	2.717	-13.4	113	-0.02
76	tert-Butylbenzene	2.312	2.498	-8.0	107	-0.02
77	1,3,5-trimethylbenzene	2.712	2.772	-2.2	105	-0.02
78	1,2,4-trimethylbenzene	2.574	2.818	-9.5	111	-0.02
79	sec-Butylbenzene	3.548	3.730	-5.1	102	-0.02
80	1,3-Dichlorobenzene	1.588	1.855	-16.8	116	-0.02

(#) = Out of Range



Data File : C:\HPCHEM\1\DATA\V3101817\V3128543.D  
Acq On : 18 Oct 2017 10:02 am  
Sample : SEQ-CCV1  
Misc : QBV3101817A  
MS Integration Params: RTEINT1.P

Vial: 2  
Operator: SR  
Inst : VOA No. 3  
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
Title : VOCs BY GC/MS EPA SW846-8260  
Last Update : Thu Sep 14 15:49:54 2017  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	1,4-Dichlorobenzene	1.579	1.884	-19.3	121	-0.02
82	1,2-Dichlorobenzene	1.433	1.573	-9.8	113	-0.02
83	p-Isopropyltoluene	2.866	3.254	-13.5	112	-0.02
84	n-Butylbenzene	3.071	3.609	-17.5	118	-0.02
85	1,2,4,5-Tetramethylbenzene	2.303	2.649	-15.0	119	-0.02
86	1,2,4-Trichlorobenzene	0.888	1.072	-20.7	127	-0.02
87	Naphthalene	1.789	1.978	-10.6	111	-0.02
88	Hexachloro-1,3-Butadiene	0.517	0.518	-0.2	103	-0.02
89	1,2,3-Trichlorobenzene	0.765	0.891	-16.5	123	-0.02





Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8270D Semi-Volatiles Data  
for York Analytical Laboratories, Inc., SDG: 17J0671**

**5 Soil Samples  
Collected October 16, 2017**

Prepared by: Donald Anné  
April 30, 2018

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Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for applicable compounds were above the method minimums, as required. The %RSDs for hexachlorocyclopentadiene, 2,4-dinitrophenol, and pentachlorophenol were above the method maximum for BNA #1 on 10-09-17. No action is taken when fewer than 20% of the compounds per calibration do not meet either method %RSD or average RRF criteria, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSD for 2,4-dinitrophenol was above the allowable maximum (30%) for BNA #1 on 10-09-17. Positive results for 2,4-dinitrophenol should be considered estimated (J) in associated samples.

Continuing Calibration: The RRFs for applicable compounds were above the method minimums and the %Ds were below the method maximum, as required.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.



Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for 24 compounds (circled red on the attached MS/MSD from) were above the allowable maximum and 2 of 2 percent recoveries for hexachlorocyclopentadiene were below QC limits and below 10% for soil MS/MSD sample EP-3 (5 ft). The "not detected" result for hexachlorocyclopentadiene should be considered rejected, unusable (R) in sample EP-3 (5 ft).

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for soil sample BJ71019-BS1.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ71019

Laboratory ID: BJ71019-MS1

Preparation: EPA 3550C

Initial/Final: 30 g / 1 mL

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. #	QC LIMITS REC.
1,2,4-Trichlorobenzene	963	ND	717	74.5	15 - 139
1,2-Dichlorobenzene	963	ND	707	73.4	29 - 106
1,3-Dichlorobenzene	963	ND	659	68.4	34 - 100
1,4-Dichlorobenzene	963	ND	652	67.7	26 - 107
2,4,5-Trichlorophenol	963	ND	744	77.3	10 - 148
2,4,6-Trichlorophenol	963	ND	732	76.0	12 - 138
2,4-Dichlorophenol	963	ND	814	84.5	16 - 144
2,4-Dimethylphenol	963	ND	798	82.9	11 - 133
2,4-Dinitrophenol	963	ND	377	39.1	10 - 132
2,4-Dinitrotoluene	963	ND	734	76.2	42 - 113
2,6-Dinitrotoluene	963	ND	781	81.1	36 - 124
2-Chloronaphthalene	963	ND	756	78.5	31 - 116
2-Chlorophenol	963	ND	787	81.7	28 - 114
2-Methylnaphthalene	963	ND	877	91.0	10 - 143
2-Methylphenol	963	ND	734	76.2	10 - 160
2-Nitroaniline	963	ND	729	75.7	33 - 122
2-Nitrophenol	963	ND	770	79.9	12 - 127
3- & 4-Methylphenols	963	ND	735	76.3	16 - 115
3,3-Dichlorobenzidine	963	ND	515	53.4	10 - 134
3-Nitroaniline	963	ND	520	54.0	24 - 128
4,6-Dinitro-2-methylphenol	963	ND	456	47.4	10 - 149
4-Bromophenyl phenyl ether	963	ND	697	72.3	32 - 148
4-Chloro-3-methylphenol	963	ND	818	85.0	14 - 138
4-Chloroaniline	963	ND	645	67.0	10 - 124
4-Chlorophenyl phenyl ether	963	ND	707	73.4	10 - 153
4-Nitroaniline	963	ND	679	70.5	10 - 151
4-Nitrophenol	963	ND	837	86.9	10 - 141
Acenaphthene	963	ND	757	78.6	13 - 133
Acenaphthylene	963	ND	724	75.2	25 - 125
Aniline	963	ND	668	69.4	10 - 112
Anthracene	963	ND	825	85.7	27 - 128
Benzo(a)anthracene	963	219	936	74.5	20 - 147



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.  
 Client: Hydro Tech Environmental (Brooklyn)  
 Matrix: Soil  
 Batch: BJ71019  
 Preparation: EPA 3550C  
 Source Sample Name: EP-3 (5 ft)

SDG: 17J0671  
 Project: #170154 11-28 31 Drive, LIC NY  
 Laboratory ID: BJ71019-MS1  
 Initial/Final: 30 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. #	QC LIMITS REC.
Benzo(a)pyrene	963	224	870	67.0	18 - 153
Benzo(b)fluoranthene	963	204	908	73.0	10 - 163
Benzo(g,h,i)perylene	963	156	536	39.5	10 - 157
Benzo(k)fluoranthene	963	222	933	73.8	10 - 157
Benzyl alcohol	963	ND	764	79.3	20 - 122
Benzyl butyl phthalate	963	ND	702	72.9	10 - 129
Bis(2-chloroethoxy)methane	963	ND	867	90.0	12 - 128
Bis(2-chloroethyl)ether	963	ND	722	75.0	18 - 113
Bis(2-chloroisopropyl)ether	963	ND	789	81.9	10 - 130
Bis(2-ethylhexyl)phthalate	963	ND	720	74.8	10 - 138
Chrysene	963	266	1020	78.2	18 - 133
Dibenzo(a,h)anthracene	963	50.9	580	55.0	10 - 146
Dibenzofuran	963	ND	760	78.9	26 - 134
Diethyl phthalate	963	ND	715	74.2	30 - 119
Dimethyl phthalate	963	ND	727	75.5	34 - 120
Di-n-butyl phthalate	963	ND	780	81.0	20 - 128
Di-n-octyl phthalate	963	ND	716	74.3	10 - 133
Fluoranthene	963	350	1230	91.1	10 - 155
Fluorene	963	ND	756	78.5	12 - 150
Hexachlorobenzene	963	ND	744	77.3	16 - 142
Hexachlorobutadiene	963	ND	702	72.9	11 - 150
Hexachlorocyclopentadiene	963	ND	84.0	8.72 *	10 - 115
Hexachloroethane	963	ND	578	60.0	14 - 106
Indeno(1,2,3-cd)pyrene	963	143	618	49.4	10 - 155
Isophorone	963	ND	799	83.0	14 - 127
Naphthalene	963	ND	878	91.2	15 - 132
Nitrobenzene	963	ND	744	77.3	18 - 125
N-Nitrosodimethylamine	963	ND	658	68.3	10 - 123
N-nitroso-di-n-propylamine	963	ND	737	76.5	23 - 115
N-Nitrosodiphenylamine	963	ND	823	85.4	16 - 166
Pentachlorophenol	963	ND	737	76.5	10 - 160
Phenanthrene	963	143	1020	90.7	10 - 151



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EP-3 (5 ft)

EPA 8270D

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ71019Laboratory ID: BJ71019-MS1Preparation: EPA 3550CInitial/Final: 30 g / 1 mLSource Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. #	QC LIMITS REC.
Phenol	963	ND	700	72.6	11 - 124
Pyrene	963	303	1120	85.0	13 - 148
Pyridine	963	ND	539	55.9	10 - 125

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EP-3 (5 ft)

EPA 8270D

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ71019

Laboratory ID: BJ71019-MSD1

Preparation: EPA 3550C

Initial/Final: 30 g / 1 mL

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,2,4-Trichlorobenzene	963	458	47.6	44.0 *	30	15 - 139
1,2-Dichlorobenzene	963	445	46.2	45.4 *	30	29 - 106
1,3-Dichlorobenzene	963	418	43.4	44.8 *	30	34 - 100
1,4-Dichlorobenzene	963	413	42.9	44.9 *	30	26 - 107
2,4,5-Trichlorophenol	963	690	71.6	7.63	30	10 - 148
2,4,6-Trichlorophenol	963	616	64.0	17.1	30	12 - 138
2,4-Dichlorophenol	963	582	60.4	33.2 *	30	16 - 144
2,4-Dimethylphenol	963	586	60.8	30.7 *	30	11 - 133
2,4-Dinitrophenol	963	311	32.3	19.0	30	10 - 132
2,4-Dinitrotoluene	963	716	74.3	2.45	30	42 - 113
2,6-Dinitrotoluene	963	726	75.4	7.36	30	36 - 124
2-Chloronaphthalene	963	552	57.3	31.2 *	30	31 - 116
2-Chlorophenol	963	515	53.4	41.8 *	30	28 - 114
2-Methylnaphthalene	963	596	61.9	38.1 *	30	10 - 143
2-Methylphenol	963	519	53.9	34.2 *	30	10 - 160
2-Nitroaniline	963	669	69.4	8.60	30	33 - 122
2-Nitrophenol	963	518	53.8	39.1 *	30	12 - 127
3- & 4-Methylphenols	963	528	54.8	32.8 *	30	16 - 115
3,3-Dichlorobenzidine	963	573	59.4	10.6	30	10 - 134
3-Nitroaniline	963	577	59.9	10.4	30	24 - 128
4,6-Dinitro-2-methylphenol	963	408	42.4	11.1	30	10 - 149
4-Bromophenyl phenyl ether	963	660	68.6	5.34	30	32 - 148
4-Chloro-3-methylphenol	963	730	75.8	11.4	30	14 - 138
4-Chloroaniline	963	564	58.6	13.4	30	10 - 124
4-Chlorophenyl phenyl ether	963	651	67.6	8.28	30	10 - 153
4-Nitroaniline	963	693	71.9	2.02	30	10 - 151
4-Nitrophenol	963	798	82.9	4.71	30	10 - 141
Acenaphthene	963	605	62.8	22.3	30	13 - 133
Acenaphthylene	963	587	61.0	20.9	30	25 - 125
Aniline	963	485	50.4	31.7 *	30	10 - 112
Anthracene	963	774	80.3	6.46	30	27 - 128
Benzo(a)anthracene	963	840	64.5	10.8	30	20 - 147
Benzo(a)pyrene	963	781	57.8	10.8	30	18 - 153



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ71019

Laboratory ID: BJ71019-MSD1

Preparation: EPA 3550C

Initial/Final: 30 g / 1 mL

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Benzo(b)fluoranthene	963	818	63.7	10.5	30	10 - 163
Benzo(g,h,i)perylene	963	510	36.8	5.01	30	10 - 157
Benzo(k)fluoranthene	963	823	62.4	12.5	30	10 - 157
Benzyl alcohol	963	546	56.7	33.2 *	30	20 - 122
Benzyl butyl phthalate	963	687	71.4	2.11	30	10 - 129
Bis(2-chloroethoxy)methane	963	581	60.3	39.5 *	30	12 - 128
Bis(2-chloroethyl)ether	963	457	47.4	45.0 *	30	18 - 113
Bis(2-chloroisopropyl)ether	963	489	50.7	47.0 *	30	10 - 130
Bis(2-ethylhexyl)phthalate	963	704	73.0	2.38	30	10 - 138
Chrysene	963	912	67.0	11.2	30	18 - 133
Dibenzo(a,h)anthracene	963	556	52.4	4.34	30	10 - 146
Dibenzofuran	963	652	67.7	15.3	30	26 - 134
Diethyl phthalate	963	689	71.5	3.73	30	30 - 119
Dimethyl phthalate	963	664	69.0	9.08	30	34 - 120
Di-n-butyl phthalate	963	749	77.8	4.03	30	20 - 128
Di-n-octyl phthalate	963	710	73.7	0.865	30	10 - 133
Fluoranthene	963	1020	69.6	18.4	30	10 - 155
Fluorene	963	683	70.9	10.2	30	12 - 150
Hexachlorobenzene	963	707	73.4	5.10	30	16 - 142
Hexachlorobutadiene	963	445	46.2	44.7 *	30	11 - 150
Hexachlorocyclopentadiene	963	ND	*		30	10 - 115
Hexachloroethane	963	364	37.8	45.3 *	30	14 - 106
Indeno(1,2,3-cd)pyrene	963	589	46.4	4.72	30	10 - 155
Isophorone	963	552	57.4	36.5 *	30	14 - 127
Naphthalene	963	574	59.6	41.9 *	30	15 - 132
Nitrobenzene	963	495	51.4	40.1 *	30	18 - 125
N-Nitrosodimethylamine	963	490	50.9	29.3	30	10 - 123
N-nitroso-di-n-propylamine	963	485	50.4	41.1 *	30	23 - 115
N-Nitrosodiphenylamine	963	780	81.0	5.38	30	16 - 166
Pentachlorophenol	963	678	70.4	8.28	30	10 - 160
Phenanthrene	963	882	76.8	14.1	30	10 - 151
Phenol	963	502	52.2	32.8 *	30	11 - 124
Pyrene	963	976	69.8	13.9	30	13 - 148



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ71019Laboratory ID: BJ71019-MSD1Preparation: EPA 3550CInitial/Final: 30 g / 1 mLSource Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Pyridine	963	398	41.4	29.9	30	10 - 125

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## Response Factor Report BNA #1

Method : C:\HPCHEM\1\METHODS\BNA1RQB3.M (Chemstation Integrator)  
 Title : GC MS BNA 1 Semi Volatiles Calibration  
 Last Update : Tue Oct 10 16:38:26 2017  
 Response via : Initial Calibration

October 9, 2017

## Calibration Files

10 =SV109770.D 20 =SV109772.D 40.0 =SV109774.D  
 15.0 =SV109771.D 2.5 =SV109768.D 5 =SV109769.D

Compound	10	20	40.0	15.0	2.5	5	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----							
2) t N-Nitrosodimethylam	1.371	1.477	1.495	1.419	1.757	1.727	1.551	10.27
3) t Pyridine	2.481	2.175	2.113	2.360		2.598	2.342	7.77
4) s 2-Fluorophenol	1.999	1.952	2.000	2.005		1.987	1.980	1.47
5) s Phenol-d5	2.304	2.161	2.130	2.254		2.461	2.237	5.92
6) t Benzaldehyde	1.635	1.195	0.724	1.376		1.697	1.258	NP 30.84
7) t Aniline	2.546	2.424	2.317	2.506		2.625	2.460	4.87
8) t Phenol	2.722	2.528	2.447	2.651	2.963	2.893	2.720	8.85
9) t Bis(2-chloroethyl)e	2.482	2.300	2.361	2.412	2.769	2.693	2.515	8.19
10) t 2-Chlorophenol	1.867	1.798	1.829	1.842	2.006	1.956	1.895	5.24
11) t 1,3-Dichlorobenzene	1.868	1.797	1.784	1.876		1.969	1.844	4.09
12) t 1,4-Dichlorobenzene	2.011	1.891	1.826	1.959		2.112	1.944	5.44
13) t Benzyl Alcohol	1.293	1.236	1.164	1.294		1.359	1.257	5.73
14) t 1,2-Dichlorobenzene	1.912	1.734	1.588	1.835		2.047	1.800	9.25
15) t 2-Methylphenol	1.544	1.448	1.421	1.490	1.666	1.637	1.546	8.11
16) t Acetophenone	2.646	2.313	2.264	2.378		2.834	2.449	9.67
17) t Bis(2-chloroisoprop	3.380	3.106	2.949	3.252	3.787	3.643	3.382	10.76
18) t N-Nitroso-di-n-prop	1.591	1.455	1.275	1.544	1.794	1.712	1.567	12.40
19) t 4-Methylphenol	2.023	1.839	1.587	1.963	2.215	2.158	1.963	11.58
20) t Hexachloroethane	0.857	0.819	0.699	0.843	0.912	0.899	0.841	8.87
21) I Naphthalene-d8	-----ISTD-----							
22) s Nitrobenzene-d5	0.687	0.647	0.581	0.675	0.721	0.736	0.671	8.62
23) t Nitrobenzene	0.723	0.654	0.569	0.699	0.763	0.784	0.697	11.85
24) t Isophorone	1.394	1.279	1.167	1.346	1.451	1.497	1.342	9.22
25) t 2-Nitrophenol	0.353	0.338	0.308	0.357	0.366	0.387	0.345	7.50
26) t 2,4-Dimethylphenol	0.497	0.447	0.389	0.475	0.532	0.541	0.480	12.66
27) t Bis(2-chloroethoxy)	0.797	0.719	0.616	0.766		0.872	0.738	12.70
28) t Benzoic acid	0.270	0.399	0.406	0.393		0.269	0.354	18.66
29) t 2,4-Dichlorophenol	0.457	0.418	0.367	0.446	0.469	0.493	0.435	9.97
30) t 1,2,4-Trichlorobenz	0.501	0.452	0.385	0.477	0.555	0.544	0.487	13.80
31) t Naphthalene	1.449	1.211	0.881	1.360		1.455	1.233	18.98
32) t Alpha-Terpineol	0.470	0.433	0.345	0.457		0.511	0.433	13.98
33) t 4-Chloroaniline	0.685	0.635	0.511	0.669		0.749	0.635	13.63
34) t Hexachlorobutadiene	0.260	0.234	0.198	0.248	0.294	0.287	0.253	14.23
35) t Caprolactam	0.270	0.256	0.256	0.205		0.288	0.252	11.44
36) t 4-Chloro-3-methylph	0.564	0.508	0.448	0.532	0.572	0.603	0.532	10.29
37) t 1-Methylnaphthalene	0.921	0.747	0.609	0.803		0.988	0.788	18.64
38) t 2-Methylnaphthalene	0.976	0.851	0.697	0.925		1.070	0.879	15.84
39) I Acenaphthene-d10	-----ISTD-----							
40) t 1,2,4,5-tetrachloro	0.897	0.792	0.666	0.831		1.025	0.821	15.69
41) t Hexachlorocyclopent	0.358	0.349	0.320	0.368	0.254	0.329	0.311	21.34



## Response Factor Report BNA #1

Method : C:\HPCHEM\1\METHODS\BNA1RQB3.M (Chemstation Integrator)  
 Title : GC MS BNA 1 Semi Volatiles Calibration  
 Last Update : Tue Oct 10 16:38:26 2017  
 Response via : Initial Calibration

## Calibration Files

10 =SV109770.D 20 =SV109772.D 40.0 =SV109774.D  
 15.0 =SV109771.D 2.5 =SV109768.D 5 =SV109769.D

	Compound	10	20	40.0	15.0	2.5	5	Avg	%RSD
42) t	Biphenyl	0.890	0.748	0.621	0.789		0.989	0.787	17.19
43) t	2,4,6-Trichlorophen	0.617	0.583	0.546	0.608	0.605	0.632	0.592	4.85
44) t	2,4,5-Trichlorophen	0.630	0.590	0.519	0.606	0.663	0.669	0.614	9.04
45) s	2-Fluorobiphenyl	1.850	1.572	1.340	1.717		2.050	1.663	15.82
46) t	2-Chloronaphthalene	1.730	1.571	1.391	1.665		1.900	1.621	11.42
47) t	2-Nitroaniline	0.809	0.783	0.774	0.807		0.815	0.794	2.34
48) t	Dimethylphthalate	2.320	2.108	1.929	2.232		2.473	2.181	9.18
49) t	2,6-Dinitrotoluene	0.539	0.498	0.481	0.523	0.538	0.564	0.515	5.93
50) t	Acenaphthylene	2.840	2.465	2.197	2.679		3.086	2.597	12.91
51) t	3-Nitroaniline	0.505	0.485	0.543	0.492		0.535	0.511	4.56
52) t	Acenaphthene	1.665	1.518	1.393	1.610		1.778	1.570	9.03
53) t	2,4-Dinitrophenol	0.332	0.362	0.403	0.351	0.169	0.269	0.297	36.69
54) t	Dibenzofuran	2.539	2.278	2.091	2.414		2.735	2.368	10.27
55) t	2,4-Dinitrotoluene	0.807	0.782	0.786	0.803	0.783	0.826	0.783	4.68
56) t	4-Nitrophenol	0.510	0.510	0.527	0.520	0.491	0.503	0.501	5.41
57) t	2,3,4,6-Tetrachloro	0.272	0.261	0.250	0.266	0.251	0.277	0.258	6.01
58) t	Diethyl phthalate	2.480	2.268	2.139	2.369		2.607	2.344	7.54
59) t	Fluorene	1.972	1.747	1.611	1.871		2.147	1.837	10.91
60) t	4-Chlorophenyl phen	0.990	0.883	0.781	0.945		1.090	0.920	12.24
61) t	4-Nitroaniline	0.613	0.532	0.525	0.577		0.647	0.568	9.40
62) I	Phenanthrene-d10	-----ISTD-----							
63) t	4,6-Dinitro-2-methy	0.231	0.232	0.219	0.236	0.174	0.226	0.208	19.35
64) t	Diphenylamine	0.813	0.740	0.684	0.783		0.890	0.769	9.95
65) t	N-Nitrosodiphenylam	0.283	0.255	0.236	0.272	0.312	0.313	0.279	11.86
66) t	Azobenzene	1.451	1.324	1.369	1.397	1.597	1.554	1.519	11.25
67) s	2,4,6-Tribromopheno	0.199	0.190	0.185	0.196		0.204	0.193	3.92
68) t	4-Bromophenyl pheny	0.342	0.319	0.298	0.333		0.363	0.327	7.42
69) t	Atrazine	0.315	0.269	0.236	0.278	0.313	0.342	0.287	12.54
70) t	Hexachlorobenzene	0.152	0.142	0.131	0.148	0.169	0.163	0.151	9.79
71) t	Pentachlorophenol	0.202	0.219	0.218	0.209	0.131	0.182	0.183	27.58
72) t	Pentachloronitroben	0.113	0.105	0.101	0.106		0.116	0.107	5.87
73) t	Phenanthrene	1.416	1.314	1.232	1.376		1.528	1.355	8.07
74) t	Anthracene	1.530	1.409	1.309	1.474		1.646	1.452	8.66
75) t	Carbazole	1.136	1.019	1.074	1.060	1.286	1.238	1.156	12.30
76) t	Di-n-butyl phthalat	2.247	2.018	1.793	2.133		2.340	2.071	10.10
77) t	Parathion	0.375	0.362	0.346	0.375		0.375	0.364	3.49
78) t	Fluoranthene	1.570	1.420	1.309	1.499		1.682	1.473	9.44
79) t	Benzidine	0.245	0.254	0.192	0.264	0.102	0.283	0.224	27.25
80) I	Chrysene-d12	-----ISTD-----							
81) t	Pyrene	1.666	1.561	1.469	1.642		1.775	1.594	7.83
82) s	Terphenyl-d14	1.114	1.041	0.973	1.095		1.180	1.062	7.86
83) t	Benzyl butyl phthal	1.069	1.017	0.986	1.056		1.090	1.033	4.38



## Response Factor Report BNA #1

Method : C:\HPCHEM\1\METHODS\BNA1RQB3.M (Chemstation Integrator)  
 Title : GC MS BNA 1 Semi Volatiles Calibration  
 Last Update : Tue Oct 10 16:38:26 2017  
 Response via : Initial Calibration

## Calibration Files

10 =SV109770.D 20 =SV109772.D 40.0 =SV109774.D  
 15.0 =SV109771.D 2.5 =SV109768.D 5 =SV109769.D

	Compound	10	20	40.0	15.0	2.5	5	Avg	%RSD
84) t	Bis(2-ethylhexyl) p	1.482	1.408	1.370	1.458	1.521	1.547	1.459	4.45
85) t	Benz (a) anthracene	1.623	1.553	1.525	1.606	1.742	1.710	1.628	5.44
86) t	3,3-Dichlorobenzidi	0.456	0.454	0.422	0.456	0.345	0.412	0.421	9.43
87) t	Chrysene	1.433	1.336	1.306	1.394	1.606	1.540	1.452	9.70
88) t	Di-n-octyl phthalat	2.516	2.412	2.418	2.506		2.542	2.469	2.35
89) t	Benzo(b)fluoranthen	1.541	1.490	1.421	1.523	1.597	1.590	1.543	4.13
90) t	Benzo(k)fluoranthen	1.520	1.435	1.279	1.495	1.648	1.610	1.506	9.75
91) t	Benzo(a)pyrene	1.467	1.414	1.393	1.441	1.532	1.534	1.476	5.32
92) I	Perylene-d12	-----ISTD-----							
93) t	Indeno(1,2,3-cd)pyr	1.731	1.649	1.549	1.729	1.882	1.843	1.745	7.94
94) t	Dibenz(a,h)anthrace	1.383	1.298	1.174	1.363	1.521	1.471	1.381	9.73
95) t	Benzo(g,h,i)perylen	1.414	1.356	1.274	1.416		1.497	1.381	5.62





Geology

Hydrology

Remediation

Water Supply

May 11, 2018

Mr. Paul I. Matli, Ph.D.  
Hydro Tech Environmental, Corp.  
15 Ocean Ave., 2<sup>nd</sup> Floor  
Brooklyn, NY 11225

Re: Data Validation Report  
February 2018 Ground Water Sampling Event  
11-28 31 Drive, LIC, NY

Dear Dr. Matli:

The data usability summary report and data validation summaries are attached to this letter for the above referenced project. The data for York Analytical Laboratories, Inc. SDG 18B0738 were acceptable with some minor issues that are identified in the validation summary. There were no data that were qualified as rejected, unusable (R) in the data pack.

We have attached lists of data validation acronyms and data qualifiers to assist you in the interpretation of the reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Hydro Tech Environmental, Corp.

Sincerely,  
Alpha Geoscience

Donald Anne  
Senior Chemist

DCA:dca  
attachments



## **Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II**

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

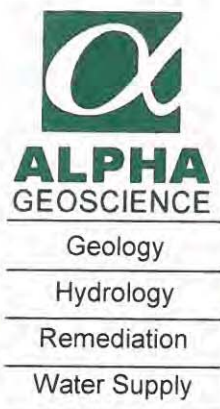
Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



## Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation





**Data Usability Summary Report for  
York Analytical Laboratories, Inc., SDG: 18B0738**

**5 Ground Water Samples,  
1 Field Blank, and 1 Trip Blank  
Collected February 19, 2018**

Prepared by: Donald Anné  
May 11, 2018

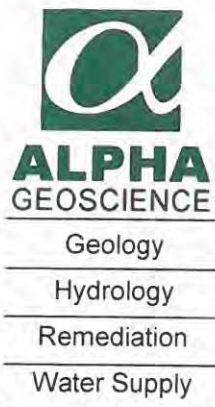
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The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile analyses for 5 ground water samples, 1 field blank, and 1 trip blank.

The overall performance of the analysis is acceptable. York Analytical Laboratories, Inc. did fulfill the requirements of the volatile method.

The data are acceptable with minor issues that are identified in the accompanying data validation reviews. There were no data qualified as either estimated (J) or rejected (R); therefore, all data are considered usable. Detailed information on data quality is included in the data validation reviews.





**QA/QC Review of Method 8260C Volatiles Data for  
York Analytical Laboratories, Inc., SDG: 18B0738**

**5 Ground Water Samples,  
1 Field Blank, and 1 Trip Blank  
Collected February 19, 2018**

Prepared by: Donald Anné  
May 11, 2018

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Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for 2-butanone and 2-hexanone were below the method minimums for VOA No.8 on 02-23-18. The %RSDs for bromomethane and methylene chloride were above the method maximum for VOA No.8 on 02-23-18. No action is taken on fewer than 20% of the compounds with method criteria outside control limits and no average RRF is less than 0.010, per calibration.

The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSD for bromomethane was above the allowable maximum (30%) for VOA No.8 on 02-23-18. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The RRFs for 2-butanone, 4-methyl-2-pentanone, and 2-hexanone were below the method minimum on 02-25-18 (V803939.D). The %D for bromomethane was above the method maximum on 02-25-18 (V803939.D). No action is taken on fewer than 20% of the compounds with method criteria outside control limits and no average RRF is less than 0.010, per calibration.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for bromomethane was above the allowable maximum (25%) on 02-25-18 (V803939.D). Positive results for bromomethane should be considered estimated (J) in associated samples.



Blanks: The analyses of the method and trip blanks reported target compounds as not detected. The field blank contained a trace of acetone (5.6 ug/L). Positive results for acetone that are less than 10 times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples, field blank, and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent difference for target compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-3.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximums and the percent recoveries (%Rs) within QC limits for aqueous samples BB81103-BS1/BSD1.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



# Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
 Method File : V8L00063.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Sun Feb 25 13:19:17 2018  
 Response Via : Initial Calibration

VOA No 8  
 2/23/18

## Calibration Files

0.5 =V803898.D 2.0 =V803899.D 4.0 =V803900.D 10.0=V803901.D 20.0=V803902.D 40.0=V803903.D  
 80.0=V803904.D 120 =V803905.D 160 =V803906.D

Compound	0.5	2.0	4.0	10.0	20.0	40.0	80.0	120	160	Avg	%RSD
-----											
1) I FLUOROBENZENE (ISTD)											
2) T Dichlorodifluo...	1.335	1.501	1.346	1.244	1.375	1.303	1.260	1.238	1.187	1.310	7.13
3) T Chloromethane	1.030	1.130	1.088	1.022	1.092	1.045	1.079	1.253	1.316	1.117	9.12
4) T Vinyl Chloride	1.203	1.335	1.253	1.236	1.370	1.309	1.228	1.278	1.223	1.271	4.47
5) T Bromomethane	0.099	0.104	0.130	0.175	0.287	0.397	0.526	0.575	0.549	0.316	63.32
6) T Chloroethane	0.770	0.830	0.748	0.699	0.753	0.702	0.673	0.650	0.612	0.715	9.35
7) T Trichlorofluor...	2.238	2.478	2.170	2.061	2.186	2.050	1.932	1.880	1.720	2.079	10.68
8) T Ethanol	0.003	0.005	0.005	0.003	0.003	0.004	0.003	0.005	0.001	0.004	33.32
9) T Freon-113	1.562	1.581	1.519	1.390	1.444	1.330	1.298	1.281	1.243	1.405	9.03
10) T 1,1-Dichloroet...	2.433	2.518	2.499	2.464	2.341	2.220	2.128	2.133	2.035	2.308	7.92
11) T Acrolein	0.006	0.005	0.006	0.006	0.007	0.007	0.007	0.006	0.007	0.006	10.45
12) T Acetone	0.154	0.124	0.130	0.130	0.109	0.118	0.094	0.089	0.096	0.114	19.01
13) T Iodomethane	0.119	0.180	0.242	0.380	0.588	0.721	0.827	0.898	0.811	0.530	57.45
14) T Methyl Acetate	0.356	0.330	0.315	0.293	0.290	0.302	0.294	0.286	0.296	0.307	7.55
15) T Carbon disulfide	3.392	3.345	3.351	3.349	3.209	3.122	3.008	3.030	2.908	3.190	5.64
16) T tert-Butyl Alc...	0.081	0.079	0.078	0.076	0.071	0.070	0.069	0.069	0.065	0.073	7.51
17) T Methylene Chlo...	2.584	2.088	1.795	1.604	1.534	1.455	1.443	1.420	1.420	1.740	23.48
18) T Acrylonitrile	0.100	0.126	0.126	0.121	0.119	0.126	0.125	0.122	0.129	0.121	7.06
19) T trans-1,2-Dich...	1.996	2.094	2.145	2.164	2.023	1.966	1.893	1.894	1.787	1.996	6.29
20) T tert-Butyl Met...	1.714	1.738	1.813	1.890	1.818	1.876	1.835	1.825	1.836	1.816	3.16
21) T 1,1-Dichloroet...	2.539	2.643	2.670	2.634	2.490	2.405	2.255	2.225	2.105	2.441	8.42
22) T Vinyl Acetate	0.770	0.771	0.810	0.917	0.918	0.917	0.936	0.943	1.026	0.890	9.78
23) T Diisopropyl et...	3.248	3.599	3.625	3.422	3.749	3.640	3.379	3.216	3.047	3.436	6.83
24) T Ethyl-tert-But...	2.372	2.664	2.683	2.606	2.893	2.924	2.812	2.828	2.797	2.731	6.28
25) T cis-1,2-Dichlo...	2.141	2.289	2.351	2.346	2.229	2.178	2.082	2.088	2.010	2.190	5.56
26) T 2-Butanone	0.036	0.042	0.045	0.043	0.041	0.040	0.039	0.037	0.040	0.040	7.01
27) T 2,2-Dichloropr...	2.160	2.340	2.311	2.311	2.199	2.124	2.053	2.083	1.960	2.171	6.02
28) T Tetrahydrofuran	0.022	0.036	0.036	0.036	0.037	0.039	0.038	0.036	0.038	0.035	14.21
29) T Bromochloromet...	0.918	0.910	0.905	0.894	0.841	0.842	0.760	0.752	0.726	0.839	8.97
30) T Chloroform	2.415	2.514	2.465	2.430	2.300	2.242	2.132	2.133	2.049	2.298	7.31



# Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
Method File : V8LO0063.M

Title : Volatile Organics EPA 8260C

31) T	1,1,1-Trichloro...	2.426	2.620	2.616	2.620	2.497	2.356	2.253	2.191	2.035	2.401	8.76
32) T	Cyclohexane	2.237	2.526	2.573	2.454	2.564	2.363	2.231	2.157	1.979	2.343	8.79
33) T	1,1-Dichloropr...	1.978	2.189	2.133	2.198	2.090	1.984	1.922	1.880	1.748	2.014	7.53
34) S	d4-1,2-Dichlor...	0.839	0.822	0.800	0.811	0.813	0.820	0.794	0.763	0.753	0.802	3.48
35) T	Carbon Tetrach...	2.190	2.342	2.357	2.375	2.284	2.161	2.077	2.032	1.894	2.190	7.58
36) T	tert-Amyl alco...	0.016	0.014	0.018	0.017	0.020	0.022	0.022	0.021	0.024	0.019	15.63
37) T	1,2-Dichloroet...	1.270	1.316	1.315	1.285	1.192	1.195	1.136	1.106	1.084	1.211	7.38
38) T	Benzene	5.337	5.455	5.472	5.366	5.076	4.871	4.560	4.440	4.149	4.970	9.87
39) T	tert-Amyl meth...	1.868	1.947	1.995	1.900	2.134	2.174	2.107	2.103	2.079	2.034	5.39

40) I	CHLOROBEZENE-d5	0.485	0.498	0.507	0.501	0.470	0.447	0.436	0.435	0.414	0.466	7.27
41) T	Trichloroethylene	0.666	0.752	0.777	0.735	0.761	0.699	0.694	0.687	0.652	0.714	6.16
42) T	Methyl Cyclohe...	0.176	0.188	0.208	0.226	0.222	0.231	0.230	0.231	0.233	0.216	9.71
43) T	Dibromomethane	0.154	0.154	0.154	0.157	0.146	0.144	0.142	0.141	0.141	0.148	4.38
44) T	Bromodichlorom...	0.457	0.481	0.498	0.501	0.472	0.467	0.455	0.456	0.442	0.470	4.28
45) T	1,2-Dichloropr...	0.377	0.395	0.394	0.387	0.364	0.355	0.344	0.346	0.336	0.366	6.23
46) T	1,4-Dioxane	0.053	0.057	0.062	0.061	0.062	0.065	0.065	0.064	0.067	0.061	48.96
47) T	2-Chloroethyl...	0.406	0.476	0.527	0.553	0.529	0.527	0.512	0.512	0.497	0.504	7.16
48) T	cis-1,3-Dichlo...	0.100	0.111	0.116	0.124	0.118	0.126	0.126	0.125	0.130	0.120	8.50
49) T	4-Methyl-2-Pen...	1.523	1.515	1.515	1.508	1.504	1.481	1.468	1.489	1.459	1.496	7.78
50) S	Toluene-d8 (SURR)	1.900	1.961	1.943	1.915	1.775	1.649	1.548	1.482	1.355	1.725	13.05
51) T	Toluene	0.349	0.368	0.389	0.411	0.396	0.403	0.397	0.393	0.389	0.388	4.87
52) T	trans-1,3-Dich...	0.207	0.212	0.214	0.208	0.194	0.192	0.188	0.185	0.184	0.198	5.98
53) T	1,1,2-Trichlor...	0.349	0.352	0.360	0.359	0.338	0.338	0.329	0.324	0.324	0.342	4.18
54) T	1,3-Dichloropr...	0.588	0.596	0.576	0.570	0.524	0.506	0.455	0.454	0.435	0.523	12.12
55) T	Tetrachloroeth...	0.063	0.064	0.070	0.078	0.075	0.082	0.082	0.081	0.085	0.075	10.92
56) T	2-Hexanone	0.229	0.244	0.250	0.263	0.250	0.257	0.255	0.256	0.255	0.251	3.93
57) T	Dibromochlorom...	0.171	0.180	0.185	0.186	0.175	0.179	0.176	0.175	0.176	0.178	2.60
58) T	1,2-Dibromoeth...	1.114	1.147	1.133	1.126	1.041	0.991	0.948	0.929	0.880	1.034	9.76
59) T	Chlorobenzene	0.348	0.377	0.389	0.394	0.368	0.351	0.334	0.324	0.303	0.354	8.68
60) T	1,1,1,2-tetrac...	1.892	2.138	2.208	2.203	2.060	1.894	1.752	1.650	1.475	1.919	13.42
61) T	Ethyl Benzene	1.461	1.700	1.737	1.714	1.575	1.437	1.285	1.162	0.993	1.452	18.06
62) T	p- & m-Xylenes	1.226	1.476	1.596	1.629	1.532	1.460	1.394	1.352	1.245	1.434	9.97
63) T	o-Xylene	0.803	1.041	1.108	1.132	1.070	1.029	0.987	0.953	0.891	1.002	10.56
64) T	Styrene	0.097	0.110	0.118	0.124	0.122	0.130	0.134	0.137	0.140	0.124	11.09
65) T	Bromoform											

67) I	1,2-DICHLOROBEZEN	5.246	5.847	6.068	5.649	5.766	5.232	4.800	4.695	4.369	5.297	11.00
68) T	p-Ethyltoluene											



## Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
Method File : V8L00063.M

Title : Volatile Organics EPA 8260C

69)	T	Isopropylbenzene	4.908	5.889	6.459	6.479	6.028	5.618	5.198	5.141	4.800	5.613	11.39
70)	S	p-Bromofluorob...	1.314	1.301	1.334	1.339	1.352	1.350	1.351	1.400	1.454	1.355	3.42
71)	T	1,1,2,2-Tetrac...	0.563	0.561	0.586	0.577	0.529	0.532	0.504	0.500	0.506	0.540	6.07
72)	T	Bromobenzene	1.911	1.886	1.966	1.918	1.806	1.764	1.706	1.751	1.745	1.828	5.10
73)	T	trans-1,4-Dich...	0.754	0.784	0.832	0.830	0.786	0.772	0.741	0.754	0.748	0.778	4.37
74)	T	1,2,3-Trichlor...	0.163	0.161	0.173	0.159	0.150	0.151	0.145	0.143	0.147	0.155	6.43
75)	T	n-Propylbenzene	6.855	7.530	7.946	7.910	7.333	6.735	6.185	5.923	5.427	6.872	12.97
76)	T	2-Chlorotoluene	4.660	4.944	5.174	5.026	4.721	4.409	4.044	3.945	3.687	4.512	11.59
77)	T	4-Chlorotoluene	4.163	4.378	4.594	4.491	4.218	4.006	3.777	3.774	3.618	4.113	8.35
78)	T	1,3,5-Trimethy...	4.469	4.965	5.332	4.437	4.496	4.251	4.010	3.775	3.819	4.698	9.85
79)	T	tert-Butylbenzene	3.399	4.054	4.417	4.496	4.753	4.467	4.101	4.028	3.750	4.440	9.12
80)	T	1,2,4-Trimethy...	3.876	4.779	5.112	5.090	4.753	4.467	4.101	4.028	3.750	4.440	11.73
81)	T	sec-Butylbenzene	4.789	5.793	6.263	6.383	6.012	5.610	5.227	5.162	4.825	5.563	10.71
82)	T	1,3-Dichlorobe...	2.416	2.552	2.660	2.592	2.397	2.245	2.027	1.971	1.879	2.304	12.51
83)	T	p-Isopropyltol...	4.094	5.181	5.654	5.703	5.359	4.986	4.578	4.450	4.102	4.901	12.71
84)	T	1,4-Dichlorobe...	0.158	0.166	0.176	0.172	0.166	0.158	0.151	0.152	0.152	0.161	5.77
85)	T	1,2,3-Trimethy...	3.523	4.203	4.274	4.207	4.281	4.061	3.781	3.759	3.603	3.966	7.58
86)	T	p-Diethylbenzene	2.033	2.555	2.832	2.805	2.865	2.665	2.519	2.506	2.413	2.577	10.07
87)	T	1,2-Dichlorobe...	2.146	2.127	2.142	2.109	1.970	1.916	1.815	1.823	1.816	1.985	7.46
88)	T	n-Butylbenzene	4.731	5.791	6.198	6.207	5.925	5.517	5.157	5.000	4.660	5.465	11.03
89)	T	1,2-Dibromo-3-...	0.067	0.078	0.079	0.084	0.081	0.085	0.084	0.084	0.091	0.081	8.27
90)	T	1,2,4,5-Tetram...	2.507	3.149	3.756	3.853	4.082	3.899	3.637	3.627	3.514	3.558	13.34
91)	T	1,2,4-Trichlor...	0.867	0.911	1.030	1.118	1.082	1.109	1.067	1.098	1.134	1.046	9.06
92)	T	Hexachloro-1,3...	0.440	0.479	0.519	0.544	0.524	0.508	0.516	0.543	0.553	0.514	6.96
93)	T	Naphthalene	0.933	1.083	1.280	1.485	1.449	1.545	1.484	1.517	1.605	1.376	16.68
94)	T	1,2,3-Trichlor...	0.021	0.053	0.057	0.057	0.057	0.059	0.057	0.059	0.062	0.054	22.97

(#) = Out of Range



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\V8022518\  
 Data File : V803939.D  
 Acq On : 25 Feb 2018 2:16 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8022518A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 12:25:43 2018  
 Quant Method : C:\msdchem\1\methods\V8LO0063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	102	0.00
2 T	Dichlorodifluoromethane	1.310	1.321	-0.9	109	0.00
3 T	Chloromethane	1.117	0.958	14.3	96	0.00
4 T	Vinyl Chloride	1.271	1.284	-1.0	106	0.00
5 T	Bromomethane	0.316	0.141	55.5#	82	0.00
6 T	Chloroethane	0.715	0.716	-0.1	105	0.00
7 T	Trichlorofluoromethane	2.079	2.118	-1.9	105	0.00
8	Ethanol	0.004	0.001	NA 62.9#	40#	0.00
9 T	Freon-113	1.405	1.434	-2.1	106	0.00
10 T	1,1-Dichloroethylene	2.308	2.200	4.7	91	0.00
11 T	Acrolein	0.006	0.046	NA 628.6#	768#	0.00
12 T	Acetone	0.114	0.124	-8.4	98	0.00
13 T	Iodomethane	0.530	0.330	NA 37.7#	89	0.00
14 T	Methyl Acetate	0.307	0.249	19.0	87	0.00
15 T	Carbon disulfide	3.191	3.084	3.3	94	0.00
16 T	tert-Butyl Alcohol (TBA)	0.073	0.065	11.7	87	0.00
17 T	Methylene Chloride	1.740	1.500	13.8	86	0.00
18 T	Acrylonitrile	0.121	0.104	14.2	88	0.00
19 T	trans-1,2-Dichloroethylene	1.996	1.925	3.6	91	0.00
20 T	tert-Butyl Methyl Ether (MT)	1.816	1.695	6.7	92	0.00
21 T	1,1-Dichloroethane	2.441	2.373	2.8	92	0.00
22 T	Vinyl Acetate	0.890	0.811	8.9	91	0.00
23 T	Diisopropyl ether (DIPE)	3.436	3.352	2.4	100	0.00
24 T	Ethyl-tert-Butyl ether (ETB)	2.731	2.635	3.5	103	0.00
25 T	cis-1,2-Dichloroethylene	2.191	2.158	1.5	94	0.00
26 T	2-Butanone	0.040	0.041	-1.7	98	0.00
27 T	2,2-Dichloropropane	2.171	2.321	-6.9	103	0.00
28 T	Tetrahydrofuran	0.035	0.030	14.7	86	0.00
29 T	Bromochloromethane	0.839	0.766	8.7	88	0.00
30 T	Chloroform	2.298	2.236	2.7	94	0.00
31 T	1,1,1-Trichloroethane	2.401	2.429	-1.1	95	0.00
32 T	Cyclohexane	2.343	2.418	-3.2	101	0.00
33 T	1,1-Dichloropropylene	2.014	2.064	-2.5	96	0.00
34 S	d4-1,2-Dichloroethane (SURR)	0.802	0.796	0.7	100	0.00
35 T	Carbon Tetrachloride	2.190	2.208	-0.8	95	0.00
36 T	tert-Amyl alcohol (TAA)	0.020	0.013	NA 33.8#	76	-0.01
37 T	1,2-Dichloroethane	1.211	1.140	5.9	91	0.00



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\V8022518\  
 Data File : V803939.D  
 Acq On : 25 Feb 2018 2:16 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8022518A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 12:25:43 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
38 T	Benzene	4.970	4.936	0.7	94	0.00
39 T	tert-Amyl methyl ether (TAM)	2.034	1.938	4.7	104	0.00
40 I	CHLORO BENZENE-d5 (ISTD)	1.000	1.000	0.0	106	0.00
41 T	Trichloroethylene	0.466	0.458	1.8	97	0.00
42 T	Methyl Cyclohexane	0.714	0.735	-2.9	106	0.00
43 T	Methyl Methacrylate	0.216	0.193	10.7	90	0.00
44 T	Dibromomethane	0.148	0.136	8.4	91	0.00
45 T	Bromodichloromethane	0.470	0.443	5.9	93	0.00
46 T	1,2-Dichloropropane	0.366	0.342	6.7	93	0.00
47 T	1,4-Dioxane	0.000	0.000	NA	66.7#	32# 0.00
48 T	2-Chloroethyl vinyl ether	0.061	0.059	3.6	103	0.00
49 T	cis-1,3-Dichloropropene	0.504	0.501	0.7	96	0.00
50 T	4-Methyl-2-Pentanone	0.120	0.097	19.0	82	0.00
51 S	Toluene-d8 (SURR)	1.496	1.498	-0.1	105	0.00
52 T	Toluene	1.726	1.717	0.5	95	0.00
53 T	trans-1,3-Dichloropropene	0.388	0.365	6.0	94	0.00
54 T	1,1,2-Trichloroethane	0.198	0.183	7.5	93	0.00
55 T	1,3-Dichloropropane	0.342	0.315	7.8	93	0.00
56 T	Tetrachloroethylene	0.523	0.514	1.7	95	-0.01
57 T	2-Hexanone	0.075	0.071	6.5	96	0.00
58 T	Dibromochloromethane	0.251	0.236	5.9	95	0.00
59 T	1,2-Dibromoethane	0.178	0.163	8.5	93	0.00
60 T	Chlorobenzene	1.034	1.017	1.7	95	0.00
61 T	1,1,1,2-tetrachloroethane	0.354	0.353	0.2	95	-0.01
62 T	Ethyl Benzene	1.919	1.987	-3.5	95	-0.01
63 T	p- & m-Xylenes	1.452	1.549	-6.7	96	-0.01
64 T	o-Xylene	1.434	1.460	-1.8	95	0.00
65 T	Styrene	1.002	1.009	-0.7	94	-0.01
66 T	Bromoform	0.124	0.112	9.3	96	0.00
67 I	1,2-DICHLORO BENZENE-d4 (IST)	1.000	1.000	0.0	106	0.00
68 T	p-Ethyltoluene	5.297	5.395	-1.9	101	-0.01
69 T	Isopropylbenzene	5.614	5.856	-4.3	95	0.00
70 S	p-Bromofluorobenzene (SURR)	1.355	1.325	2.2	104	0.00
71 T	1,1,2,2-Tetrachloroethane	0.540	0.480	11.1	88	0.00
72 T	Bromobenzene	1.828	1.694	7.3	93	-0.00



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\V8022518\  
 Data File : V803939.D  
 Acq On : 25 Feb 2018 2:16 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8022518A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 12:25:43 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
73 T	trans-1,4-Dichloro-2-butene	0.778	0.727	6.6	92	0.00
74 T	1,2,3-Trichloropropane	0.155	0.137	11.2	91	-0.01
75 T	n-Propylbenzene	6.872	7.052	-2.6	94	-0.01
76 T	2-Chlorotoluene	4.512	4.502	0.2	95	0.00
77 T	4-Chlorotoluene	4.113	3.999	2.8	94	-0.01
78 T	1,3,5-Trimethylbenzene	4.698	4.749	-1.1	95	-0.01
79 T	tert-Butylbenzene	3.985	4.059	-1.9	95	-0.01
80 T	1,2,4-Trimethylbenzene	4.440	4.520	-1.8	94	0.00
81 T	sec-Butylbenzene	5.563	5.682	-2.1	94	0.00
82 T	1,3-Dichlorobenzene	2.304	2.333	-1.3	95	0.00
83 T	p-Isopropyltoluene	4.901	5.102	-4.1	94	-0.01
84 T	1,4-Dichlorobenzene	0.161	0.155	4.2	95	0.00
85 T	1,2,3-Trimethylbenzene	3.966	3.935	0.8	99	0.00
86 T	p-Diethylbenzene	2.577	2.519	2.3	95	0.00
87 T	1,2-Dichlorobenzene	1.985	1.872	5.7	94	0.00
88 T	n-Butylbenzene	5.465	5.432	0.6	92	0.00
89 T	1,2-Dibromo-3-chloropropane	0.082	0.068	16.4	86	0.00
90 T	1,2,4,5-Tetramethylbenzene	3.558	3.659	-2.8	100	0.00
91 T	1,2,4-Trichlorobenzene	1.046	1.000	4.4	94	0.00
92 T	Hexachloro-1,3-Butadiene	0.514	0.460	10.6	89	0.00
93 T	Naphthalene	1.375	1.262	8.2	90	0.00
94 T	1,2,3-Trichlorobenzene	0.054	0.051	4.3	95	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0





## HydroTech Environmental

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[WWW.HYDROTECHENVIRONMENTAL.COM](http://WWW.HYDROTECHENVIRONMENTAL.COM)

---

July 05, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza 47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – May 2018  
11-28 31<sup>st</sup> Drive Long Island City, New York  
BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Received approval from NYSDEC for the revised RAWP QAPP
- Posted the EDD for the endpoint soil samples via NYSDEC EQuIS.
- NYSDEC confirmed that the Environmental Easement submitted previously is accepted as a final document.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Schedule on July 3, 2018 the monitoring of groundwater depth in target MWs and the sampling of groundwater in MW-3 to be analyzed for emerging contaminant.
- Place PDB samplers in target monitoring wells on July 3, 2018 to be collected for laboratory analysis 14 days later.

Approved Activity Modifications:

- None
-



Results of sampling and tests and all other data received or generated by or on behalf of Applicant in connection with this Site

- None

Estimated Percentage of Project Completion:

- 60 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None

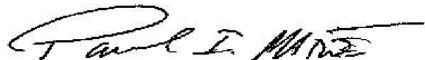
Actions Undertaken to Resolve Delays:

- None

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**HydroTech Environmental Engineering and Geology, DPC**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/as

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)  
Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.





## HydroTech Environmental

ENGINEERING AND GEOLOGY, DPC

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---

August 09, 2018

New York State Department of Environmental Conservation  
Bureau of Environmental Remediation  
Hunters Point Plaza 47-40 21st Street  
Long Island City, New York 11101  
Attn.: Mr. Sondra Martinkat, Project Manager

**Re: Progress Report – July 2018**  
**11-28 31<sup>st</sup> Drive Long Island City, New York**  
**BCP Site #C241159**

Dear Ms. Martinkat:

This correspondence is submitted on behalf of Mr. George Man to satisfy Section XI of the *Brownfield Site Cleanup Agreement* for:

Actions Taken Relative to the Project during the Reporting Period:

- Collected one groundwater sample from MW-3 for emerging contaminants via EPA low flow sampling method and gauged depth to water and placed PDB in MW-1 to MW-4 and MW-6 on July 3, 2018.
- Groundwater samples from PDBs removed from MW-1 to MW-4 and MW-6 were collected for laboratory analysis on July 24, 2018. Also performed a test on groundwater sample collected from the wells to determine the pos-injection levels of Klosur Persulfate in the wells.

Other Site Activities not related to the Proposed Remediation:

- None

Anticipated Activities for the Next Reporting Period:

- Installation of SSD system and vapor barrier system.
- Evaluate the possibility of postponing second round of injections until after the second quarterly sampling.

Approved Activity Modifications:

- None
-



Results of sampling and tests and all other data received or generated by or on behalf of Applicant in connection with this Site

- Measured levels of Klosur Persulfate were coordinated with manufacturer for their comments. Manufacturer indicate a sufficient amount this chemical remains in groundwater in MW-2 (28.74 g/L), MW-3 (34.68 g/L) and MW-4 (40.62 g/L) and it is likely to continue to be effective in reducing the concentration of contaminants for the next couple of months.
- Post-injection analytical results of PCE and TCE in target monitoring wells indicated the concentrations of these 2 compounds have decreased from the baseline and historic levels. The post-injection PCE level was detected on-site at a maximum 20 µg/L in MW-2. Table 1 provides PCE and TCE concentration detection over time. Attachment A provides analytical results of PCE and TCE.
- Emerging contaminants results in MW-3 indicate 1,4-Dioxane was not detected and Perfluoropentanoic acid (PFPeA) was detected at a concentration of 94 ng/L. Attachment B provided laboratory analytical results of emerging contaminants.

Estimated Percentage of Project Completion:

- 60 percent.

Unresolved Delays Encountered or Anticipated That May Affect the Approved Schedule:

- None

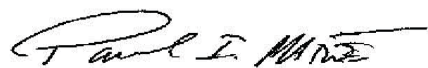
Actions Undertaken to Resolve Delays:

- None

If you need any additional information, please contact me directly at 718-636-0800 or at pmatli@hydrotechenvironmental.com.

Sincerely,

**HydroTech Environmental Engineering and Geology, DPC**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

PIM/as

cc: Jane O'Connell-NYSDEC w/ Enc. (by email)  
Larry Schnapf- Schnapf LLC w/ Enc. (by email)  
Ariel Czemerinski PE. - AMC Engineering, PLLC w/ Enc. (by email)



Tim Li-Project Architect w/ Enc. (by email)  
Hydro Tech file 140344 w/ Enc.



**Tabel 1**  
**Groundwater Samples Analytical Results for PCE and TCE**  
**11-28 31st Drive, Queens, NY**

Sample ID	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4	MW-4	MW-6	MW-6	MW-6	MW-6	MW-6	NYSDEC TOGS
Sampling Date	1/13/2015	2/19/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	7/24/2018	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	2/19/2018	2/19/2018	2/19/2018	2/19/2018	2/19/2018	Standards and
Compound	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Q	µg/L	Guidance Values -
Tetrachloroethylene	0.2	U	0.3	J	0.220	J	3.03	J	25				20.8	Q	4.1	Q	1.2	Q	3,799.8	Q	70	Q	75	5
Trichloroethylene	0.2	U	0.2	U	0.200	U	0.2	U	0.4	J	0.630	Q	0.52	Q	0.2	U	0.200	U	17.0	Q	0.7	Q	15	5

**NOTES:**

**Q is the Qualifier Column with definitions as follows:**

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

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



## **Attachment A**





# Technical Report

prepared for:

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 07/31/2018

**Client Project ID: #170154 11-28 31 Drive, LIC NY**

York Project (SDG) No.: 18G1061

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371



132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)



Report Date: 07/31/2018  
Client Project ID: #170154 11-28 31 Drive, LIC NY  
York Project (SDG) No.: 18G1061

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

---

**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 25, 2018 and listed below. The project was identified as your project: **#170154 11-28 31 Drive, LIC NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18G1061-01	MW-1	Water	07/24/2018	07/25/2018
18G1061-02	MW-2	Water	07/24/2018	07/25/2018
18G1061-03	MW-3	Water	07/24/2018	07/25/2018
18G1061-04	MW-4	Water	07/24/2018	07/25/2018
18G1061-05	MW-6	Water	07/24/2018	07/25/2018
18G1061-06	Trip Blank	Water	07/24/2018	07/25/2018



## **General Notes for York Project (SDG) No.: 18G1061**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 07/31/2018







## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 18G1061-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	0.22	J	ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 03:53	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 03:53	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
	Surrogate Recoveries	Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %			69-130						
2037-26-5	Surrogate: Toluene-d8	101 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	101 %			79-122						

## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 18G1061-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	20		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	0.63		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
	Surrogate Recoveries	Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %			69-130						
2037-26-5	Surrogate: Toluene-d8	100 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	100 %			79-122						

## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18G1061-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:





### Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18G1061-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	1.2		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
	Surrogate Recoveries	Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %			69-130						
2037-26-5	Surrogate: Toluene-d8	100 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	101 %			79-122						

### Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 18G1061-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

#### Volatile Organics, 8260 List - Low Level

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	13		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 05:29	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	0.43	J	ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 05:29	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
	Surrogate Recoveries	Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %			69-130						
2037-26-5	Surrogate: Toluene-d8	100 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	102 %			79-122						

### Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18G1061-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

#### Volatile Organics, 8260 List - Low Level

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	43		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 07:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		





## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18G1061-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	0.46	J	ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 07:38	SS
		Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP									
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	108 %	69-130								
2037-26-5	Surrogate: Toluene-d8	98.4 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	101 %	79-122								

## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 18G1061-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 01:46	SS
		Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP									
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 01:46	SS
		Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP									
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: Toluene-d8	100 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	101 %	79-122								





## Analytical Batch Summary

**Batch ID:** BG81295

**Preparation Method:** EPA 5030B

**Prepared By:** TAB

YORK Sample ID	Client Sample ID	Preparation Date
18G1061-01	MW-1	07/27/18
18G1061-02	MW-2	07/27/18
18G1061-03	MW-3	07/27/18
18G1061-04	MW-4	07/27/18
18G1061-05	MW-6	07/27/18
18G1061-06	Trip Blank	07/27/18
BG81295-BLK1	Blank	07/27/18
BG81295-BS1	LCS	07/27/18
BG81295-BSD1	LCS Dup	07/27/18
BG81295-MS1	Matrix Spike	07/27/18
BG81295-MSD1	Matrix Spike Dup	07/27/18





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BG81295 - EPA 5030B

##### Blank (BG81295-BLK1)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	ND	0.50	ug/L								
Trichloroethylene	ND	0.50	"								
Surrogate: 1,2-Dichloroethane-d4	10.4		"	10.0		104	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	10.4		"	10.0		104	79-122				

##### LCS (BG81295-BS1)

Prepared &amp; Analyzed: 07/27/2018

Tetrachloroethylene	8.06		ug/L	10.0		80.6	82-131	Low Bias			
Trichloroethylene	8.83		"	10.0		88.3	82-128				
Surrogate: 1,2-Dichloroethane-d4	9.82		"	10.0		98.2	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.90		"	10.0		99.0	79-122				

##### LCS Dup (BG81295-BS1)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	8.42		ug/L	10.0		84.2	82-131		4.37	30	
Trichloroethylene	9.24		"	10.0		92.4	82-128		4.54	30	
Surrogate: 1,2-Dichloroethane-d4	10.0		"	10.0		100	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.93		"	10.0		99.3	79-122				

##### Matrix Spike (BG81295-MS1)

\*Source sample: 18G1061-04 (MW-4)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	18.6		ug/L	10.0	12.8	58.2	64-139	Low Bias			
Trichloroethylene	8.41		"	10.0	0.430	79.8	53-145				
Surrogate: 1,2-Dichloroethane-d4	10.4		"	10.0		104	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.72		"	10.0		97.2	79-122				

##### Matrix Spike Dup (BG81295-MSD1)

\*Source sample: 18G1061-04 (MW-4)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	20.1		ug/L	10.0	12.8	72.8	64-139		22.3	30	
Trichloroethylene	9.00		"	10.0	0.430	85.7	53-145		7.13	30	
Surrogate: 1,2-Dichloroethane-d4	10.4		"	10.0		104	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.67		"	10.0		96.7	79-122				





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18G1061-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-04	MW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-05	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-06	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C





## Sample and Data Qualifiers Relating to This Work Order

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

## Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.





For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

---



**YORK**

ANALYTICAL LABORATORIES, INC.  
120 RESEARCH DR. STRATFORD, CT 06615  
(203) 325-1371 FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 1 of 1

York Project No. 18G-1061

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type	
Company: HydroTech Env. Eng Geol	<input checked="" type="checkbox"/> SAME <input type="checkbox"/>	Name: <u>Paul I. Matli</u>	Address: <u>15 Ocean Ave. 2nd Fl</u>	Company: <u>Bklyn, NY 11225</u>	Address: <u>718-636-0800</u>	Contact: <u>Paul I. Matli</u>	E-mail: <u>pmatli@hydrotechenvironmental.com</u>	Volatiles: <u>8260 full</u>	Metals: <u>RCRA8</u>	Misc. Org. <u>TPH GRO</u>	Summary Report <input checked="" type="checkbox"/>
										QA Report <input checked="" type="checkbox"/>	
										CT RCP	
										CT RCP DQA/DUE Pkg	
										NY ASP A Package	
										NY ASP B Package	
										NUDEP Reduced Deliv	

**Print Clearly and Legibly. All Information must be complete.**  
**Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Matrix Codes  
S - soil  
Other - specify (oil, etc.)  
WW - wastewater  
GW - groundwater  
DW - drinking water  
Air-A - ambient air  
Air-SV - soil vapor

Paul I. Matli  
Name (printed)

Sample Identification	Date/Time Sampled	Matrix	Volatiles	Semi-Vols.	Metals	Misc. Org.	Full Lists
MW-1	7/24/2018	GW	8260 full	8270 α-625	RCRA8	TPH GRO	Ph. Poll.
MW-2	x	x	624	STARS list	PP13 list	TPH DRO	TCL Organics
MW-3	x	x	STARS list	BN Only	TAL	CT/TPH	TAL MetCN
MW-4 (MS/MSD)	x	x	BTEX	Advs Only	CT RCP	NY 310-13	Full TCLP
MW-6	x	x	MTBE	PAH list	App. IX	TPH 1664	Full App. IX
Trip Blank	x	DI	TCL list	TAGM list	Site Spec.	Air TO14A	Part 360-Routine
			TAGM list	CT RCP list	SELP or TCLP	Air TO15	regulatory Comp Excel
			CT RCP list	TCL list	Dissolved	Air STARS	Part 360-Routine
			Arom. only	NUDEP list	TCLP Herb	Air VPH	Part 360-Routine
			Halog. only	SELP or TCLP	Chlordane	Air TICs	Part 360-Routine
			App. IX list	App. IX	LIST Below	Mediane	Comment below
			8021B list	SELP or TCLP	608 PCB	Helium	NYCDEP Sewer
				SELP or TCLP	608 PCB		NYCDEP Sewer
				SELP or TCLP	608 PCB		TAGM Container Description
							3 x 40 mils vials
							x
							x
							6 x 40 mils vials
							3 x 40 mils vials
							2 x 40 mils vials

Comments:	Preservation (check all applicable)		4°C		Frozen	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> O <sub>2</sub>	NaOH	Temp on
x = same as before Compare to NYSDEC - 1.1.1 TOGS - GQS		Special Instructions		Samples Relinquished By		Date/Time		Samples Received By		Date/Time	
		<u>mandy</u>		<u>7/25/18</u>		<u>7/25/18</u>		<u>7/25/18</u>		<u>12:18</u>	



**Attachment B**



July 19, 2018

Paul I. Matli  
Hydro Tech Environmental Engineering and Geology  
77 Arkay Dr. Suite K  
Hauppauge, NY 11788

Project Location: 11-28 31st., Dr.  
Client Job Number:  
Project Number: 170154  
Laboratory Work Order Number: 18G0164

Enclosed are results of analyses for samples received by the laboratory on July 5, 2018. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jessica Hoffman". The signature is written in a cursive, flowing style.

Jessica L. Hoffman  
Project Manager



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Hydro Tech Environmental Engineering and Geolog  
77 Arkay Dr. Suite K  
Hauppauge, NY 11788  
ATTN: Paul I. Matli

REPORT DATE: 7/19/2018

PURCHASE ORDER NUMBER: 52150

PROJECT NUMBER: 170154

---

**ANALYTICAL SUMMARY**

---

WORK ORDER NUMBER: 18G0164

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

PROJECT LOCATION: 11-28 31st., Dr.

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-3	18G0164-01	Ground Water		SOP 434-PFAAS SW-846 8270D	
Field Blank	18G0164-02	Equipment Blank Water		SOP 434-PFAAS	



#### **CASE NARRATIVE SUMMARY**

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



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## SOP 434-PFAAS

## Qualifications:

## L-03

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

## Analyte &amp; Samples(s) Qualified:

## Perfluorooctanesulfonamide (FOS)

B207774-BS1

## MS-07

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

## Analyte &amp; Samples(s) Qualified:

## Perfluorobutanesulfonic acid (PFB)

B207774-MS1

## Perfluorodecanoic acid (PFDA)

B207774-MS1

## MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

## Analyte &amp; Samples(s) Qualified:

## 6:2 Fluorotelomersulfonate (6:2 FT)

B207774-MS1, B207774-MSD1

## NEtFOSAA

B207774-MS1, B207774-MSD1

## NMeFOSAA

B207774-MS1, B207774-MSD1

## Perfluorobutanoic acid (PFBA)

B207774-MS1, B207774-MSD1

## Perfluorodecanesulfonic acid (PFD)

B207774-MS1, B207774-MSD1

## Perfluorododecanoic acid (PFDoA)

B207774-MS1, B207774-MSD1

## Perfluorohexanoic acid (PFHxA)

B207774-MS1, B207774-MSD1

## Perfluorooctanesulfonamide (FOS)

B207774-MS1, B207774-MSD1

## Perfluoropentanoic acid (PFPeA)

B207774-MS1, B207774-MSD1

## Perfluorotetradecanoic acid (PFTA)

B207774-MS1, B207774-MSD1

## Perfluorotridecanoic acid (PFTrDA)

B207774-MS1, B207774-MSD1

## Perfluoroundecanoic acid (PFUnA)

B207774-MS1, B207774-MSD1

## R-06

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

## Analyte &amp; Samples(s) Qualified:

## Perfluorobutanesulfonic acid (PFB)

B207774-MSD1

## S-19

Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.

## Analyte &amp; Samples(s) Qualified:

## d5-NEtFOSAA

18G0164-01[MW-3], B207774-MS1



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

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

A handwritten signature in black ink, appearing to read "Lisa Worthington", is written over a light gray rectangular background.

Lisa A. Worthington  
Project Manager



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

Project Location: 11-28 31st., Dr.

Sample Description:

Work Order: 18G0164

Date Received: 7/5/2018

Field Sample #: MW-3

Sample ID: 18G0164-01

Start Date/Time: 7/3/2018 10:10:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/3/2018 10:59:00AM

**1,4-Dioxane by isotope dilution GC/MS**

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	µg/L	1		SW-846 8270D	7/6/18	7/13/18 15:40	IMR
Surrogates	% Recovery	Recovery Limits			Flag/Qual				
1,4-Dioxane-d8	22.7	15-110						7/13/18 15:40	



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Project Location: 11-28 31st., Dr.

Sample Description:

Work Order: 18G0164

Date Received: 7/5/2018

Field Sample #: MW-3

Sample ID: 18G0164-01

Start Date/Time: 7/3/2018 10:10:00AM

Sample Matrix: Ground Water

Stop Date/Time: 7/3/2018 10:59:00AM

### Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorohexanoic acid (PFHxA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluoroheptanoic acid (PFHpA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorobutanoic acid (PFBA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorodecanesulfonic acid (PFDS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluoroheptanesulfonic acid (PFHpS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorooctanesulfonamide (FOSA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluoropentanoic acid (PFPeA)	94	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorohexanesulfonic acid (PFHxS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorooctanoic acid (PFOA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorooctanesulfonic acid (PFOS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorononanoic acid (PFNA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorodecanoic acid (PFDA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
NMeFOSAA	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluoroundecanoic acid (PFUnA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
NEtFOSAA	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorododecanoic acid (PFDoA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorotridecanoic acid (PFTrDA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Perfluorotetradecanoic acid (PFTA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:46	KAF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C-PFHxA	97.6	70-130							
13C-PFDA	70.3	70-130							
d5-NEtFOSAA	46.7 *	70-130	S-19						



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Project Location: 11-28 31st., Dr.

Sample Description:

Work Order: 18G0164

Date Received: 7/5/2018

Field Sample #: Field Blank

Sampled: 7/3/2018 10:59

Sample ID: 18G0164-02

Sample Matrix: Equipment Blank Water

### Miscellaneous Organic Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanesulfonic acid (PFBS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorohexanoic acid (PFHxA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluoroheptanoic acid (PFHpA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorobutanoic acid (PFBA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorodecanesulfonic acid (PFDS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluoroheptanesulfonic acid (PFHpS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorooctanesulfonamide (FOSA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluoropentanoic acid (PFPeA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorohexanesulfonic acid (PFHxS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorooctanoic acid (PFOA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorooctanesulfonic acid (PFOS)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorononanoic acid (PFNA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorodecanoic acid (PFDA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
NMeFOSAA	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluoroundecanoic acid (PFUnA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
NEtFOSAA	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorododecanoic acid (PFDoA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorotridecanoic acid (PFTrDA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Perfluorotetradecanoic acid (PFTA)	ND	20	ng/L	1		SOP 434-PFAAS	7/16/18	7/18/18 20:59	KAF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
13C-PFHxA	107	70-130							
13C-PFDA	96.7	70-130							
d5-NEtFOSAA	104	70-130							



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### Sample Extraction Data

**Prep Method: EPA 537-SOP 434-PFAAS**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18G0164-01 [MW-3]	B207774	250	1.00	07/16/18
18G0164-02 [Field Blank]	B207774	250	1.00	07/16/18

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

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
18G0164-01 [MW-3]	B207396	980	1.00	07/06/18



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**QUALITY CONTROL**
**1,4-Dioxane by isotope dilution GC/MS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B207396 - SW-846 3510C</b>										
<b>Blank (B207396-BLK1)</b>				Prepared: 07/06/18 Analyzed: 07/13/18						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	3.12		µg/L	10.0		31.2	15-110			
<b>LCS (B207396-BS1)</b>				Prepared: 07/06/18 Analyzed: 07/13/18						
1,4-Dioxane	9.75	0.20	µg/L	10.0		97.5	40-140			
Surrogate: 1,4-Dioxane-d8	3.60		µg/L	10.0		36.0	15-110			
<b>LCS Dup (B207396-BSD1)</b>				Prepared: 07/06/18 Analyzed: 07/13/18						
1,4-Dioxane	9.18	0.20	µg/L	10.0		91.8	40-140	6.01	30	
Surrogate: 1,4-Dioxane-d8	3.62		µg/L	10.0		36.2	15-110			
<b>Matrix Spike (B207396-MS2)</b>				<b>Source: 18G0164-01</b>		Prepared: 07/06/18 Analyzed: 07/13/18				
1,4-Dioxane	10.3	0.20	µg/L	10.0	ND	103	40-140			
Surrogate: 1,4-Dioxane-d8	2.46		µg/L	10.0		24.6	15-110			
<b>Matrix Spike Dup (B207396-MSD2)</b>				<b>Source: 18G0164-01</b>		Prepared: 07/06/18 Analyzed: 07/13/18				
1,4-Dioxane	10.8	0.21	µg/L	10.4	ND	104	40-140	4.43	20	
Surrogate: 1,4-Dioxane-d8	2.38		µg/L	10.4		22.9	15-110			



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## QUALITY CONTROL

## Miscellaneous Organic Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B207774 - EPA 537</b>										
<b>Blank (B207774-BLK1)</b>										
Prepared: 07/16/18 Analyzed: 07/18/18										
Perfluorobutanesulfonic acid (PFBS)	ND	20	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	20	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	20	ng/L							
Perfluorobutanoic acid (PFBA)	ND	20	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	20	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	20	ng/L							
Perfluorooctanesulfonamide (FOSA)	ND	20	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	20	ng/L							
6:2 Fluorotelomersulfonate (6:2 FTS)	ND	20	ng/L							
8:2 Fluorotelomersulfonate (8:2 FTS)	ND	20	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	20	ng/L							
Perfluorooctanoic acid (PFOA)	ND	20	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	20	ng/L							
Perfluorononanoic acid (PFNA)	ND	20	ng/L							
Perfluorodecanoic acid (PFDA)	ND	20	ng/L							
NMeFOSAA	ND	20	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	20	ng/L							
NEtFOSAA	ND	20	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	20	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	20	ng/L							
Perfluorotetradecanoic acid (PFTA)	ND	20	ng/L							
Surrogate: 13C-PFHxA	51.8		ng/L	40.0		130	70-130			
Surrogate: 13C-PFDA	50.8		ng/L	40.0		127	70-130			
Surrogate: d5-NEtFOSAA	173		ng/L	160		108	70-130			
<b>LCS (B207774-BS1)</b>										
Prepared: 07/16/18 Analyzed: 07/18/18										
Perfluorobutanesulfonic acid (PFBS)	11.5	20	ng/L	8.85		130	70-130			
Perfluorohexanoic acid (PFHxA)	10.6	20	ng/L	10.0		106	70-130			
Perfluoroheptanoic acid (PFHpA)	9.91	20	ng/L	10.0		99.1	70-130			
Perfluorobutanoic acid (PFBA)	3.35	20	ng/L	10.0		33.5	30-110			
Perfluorodecanesulfonic acid (PFDS)	11.5	20	ng/L	9.65		120	70-130			
Perfluoroheptanesulfonic acid (PFHpS)	12.1	20	ng/L	9.50		128	70-130			
<b>Perfluorooctanesulfonamide (FOSA)</b>	2.14	20	ng/L	10.0		<b>21.4</b>	* 30-110			L-03
Perfluoropentanoic acid (PFPeA)	12.2	20	ng/L	10.0		122	70-130			
6:2 Fluorotelomersulfonate (6:2 FTS)	10.6	20	ng/L	9.50		111	70-130			
8:2 Fluorotelomersulfonate (8:2 FTS)	12.0	20	ng/L	9.60		125	70-130			
Perfluorohexanesulfonic acid (PFHxS)	10.9	20	ng/L	9.10		120	70-130			
Perfluorooctanoic acid (PFOA)	10.1	20	ng/L	10.0		101	70-130			
Perfluorooctanesulfonic acid (PFOS)	11.8	20	ng/L	9.25		127	70-130			
Perfluorononanoic acid (PFNA)	10.8	20	ng/L	10.0		108	70-130			
Perfluorodecanoic acid (PFDA)	8.49	20	ng/L	10.0		84.9	70-130			
NMeFOSAA	10.5	20	ng/L	10.0		105	70-130			
Perfluoroundecanoic acid (PFUnA)	8.54	20	ng/L	10.0		85.4	70-130			
NEtFOSAA	11.2	20	ng/L	10.0		112	70-130			
Perfluorododecanoic acid (PFDoA)	8.46	20	ng/L	10.0		84.6	70-130			
Perfluorotridecanoic acid (PFTrDA)	7.91	20	ng/L	10.0		79.1	70-130			
Perfluorotetradecanoic acid (PFTA)	8.75	20	ng/L	10.0		87.5	70-130			
Surrogate: 13C-PFHxA	46.2		ng/L	40.0		116	70-130			
Surrogate: 13C-PFDA	42.4		ng/L	40.0		106	70-130			
Surrogate: d5-NEtFOSAA	196		ng/L	160		122	70-130			



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

## QUALITY CONTROL

## Miscellaneous Organic Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B207774 - EPA 537</b>										
<b>Matrix Spike (B207774-MS1)</b>	<b>Source: 18G0164-01</b>			Prepared: 07/16/18 Analyzed: 07/18/18						
<b>Perfluorobutanesulfonic acid (PFBS)</b>	20.4	20	ng/L	8.85	6.53	<b>157</b>	* 70-130			MS-07
<b>Perfluorohexanoic acid (PFHxA)</b>	19.5	20	ng/L	10.0	6.02	<b>135</b>	* 70-130			MS-07A
Perfluoroheptanoic acid (PFHpA)	12.3	20	ng/L	10.0	2.18	101	70-130			
<b>Perfluorobutanoic acid (PFBA)</b>	25.2	20	ng/L	10.0	12.5	<b>127</b>	* 30-110			MS-07A
<b>Perfluorodecanesulfonic acid (PFDS)</b>	5.39	20	ng/L	9.65	ND	<b>55.9</b>	* 70-130			MS-07A
Perfluoroheptanesulfonic acid (PFHpS)	10.2	20	ng/L	9.50	ND	107	70-130			
<b>Perfluorooctanesulfonamide (FOSA)</b>	1.31	20	ng/L	10.0	ND	<b>13.1</b>	* 30-110			MS-07A
<b>Perfluoropentanoic acid (PFPeA)</b>	146	20	ng/L	10.0	94.1	<b>522</b>	* 70-130			MS-07A
<b>6:2 Fluorotelomersulfonate (6:2 FTS)</b>	24.1	20	ng/L	9.50	1.36	<b>239</b>	* 70-130			MS-07A
8:2 Fluorotelomersulfonate (8:2 FTS)	10.4	20	ng/L	9.60	ND	108	70-130			
Perfluorohexanesulfonic acid (PFHxS)	9.96	20	ng/L	9.10	1.73	90.5	70-130			
Perfluorooctanoic acid (PFOA)	18.1	20	ng/L	10.0	7.45	106	70-130			
Perfluorooctanesulfonic acid (PFOS)	11.4	20	ng/L	9.25	3.65	83.3	70-130			
Perfluorononanoic acid (PFNA)	7.99	20	ng/L	10.0	0.820	71.7	70-130			
<b>Perfluorodecanoic acid (PFDA)</b>	6.60	20	ng/L	10.0	0.732	<b>58.6</b>	* 70-130			MS-07
<b>NMeFOSAA</b>	6.09	20	ng/L	10.0	ND	<b>60.9</b>	* 70-130			MS-07A
<b>Perfluoroundecanoic acid (PFUnA)</b>	4.13	20	ng/L	10.0	ND	<b>41.3</b>	* 70-130			MS-07A
<b>NEtFOSAA</b>	3.97	20	ng/L	10.0	ND	<b>39.7</b>	* 70-130			MS-07A
<b>Perfluorododecanoic acid (PFDoA)</b>	3.92	20	ng/L	10.0	ND	<b>39.2</b>	* 70-130			MS-07A
<b>Perfluorotridecanoic acid (PFTriDA)</b>	3.98	20	ng/L	10.0	ND	<b>39.8</b>	* 70-130			MS-07A
<b>Perfluorotetradecanoic acid (PFTA)</b>	3.55	20	ng/L	10.0	ND	<b>35.5</b>	* 70-130			MS-07A
Surrogate: 13C-PFHxA	43.9		ng/L	40.0		110	70-130			
Surrogate: 13C-PFDA	28.5		ng/L	40.0		71.2	70-130			
<b>Surrogate: d5-NEtFOSAA</b>	102		ng/L	160		<b>63.5</b>	* 70-130			S-19
<b>Matrix Spike Dup (B207774-MSD1)</b>	<b>Source: 18G0164-01</b>			Prepared: 07/16/18 Analyzed: 07/18/18						
Perfluorobutanesulfonic acid (PFBS)	13.3	20	ng/L	8.85	6.53	76.7	70-130	<b>42.1</b>	* 30	R-06
<b>Perfluorohexanoic acid (PFHxA)</b>	20.1	20	ng/L	10.0	6.02	<b>141</b>	* 70-130	3.02	30	MS-07A
Perfluoroheptanoic acid (PFHpA)	12.7	20	ng/L	10.0	2.18	105	70-130	3.35	30	
<b>Perfluorobutanoic acid (PFBA)</b>	33.0	20	ng/L	10.0	12.5	<b>205</b>	* 30-110	26.6	30	MS-07A
<b>Perfluorodecanesulfonic acid (PFDS)</b>	6.73	20	ng/L	9.65	ND	<b>69.7</b>	* 70-130	22.1	30	MS-07A
Perfluoroheptanesulfonic acid (PFHpS)	10.7	20	ng/L	9.50	ND	113	70-130	4.76	30	
<b>Perfluorooctanesulfonamide (FOSA)</b>	2.09	20	ng/L	10.0	ND	<b>20.9</b>	* 30-110	<b>45.9</b>	* 30	MS-07A
<b>Perfluoropentanoic acid (PFPeA)</b>	200	20	ng/L	10.0	94.1	<b>1060</b>	* 70-130	<b>30.8</b>	* 30	MS-07A
<b>6:2 Fluorotelomersulfonate (6:2 FTS)</b>	16.8	20	ng/L	9.50	1.36	<b>162</b>	* 70-130	<b>35.7</b>	* 30	MS-07A
8:2 Fluorotelomersulfonate (8:2 FTS)	9.60	20	ng/L	9.60	ND	100	70-130	7.87	30	
Perfluorohexanesulfonic acid (PFHxS)	8.63	20	ng/L	9.10	1.73	75.9	70-130	14.3	30	
Perfluorooctanoic acid (PFOA)	16.1	20	ng/L	10.0	7.45	86.2	70-130	11.8	30	
Perfluorooctanesulfonic acid (PFOS)	10.3	20	ng/L	9.25	3.65	71.8	70-130	9.82	30	
Perfluorononanoic acid (PFNA)	9.01	20	ng/L	10.0	0.820	81.9	70-130	12.0	30	
Perfluorodecanoic acid (PFDA)	8.14	20	ng/L	10.0	0.732	74.1	70-130	21.0	30	
<b>NMeFOSAA</b>	6.18	20	ng/L	10.0	ND	<b>61.8</b>	* 70-130	1.39	30	MS-07A
<b>Perfluoroundecanoic acid (PFUnA)</b>	6.53	20	ng/L	10.0	ND	<b>65.3</b>	* 70-130	<b>45.1</b>	* 30	MS-07A
<b>NEtFOSAA</b>	4.83	20	ng/L	10.0	ND	<b>48.3</b>	* 70-130	19.4	30	MS-07A
<b>Perfluorododecanoic acid (PFDoA)</b>	5.72	20	ng/L	10.0	ND	<b>57.2</b>	* 70-130	<b>37.3</b>	* 30	MS-07A
<b>Perfluorotridecanoic acid (PFTriDA)</b>	4.93	20	ng/L	10.0	ND	<b>49.3</b>	* 70-130	21.3	30	MS-07A
<b>Perfluorotetradecanoic acid (PFTA)</b>	3.73	20	ng/L	10.0	ND	<b>37.3</b>	* 70-130	5.01	30	MS-07A
Surrogate: 13C-PFHxA	47.9		ng/L	40.0		120	70-130			
Surrogate: 13C-PFDA	35.6		ng/L	40.0		88.9	70-130			
Surrogate: d5-NEtFOSAA	120		ng/L	160		74.8	70-130			



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

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-03	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
S-19	Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.



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

Analyte	Certifications
<b><i>SOP 434-PFAAS in Water</i></b>	
Perfluorobutanesulfonic acid (PFBS)	NH-P
Perfluorohexanoic acid (PFHxA)	NH-P
Perfluoroheptanoic acid (PFHpA)	NH-P
Perfluorohexanesulfonic acid (PFHxS)	NH-P
Perfluorooctanoic acid (PFOA)	NH-P
Perfluorooctanesulfonic acid (PFOS)	NH-P
Perfluorononanoic acid (PFNA)	NH-P
Perfluorodecanoic acid (PFDA)	NH-P
NMeFOSAA	NH-P
Perfluoroundecanoic acid (PFUnA)	NH-P
NEtFOSAA	NH-P
Perfluorododecanoic acid (PFDoA)	NH-P
Perfluorotridecanoic acid (PFTrDA)	NH-P
Perfluorotetradecanoic acid (PFTA)	NH-P
<b><i>SW-846 8270D in Water</i></b>	
1,4-Dioxane	NY

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

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2005	100033	03/1/2020
MA	Massachusetts DEP	M-MA100	06/30/2019
CT	Connecticut Department of Public Health	PH-0567	09/30/2019
NY	New York State Department of Health	10899 NELAP	04/1/2019
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2019
RI	Rhode Island Department of Health	LAO00112	12/30/2018
NC	North Carolina Div. of Water Quality	652	12/31/2018
NJ	New Jersey DEP	MA007 NELAP	06/30/2019
FL	Florida Department of Health	E871027 NELAP	06/30/2019
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2019
ME	State of Maine	2011028	06/9/2019
VA	Commonwealth of Virginia	460217	12/14/2018
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2018
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2019
NC-DW	North Carolina Department of Health	25703	07/31/2018





Phone: 413-525-2332

Fax: 413-525-6405

Email: info@contestlabs.com

Company Name:

Address: 15 Ocean Ave. Suite 2B, Bldg. 2A

Phone: 718 676 5800

Project Name:

Project Location: 11-28 31 Drive, LIC NY

Project Number:

Project Manager: Paul Mathi

Con-Test Quote Name/Number:

Invoice Recipient: Paul Mathi

Sampled By:

Paul Mathi

Client Sample ID / Description

MW-3 MS ASD (7/5/18)

Beginning Date/Time

7/5/18 10:20

Ending Date/Time

7/5/18 16:59

Composite

Grab

Matrix Code

Conc Code

GW

Request Turnaround Time

7-Day ☒ 10-Day ☐

Due Date:

17-01-54

Rush-Approval Required

1-Day ☐ 3-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☒ EXCEL ☐

Other: ASPB Package

CLP (Like Data Pkg Required) ☐

Email To: Paul Mathi

Fax To: 718 676 5800

ANALYSIS REQUESTED

Field Filtered ☐

Lab to Filter ☐

Field Filtered ☐

Lab to Filter ☐

1 Matrix Codes:

GW = Ground Water

WW = Waste Water

DW = Drinking Water

A = Air

S = Soil

SL = Sludge

SOL = Solid

O = Other (please define)

2 Preservation Codes:

I = Iced

H = HCL

M = Methanol

N = Nitric Acid

S = Sulfuric Acid

B = Sodium Bisulfate

X = Sodium Hydroxide

T = Sodium

Thiosulfate

O = Other (please define)

3 Container Codes:

A = Amber Glass

G = Glass

P = Plastic

ST = Sterile

V = Vial

S = Summa Canister

T = Tedlar Bag

O = Other (please define)

PCB ONLY

Soxhlet

Non Soxhlet

Other

Chromatogram

AIHA-LAP, LLC

NY TOGS

NY CP-51

NYC Sewer Discharge

Part 360 GW (Landfill)

NY Restricted Use

NY Unrestricted Use

NY Part 375

Other

Project Entity

Government

Federal

City

Municipality

21 J

Brownfield

MWRA

School

MBTA

WRTA

Other

Chromatogram

AIHA-LAP, LLC

Enhanced Data Package

NYSDEC EQUIS EDD

EQUIS (Standard) EDD

NY Regulatory EDD

NY Regs Hits-Only EDD

Other

NETAC and AIHA-LAP, LLC Accredited

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MWRA




**con-test®**  
 ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

**Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False**
Client Hydrotech Corp O-Ring & SealReceived By ESD Date 7-5-18 Time 16:45
 How were the samples received? In Cooler T No Cooler        On Ice T No Ice         
 Direct from Sampling        Ambient        Melted Ice       

 Were samples within Temperature? 2-6°C T By Gun # 7 Actual Temp - 2.0  
 By Blank #        Actual Temp -       
Was Custody Seal Intact? NA Were Samples Tampered with? NAWas COC Relinquished? T Does Chain Agree With Samples? TAre there broken/leaking/loose caps on any samples? TIs COC in ink/ Legible? T Were samples received within holding time? T
 Did COC include all pertinent Information? Client T Analysis T Sampler Name T  
 Project T ID's T Collection Dates/Times T
Are Sample labels filled out and legible? TAre there Lab to Filters? F Who was notified?       Are there Rushes? F Who was notified?       Are there Short Holds? F Who was notified?       Is there enough Volume? TIs there Headspace where applicable? ENC/NA MS/MSD? TProper Media/Containers Used? T Is splitting samples required? FWere trip blanks received? F On COC? FDo all samples have the proper pH? NA Acid        Base       

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.	<u>6</u>	1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic	<u>5</u>	4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

**Unused Media**

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

Comments:



contamination. Project managers may approve a shorter analyte list (e.g., just the UCMR3 list) for some reporting on a case by case basis.

**1,4-Dioxane Analysis and Reporting:** The method detection limit (MDL) for 1,4-dioxane should be no higher than 0.28 µg/l (ppb). ELAP offers certification for both EPA Methods 8260 and 8270. In order to get the appropriate detection limits, the lab would need to run either of these methods in "selective ion monitoring" (SIM) mode. DER is advising PMS to use 8270, since this method provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents (we acknowledge that 8260 has been shown to have a higher recovery in some studies).

### Full PFAS Target Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	<b>Perfluorobutanesulfonic acid</b>	<b>PFBS</b>	<b>375-73-5</b>
	<b>Perfluorohexanesulfonic acid</b>	<b>PFHxS</b>	<b>355-46-4</b>
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	<b>Perfluorooctanesulfonic acid</b>	<b>PFOS</b>	<b>1763-23-1</b>
	Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoroalkyl carboxylates	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	<b>Perfluoroheptanoic acid</b>	<b>PFHpA</b>	<b>375-85-9</b>
	<b>Perfluorooctanoic acid</b>	<b>PFOA</b>	<b>335-67-1</b>
	<b>Perfluorononanoic acid</b>	<b>PFNA</b>	<b>375-95-1</b>
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTriA/PFTTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane-sulfonamides	Perfluorooctanesulfonamide	FOSA	754-91-6
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Bold entries depict the 6 original UCMR3 chemicals



## Groundwater Sampling for Emerging Contaminants

February 2018

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Issue: NYSDEC has committed to analyzing representative groundwater samples at remediation sites for emerging contaminants (1,4-dioxane and PFAS) as described in the below guidance.

### Implementation

NYSDEC project managers will be contacting site owners to schedule sampling for these chemicals. Only groundwater sampling is required. The number of samples required will be similar to the number of samples where “full TAL/TCL sampling” would typically be required in a remedial investigation. If sampling is not feasible (e.g., the site no longer has any monitoring wells in place), sampling may be waived on a site-specific basis after first considering potential sources of these chemicals and whether there are water supplies nearby.

Upon a new site being brought into any program (i.e., SSF, BCP), PFAS and 1,4-dioxane will be incorporated into the investigation of groundwater as part of the standard “full TAL/TCL” sampling. Until an SCO is established for PFAS, soil samples do not need to be analyzed for PFAS unless groundwater contamination is detected. Separate guidance will be developed to address sites where emerging contaminants are found in the groundwater. The analysis currently performed for SVOCs in soil is adequate for evaluation of 1,4-dioxane, which already has an established SCO.

### Analysis and Reporting

Labs should provide a full category B deliverable, and a DUSR should be prepared by a data validator.

The work plan should explicitly describe analysis and reporting requirements.

PFAS sample analysis: Samples should be analyzed by an environmental laboratory certified by ELAP to use EPA method 537 or ISO 25101. ELAP does not currently offer certification for PFAS analysis of non-drinking water samples (including groundwater, soil and sediment), so there is no requirement to use an ELAP certified method. The preferred method is the modified EPA Method 537. Labs have been able to achieve reporting limits for PFOA and PFOS of 2 ng/l (part per trillion). If labs are not able to achieve similar reporting limits, the NYSDEC project manager will make case-by-case decisions as to whether the analysis can meet the needs for the specific site.

PFAS sample reporting: DER has developed a PFAS target analyte list (below) with the intent of achieving reporting consistency between labs for commonly reportable analytes. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. This list may be updated in the future as new information is learned and as labs develop new capabilities. If lab and/or matrix specific issues are encountered for any particular compounds, the NYSDEC project manager will make case-by-case decisions as to whether particular analytes may be temporarily or permanently discontinued from analysis for each site. Any technical lab issues should be brought to the attention of a NYSDEC chemist.

Some sampling using this full PFAS target analyte list is needed to understand the nature of contamination. It may also be critical to differentiate PFAS compounds associated with a site from other sources of these chemicals. Like routine refinements to parameter lists based on investigative findings, the full PFAS target analyte list may not be needed for all sampling intended to define the extent of



## Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitoring Wells Sample Protocol

**Samples collected using this protocol are intended to be analyzed for perfluorooctanoic acid (PFOA) and other perfluorinated compounds by Modified (Low Level) Test Method 537.**

The procedure used must be consistent with the NYSDEC March 1991 Sampling Guidelines and Protocols [http://www.dec.ny.gov/docs/remediation\\_hudson\\_pdf/sgpsect5.pdf](http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf) with the following materials limitations.

At this time acceptable materials for sampling include: stainless steel, high density polyethylene (HDPE), PVC, silicone, acetate and polypropylene. Equipment blanks should be generated at least daily. Additional materials may be acceptable if pre-approved by NYSDEC. Requests to use alternate equipment should include clean equipment blanks. **NOTE: Grunfos pumps and bladder pumps are known to contain PFC materials (e.g. Teflon™ washers for Grunfos pumps and LDPE bladders for bladder pumps).** All sampling equipment components and sample containers should not come in contact with aluminum foil, low density polyethylene (LDPE), glass or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer. Standard two step decontamination using detergent and clean water rinse will be performed for equipment that does come in contact with PFC materials. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFC materials must be avoided. Many food and drink packaging materials and “plumbers thread seal tape” contain PFCs.

All clothing worn by sampling personnel must have been laundered multiple times. The sampler must wear nitrile gloves while filling and sealing the sample bottles.

Pre-cleaned sample bottles with closures, coolers, ice, sample labels and a chain of custody form will be provided by the laboratory.

1. Fill two pre-cleaned 500 mL HDPE or polypropylene bottle with the sample.
2. Cap the bottles with an acceptable cap and liner closure system.
3. Label the sample bottles.
4. Fill out the chain of custody.
5. Place in a cooler maintained at  $4 \pm 2^\circ$  Celsius.

Collect one equipment blank for every sample batch, not to exceed 20 samples.

Collect one field duplicate for every sample batch, not to exceed 20 samples.

Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, not to exceed 20 samples.

Request appropriate data deliverable (Category A or B) and an electronic data deliverable.



# **ATTACHMENT F**

## **Digital Photo Log**



**Photo Log**  
9/19/17

Housekeeping activities following  
site demolition



Removal of concrete slab





**Stockpiling of removed concrete  
from slab**





**Photo Log**

9/20/17

CAMP station



Removal of concrete slab



**Stockpiling of removed concrete  
from slab**





**Photo Log**  
10/11/17

Truck loading with C&D



Disposal of C&D





Truck loading with C&D





**Photo Log**  
10/12/17

Soil excavation



Soil loading





View of excavated area





**Photo Log**  
10/13/17

Soil excavation



Soil loading





Exposed UST





**Photo Log**  
10/16/17

Exposed UST



Vacuum removal of liquid accumulated inside the UST



Exposed UST





View of tank excavation pit



55-gal drum containing  
cleaning waste from UST





C&D disposal





**Photo Log**  
10/27/17

55-gal drum containing cleaning  
waste from UST





**Photo Log**  
11/22/17

Breaking edges of former slab along existing southern wall in preparation for underpinning



Hand excavated pit for underpinning



Form placed for concrete underlining under footing of south-adjacent building





**Photo Log**  
11/28/17

Site View



Hand excavation of underpinning pits



View of underpinning pits





**Photo Log**  
11/30/17

Site View

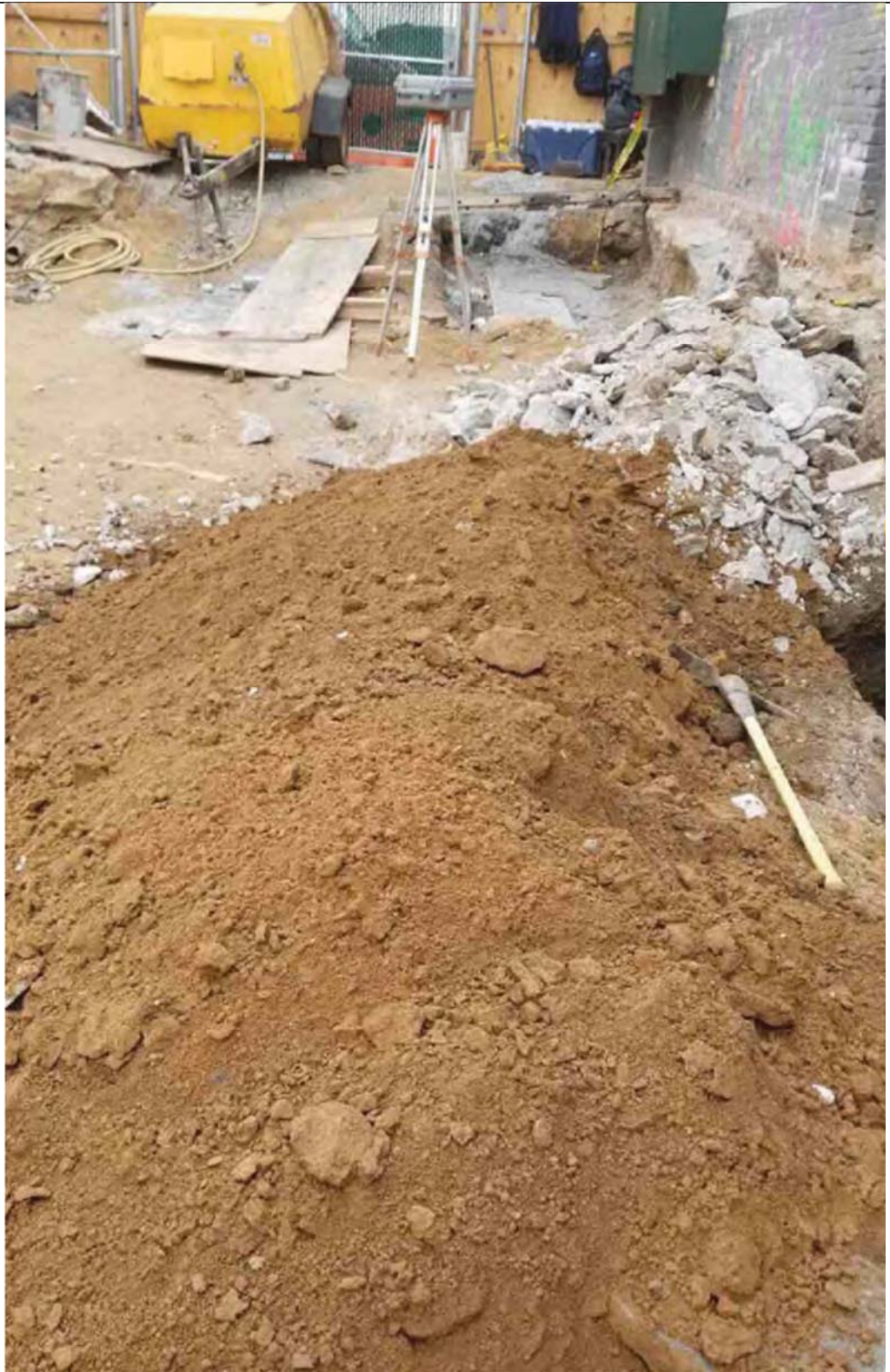


Hand  
excavation  
of  
underpinning  
pits





Excavated  
soil from  
underpinning  
activities





**Photo Log**  
12/13/17

View of excavated pit for  
elevator foundations and  
surrounding building  
footings



Stockpiled soil from  
elevator pit excavation





Placement of  $\frac{3}{4}$ -inch  
bluestone at bottom of  
elevator pit





**Photo Log**  
12/18/17

Installation of vapor barrier in elevator pit



Completed installation of vapor barrier in elevator pit





**Photo Log**  
12/19/17

View of demarcation layer prior to backfill in rear yard



Movement of previously stockpiled excavated soil for on-site reuse as backfill



Completed backfilling in rear yard with reused on-site soil





**Photo Log**  
1/18/18

Vapor barrier around  
elevator pit





**Photo Log**  
1/25/18

View of imported bluestone





View of imported bluestone





**Photo Log**  
1/26/18

Backfilling the Site with bluestone





View of imported bluestone





**Photo Log**  
1/29/18





**Photo Log**  
2/14/18

Installation of monitoring wells





**Photo Log**  
2/15/18

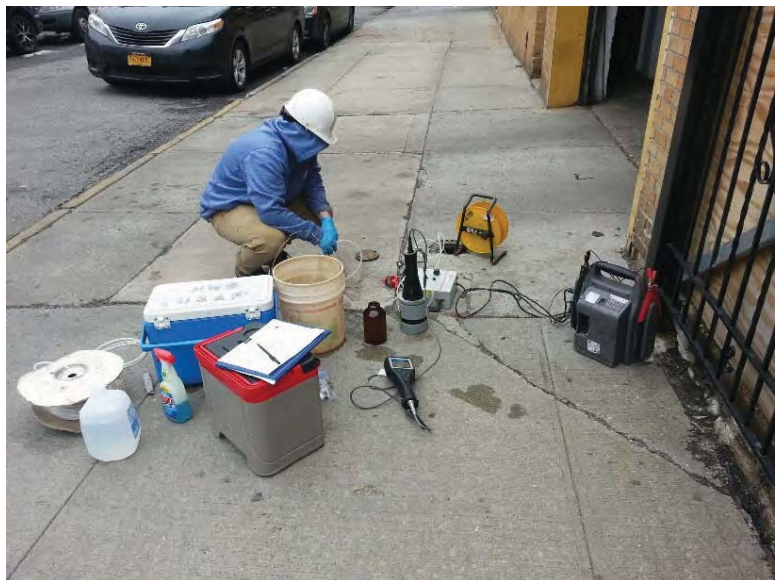
Development of monitoring wells





**Photo Log**  
2/19/18

Sampling of monitoring wells





**Photo Log**  
5/28/18

ISCO injections in sidewalk





**Photo Log**  
5/29/18

ISCO injections in sidewalk





**ATTACHMENT G**  
**Solid Waste Disposal Documentation**



# Soil/Fill Waste Characterization





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July 07, 2017

Mr. George Man  
57 Allen Street  
New York, NY 10002

**Re: 11-28 31<sup>st</sup> Drive, Long Island City, New York  
NYSDEC BCP Site #C241159  
Hydro Tech Job No. 170175 -Waste Characterization Sampling**

Dear Mr. Man:

This letter is intended to provide you with the analytical data from our recent waste characterization exercise conducted at the above-referenced in anticipation of Site remedial development under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Clean-Up Program Site (NYSDEC BCP Site # C241159). According to the proposed development plan, the site excavation will extend to the depth of 3 feet below grade surface across the entire property and to the depth of the soil and groundwater interface at approximately 7 feet below grade surface in the ear of the elevator pit. Based on the requirements of the retained soil disposal facility identified as Clean Earth of Bethlehem in Pennsylvania, one waste characterization sample is required for the total amount of soil waste generated during Site excavation that is anticipated to be around 400 tons. A map showing the sampling locations is provided in **Figure 1**.

The waste characterization exercise was performed on June 20, 2017. There were no deviations from the original waste characterization sampling plan. The entire site was designated as (1) grid designated WC-1. Four (4) soil probes designated SB-1 to SB-4 were installed in this grid spanning the required depths of soil excavation; 0 to 3 feet in across the entire site and from 3 to 7 feet bgs beneath the proposed elevator pit. Groundwater was not encountered during the soil sampling activities.

A Hydro Tech geologist performed infield characterization and screening of each soil sample utilizing the Unified Soil Classification System and a Photo Ionization Detector (PID). The soil beneath the Site is composed of sand with trace amount of fill material consisting of glass, bricks to variable depths underlain by silty sand, consistent with the previous investigations. No visual/olfactory evidence of petroleum vapors or detectable (<0.1 ppm) organic vapors were noted in any soil samples. **Attachment A** provides soil probe logs.

A total of five grab samples WC-1\_SB-1 (1'-2'; 3'-4'), WC-1\_SB-2 (3'-4'), WC-1\_SB-3 (4'-5') and WC-1\_SB-4 (0-1') were analyzed for VOCs. The five-point composite sample was analyzed for Volatile Organics (VOCs), TCLP VOCs, Semi Volatile Organics (SVOCs), TCLP SVOCs, Pesticides, TCLP Pesticides, TCLP Herbicides, PCBs, TAL Metals, TCLP Metals, Corrosivity, Ignitability and Reactivity for Cyanide and Sulfide. Additionally, a site grab sample was collected from WC-1\_SB-1 (3'-4') and analyzed for TCLP metals and paint filters. The sample was analyzed by a New York State Department of Health ELAP certified laboratory.



Mr. George Man

July 07, 2017

2

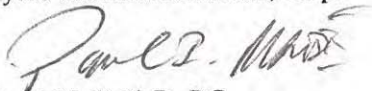
Tables 1 through 6 provide the results of the soil samples from the composite and grab samples. Tables 1 through 6 also provide a comparison to the NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives (UUSCO), PA Clean Fill Limits and PA Regulated Fill Limits, and EPA Hazardous Waste Regulatory Levels for Toxicity Characteristic or TCLP. The concentrations reported in the summary tables are in milligrams per kilogram (mg/kg), unless noted otherwise. The laboratory analytical data report for waste characterization activities is provided in **Attachment B**.

Upon review of the laboratory analytical results, no substances were detected at concentrations exceeding the TCLP hazardous levels.

The analytical results indicated the grab sample WC-1\_SB-2 contained Methylene chloride at a concentration in exceedance of UUSCO. The composite sample WC-1 contained Cobalt at a concentration exceeding the PA Clean Fill Limits. Soil at the Site met the PA Regulated Fill Limits. Since no soil removed from this Site is permitted to be disposed of at an unregulated facility, a final approval following a review from the soil disposal facility will be required prior to the export of any soil from the Site.

Price quotes will be requested from disposal companies on your behalf and will be provided upon receipt.. Should you have any questions, please feel free to contact our office at your convenience.

Very Truly Yours,  
**Hydro Tech Environmental, Corp.**



Paul I. Matli, Ph.D., P.G.  
Senior Project Manager

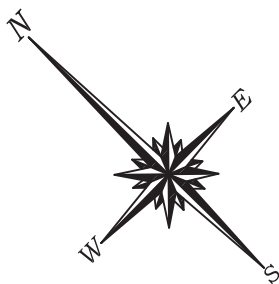
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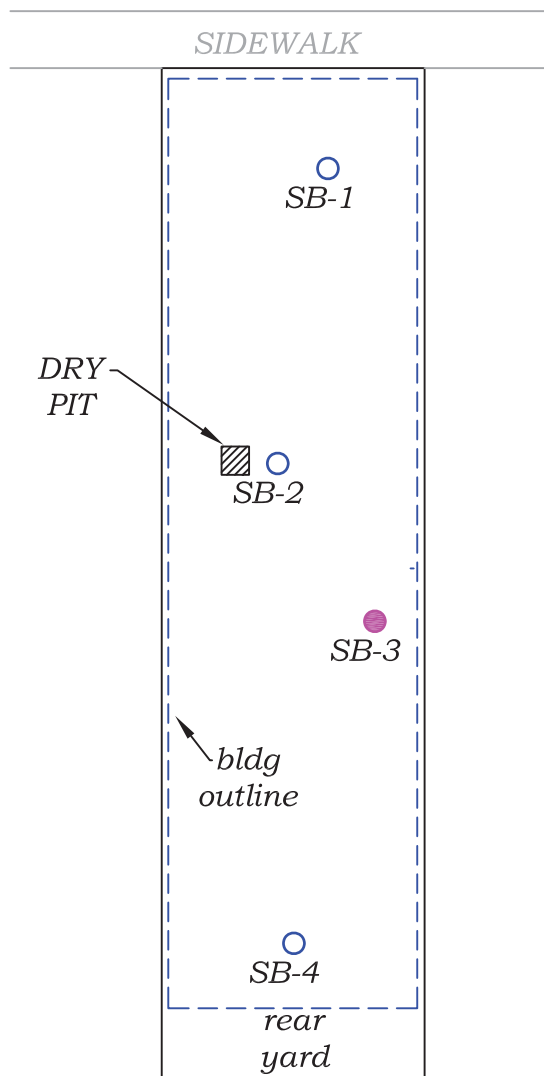


**Figure 1: Sampling Plan**





31st DRIVE



LEGEND:

- WASTE CHARACTERIZATION BORING TO 7 FEET BELOW GRADE (SB)
- WASTE CHARACTERIZATION BORING TO 4 FEET BELOW GRADE (SB)

0' 20' 40'  
SCALE IN FEET (FT.)



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11-28 31st Drive  
Long Island City, NY  
HTE Job# 120029

Drawn By: C.Q.  
Reviewed By: P.M.  
Approved By: M.R.  
Date: 07/05/17  
Scale: AS NOTED

TITLE:

FIGURE 1: MAP OF WASTE CHARACTERIZATION SAMPLING



## **Tables**



**Table 1**  
**Waste Characterization Analytical Results for VOCs**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1-SB-2 (2-3) Grab		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result				
Units	mg/kg	Q	mg/Kg	mg/kg	mg/kg
<b>Volatile Organics, 8260 - Comprehensive</b>					
1,1,1,2-Tetrachloroethane	0.00280	U	~	18	18
1,1,1-Trichloroethane	0.00280	U	0.68	7.2	7.2
1,1,2,2-Tetrachloroethane	0.00280	U	~	0.0093	0.0093
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.00280	U	~	26000	53000
1,1,2-Trichloroethane	0.00280	U	~	0.15	7.2
1,1-Dichloroethane	0.00280	U	0.27	0.65	2.7
1,1-Dichloroethylene	0.00280	U	0.33	0.19	0.19
1,1-Dichloropropylene	0.00280	U	~	~	~
1,2,3-Trichlorobenzene	0.00280	U	~	~	~
1,2,3-Trichloropropane	0.00280	U	~	1.6	0.82
1,2,4-Trichlorobenzene	0.00280	U	~	27	27
1,2,4-Trimethylbenzene	0.00280	U	3.6	9	20
1,2-Dibromo-3-chloropropane	0.00280	U	~	0.0092	0.0092
1,2-Dibromoethane	0.00280	U	~	0.0012	0.0012
1,2-Dichlorobenzene	0.00280	U	1.1	59	59
1,2-Dichloroethane	0.00280	U	0.02	0.1	0.1
1,2-Dichloropropane	0.00280	U	~	0.11	0.11
1,3,5-Trimethylbenzene	0.00280	U	8.4	2.8	6.2
1,3-Dichlorobenzene	0.00280	U	2.4	61	61
1,3-Dichloropropane	0.00280	U	~	~	~
1,4-Dichlorobenzene	0.00280	U	1.8	10	10
1,4-Dioxane	0.0570	U	0.1	0.073	0.31
2,2-Dichloropropane	0.00280	U	~	~	~
2-Butanone	0.00280	U	0.12	54	110
2-Chlorotoluene	0.00280	U	~	20	20
2-Hexanone	0.00280	U	~	~	~
4-Chlorotoluene	0.00280	U	~	~	~
4-Methyl-2-pentanone	0.00280	U	~	2.9	6.3
Acetone	0.00570	U	0.05	41	110
Acrolein	0.00570	U	~	0.00062	0.0014
Acrylonitrile	0.00280	U	~	0.0087	0.037
Benzene	0.00280	U	0.06	0.13	0.13
Bromobenzene	0.00280	U	~	~	~
Bromochloromethane	0.00280	U	~	1.6	1.6
Bromodichloromethane	0.00280	U	~	3.4	3.4
Bromoform	0.00280	U	~	4.4	4.4
Bromomethane	0.00280	U	~	0.54	0.54
Carbon disulfide	0.00280	U	~	160	350
Carbon tetrachloride	0.00280	U	0.76	0.26	0.26
Chlorobenzene	0.00280	U	1.1	6.1	6.1
Chloroethane	0.00280	U	~	5	19
Chloroform	0.00280	U	0.37	2.5	2.5
Chloromethane	0.00280	U	~	0.038	0.038
cis-1,2-Dichloroethylene	0.00280	U	0.25	1.6	1.6
cis-1,3-Dichloropropylene	0.00280	U	~	0.12	0.46
Cyclohexane	0.00280	U	~	~	~
Dibromochloromethane	0.00280	U	~	3.2	3.2
Dibromomethane	0.00280	U	~	3.7	7.7
Dichlorodifluoromethane	0.00280	U	~	100	2.6
Ethyl Benzene	0.00280	U	1	46	46
Hexachlorobutadiene	0.00280	U	~	1.2	1.2
Isopropylbenzene	0.00280	U	~	780	1600
Methyl acetate	0.00280	U	~	690	1900
Methyl tert-butyl ether (MTBE)	0.00280	U	0.93	0.28	0.28
Methylcyclohexane	0.00280	U	~	~	~
Methylene chloride	0.0400		0.05	0.076	0.038
n-Butylbenzene	0.00280	U	12	950	2600
n-Propylbenzene	0.00280	U	3.9	290	780
o-Xylene	0.00280	U	~	~	~
p- & m- Xylenes	0.00570	U	~	~	~
p-Isopropyltoluene	0.00280	U	~	~	~
sec-Butylbenzene	0.00280	U	11	350	960
Styrene	0.00280	U	~	24	24
tert-Butyl alcohol (TBA)	0.00280	U	~	~	24
tert-Butylbenzene	0.00280	U	5.9	270	740
Tetrachloroethylene	0.00280	U	1.3	0.43	0.43
Toluene	0.00280	U	0.7	44	44
trans-1,2-Dichloroethylene	0.00280	U	0.19	2.3	2.3
trans-1,3-Dichloropropylene	0.00280	U	~	0.12	0.046
Trichloroethylene	0.00280	U	0.47	0.17	0.17
Trichlorofluoromethane	0.00280	U	~	87	87
Vinyl acetate	0.00280	U	~	~	14
Vinyl Chloride	0.00280	U	0.02	0.03	0.027
Xylenes, Total	0.00850	U	0.26	990	990
<b>Volatile Organics, Tentatively Identified Cmpds.</b>					
Hexane isomer	0.0140	JN	~	~	~

**NOTES:**

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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

      "= sample exceeds PA Regulated Fill Limits



**Table 2**  
**Waste Characterization Analytical Results for SVOCs**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-7) Composite		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result				
Units	mg/kg	Q	mg/Kg	mg/kg	mg/kg
Semi-Volatiles, 8270 - Comprehensive					
1,1-Biphenyl	0.0477	U	~	790	2200
1,2,4,5-Tetrachlorobenzene	0.0952	U	~	~	14
1,2,4-Trichlorobenzene	0.0477	U	~	27	27
1,2-Dichlorobenzene	0.0477	U	1.1	59	59
1,2-Diphenylhydrazine (as Azobenzene)	0.0477	U	~	0.15	0.58
1,3-Dichlorobenzene	0.0477	U	2.4	61	61
1,4-Dichlorobenzene	0.0477	U	1.8	10	10
2,3,4,6-Tetrachlorophenol	0.0952	U	~	~	~
2,4,5-Trichlorophenol	0.0477	U	~	2300	6100
2,4,6-Trichlorophenol	0.0477	U	~	3.1	8.9
2,4-Dichlorophenol	0.0477	U	~	1	1
2,4-Dimethylphenol	0.0477	U	~	32	87
2,4-Dinitrophenol	0.0952	U	~	0.21	0.46
2,4-Dinitrotoluene	0.0477	U	~	0.05	0.2
2,6-Dinitrotoluene	0.0477	U	~	1.1	3
2-Chloronaphthalene	0.0477	U	~	6200	18000
2-Chlorophenol	0.0477	U	~	4.4	4.4
2-Methylnaphthalene	0.0477	U	~	2900	8000
2-Methylphenol	0.0477	U	0.33	64	180
2-Nitroaniline	0.0952	U	~	0.038	0.091
2-Nitrophenol	0.0477	U	~	5.9	17
3- & 4-Methylphenols	0.0477	U	~	4.2	12
3,3-Dichlorobenzidine	0.0477	U	~	8.3	32
3-Nitroaniline	0.0952	U	~	0.033	0.1
4,6-Dinitro-2-methylphenol	0.0952	U	~	~	~
4-Bromophenyl phenyl ether	0.0477	U	~	~	~
4-Chloro-3-methylphenol	0.0477	U	~	37	110
4-Chloroaniline	0.0477	U	~	19	52
4-Chlorophenyl phenyl ether	0.0477	U	~	~	~
4-Nitroaniline	0.0952	U	~	0.031	0.066
4-Nitrophenol	0.0952	U	~	4.1	4.1
Acenaphthene	0.0477	U	20	2700	4700
Acenaphthylene	0.0477	U	100	2500	6900
Acetophenone	0.0477	U	~	200	540
Aniline	0.191	U	~	0.16	0.34
Anthracene	0.0477	U	100	350	350
Atrazine	0.0477	U	~	0.13	0.13
Benzaldehyde	0.0477	U	~	~	~
Benzidine	0.191	U	~	0.078	0.34
Benzo(a)anthracene	0.0477	U	1	25	110
Benzo(a)pyrene	0.0477	U	1	2.5	11
Benzo(b)fluoranthene	0.0477	U	1	25	110
Benzo(g,h,i)perylene	0.0477	U	100	180	180
Benzo(k)fluoranthene	0.0477	U	0.8	250	610
Benzoic acid	0.0477	U	~	2900	7800
Benzyl alcohol	0.0477	U	~	400	1100
Benzyl butyl phthalate	0.0477	U	~	10000	10000
Bis(2-chloroethoxy)methane	0.0477	U	~	~	~
Bis(2-chloroethyl)ether	0.0477	U	~	0.0039	0.017
Bis(2-chloroisopropyl)ether	0.0477	U	~	8	8
Bis(2-ethylhexyl)phthalate	0.0477	U	~	130	130
Caprolactam	0.0952	U	~	~	~
Carbazole	0.0477	U	~	21	0.83
Chrysene	0.0477	U	1	230	230
Dibenzo(a,h)anthracene	0.0477	U	0.33	2.5	11
Dibenzofuran	0.0477	U	7	~	~
Diethyl phthalate	0.0477	U	~	160	180
Dimethyl phthalate	0.0477	U	~	~	~
Di-n-butyl phthalate	0.0477	U	~	~	~
Di-n-octyl phthalate	0.176	D	~	4400	10000
Fluoranthene	0.0477	U	100	3200	3200
Fluorene	0.0477	U	30	3000	3800
Hexachlorobenzene	0.0477	U	0.33	0.96	0.96
Hexachlorobutadiene	0.0477	U	~	1.2	1.2
Hexachlorocyclopentadiene	0.0477	U	~	91	91
Hexachloroethane	0.0477	U	~	0.56	0.56
Indeno(1,2,3-cd)pyrene	0.0477	U	0.5	25	110
Isophorone	0.0477	U	~	1.9	1.9
Naphthalene	0.0477	U	12	25	25
Nitrobenzene	0.0477	U	~	0.79	2.2
N-Nitrosodimethylamine	0.0477	U	~	0.000041	7.6e-005
N-nitroso-di-n-propylamine	0.0477	U	~	0.0013	0.0061
N-Nitrosodiphenylamine	0.0477	U	~	20	83
Pentachlorophenol	0.0477	U	0.8	5	5
Phenanthrene	0.0477	U	100	10000	10000
Phenol	0.0477	U	0.33	66	88
Pyrene	0.0477	U	100	2200	2206

**NOTES:**

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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



**Table 3**  
**Waste Characterization Analytical Results for Pesticides, Herbicides and PCBs**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-8) Composite		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result				
Units	mg/kg	Q	mg/Kg	mg/kg	mg/kg
<b>Pesticides, EPA TCL List</b>					
4,4'-DDD	0.00191	U	0.0033	6.8	30
4,4'-DDE	0.00191	U	0.0033	41	170
4,4'-DDT	0.00191	U	0.0033	53	230
Aldrin	0.00191	U	0.005	0.1	0.44
alpha-BHC	0.00191	U	0.02	0.046	0.19
beta-BHC	0.00191	U	0.036	0.22	0.82
Chlordane, total	0.00382	U	~	49	49
delta-BHC	0.00191	U	0.04	11	30
Dieldrin	0.00191	U	0.005	0.11	0.44
Endosulfan I	0.00191	U	2.4	110	260
Endosulfan II	0.00191	U	2.4	130	260
Endosulfan sulfate	0.00191	U	2.4	70	70
Endrin	0.00191	U	0.014	5.5	5.5
Endrin aldehyde	0.00191	U	~	~	~
Endrin ketone	0.00191	U	~	~	~
gamma-BHC (Lindane)	0.00191	U	0.1	0.072	0.072
Heptachlor	0.00191	U	0.042	0.68	0.68
Heptachlor epoxide	0.00191	U	~	1.1	1.1
Methoxychlor	0.00955	U	~	630	630
Toxaphene	0.0966	U	~	1.2	1.2
<b>Polychlorinated Biphenyls (PCB)</b>					
Aroclor 1016	0.0193	U	~	15	200
Aroclor 1221	0.0193	U	~	0.63	2.5
Aroclor 1232	0.0193	U	~	0.5	2
Aroclor 1242	0.0193	U	~	16	62
Aroclor 1248	0.0193	U	~	9.9	44
Aroclor 1254	0.0193	U	~	4.4	44
Aroclor 1260	0.0193	U	~	30	130
Total PCBs	0.0193	U	0.1	~	50

**NOTES:**

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J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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



**Table 4**  
**Waste Characterization Analytical Results for Metals**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-8) Composite		NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	PA Clean Fill Limits	PA Regulated Fill Limits
Sampling Date	6/20/2017				
Client Matrix	Soil				
Compound	Result	Q			
Aluminum	9,510		~	~	190000
Antimony	0.58	U	~	27	27
Arsenic	4.68		13	12	53
Barium	26.40		350	8200	8200
Beryllium	0.44		7.2	320	320
Cadmium	0.35	U	2.5	38	38
Calcium	779	B	~	~	~
Chromium, Trivalent	14.60		~	~	190000
Chromium, Hexavalent	0.58	U	1	94	190
Cobalt	12.90		~	8.1	22
Copper	12.50		50	8200	36000
Iron	19,400		~	~	190000
Lead	12		63	450	450
Magnesium	2,770		~	~	~
Manganese	480		1600	31000	190000
Mercury	0.03	U	0.18	10	10
Nickel	13.90	B	30	650	650
Potassium	1,120	B	~	~	~
Selenium	2.61		3.9	26	26
Silver	0.58	U	2	84	84
Sodium	113	B	~	~	~
Thallium	1.16	U	~	14	14
Vanadium	20.80		~	1500	72000
Zinc	39.50		109	12000	12000

**NOTES:**

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U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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

  = sample exceeds PA Clean Fill Limits



Table 5  
Waste Characterization Analytical Results for TCLPs  
11-28 31st Drive, Long Island city, NY

Sample ID	WC-1 (0-8) Composite		WC-1-SB-2 (2-3) Grab		WC-SB-1 (3-4) Site Grab		EPA Hazardous Waste Limits
Sampling Date	6/20/2017		6/20/2017		6/20/2017		
Client Matrix	Soil		Soil		Soil		
Units	mg/L	Q	mg/L	Q		mg/L	
Volatile Organics, TCLP RCRA List							
1,1-Dichloroethylene	NT		0.00250	U	NT		0.33
1,2-Dichloroethane	NT		0.00250	U	NT		0.02
1,4-Dichlorobenzene	NT		0.00250	U	NT		1.8
2-Butanone	NT		0.00250	U	NT		0.12
Benzene	NT		0.00250	U	NT		0.06
Carbon tetrachloride	NT		0.00250	U	NT		0.76
Chlorobenzene	NT		0.00250	U	NT		1.1
Chloroform	NT		0.00250	U	NT		0.37
Tetrachloroethylene	NT		0.00250	U	NT		1.3
Trichloroethylene	NT		0.00250	U	NT		0.47
Vinyl Chloride	NT		0.00250	U	NT		0.02
Semi-Volatiles, TCLP RCRA							
1,4-Dichlorobenzene	0.00645	U	NT		NT		1.8
2,4,5-Trichlorophenol	0.00722	U	NT		NT		~
2,4,6-Trichlorophenol	0.00654	U	NT		NT		~
2,4-Dinitrotoluene	0.00473	U	NT		NT		~
2-Methylphenol	0.00171	U	NT		NT		0.33
3- & 4-Methylphenols	0.00743	U	NT		NT		~
Cresols, total	0.00740	U	NT		NT		~
Hexachlorobenzene	0.00591	U	NT		NT		0.33
Hexachlorobutadiene	0.00662	U	NT		NT		~
Hexachloroethane	0.00726	U	NT		NT		~
Nitrobenzene	0.00393	U	NT		NT		~
Pentachlorophenol	0.00753	U	NT		NT		0.8
Pyridine	0.00637	U	NT		NT		~
Pesticides, TCLP RCRA List							
Chlordane, total	0.00022	U	NT		NT		~
Endrin	0.00004	U	NT		NT		0.014
gamma-BHC (Lindane)	0.00004	U	NT		NT		0.1
Heptachlor	0.00004	U	NT		NT		0.042
Heptachlor epoxide	0.00004	U	NT		NT		~
Methoxychlor	0.00004	U	NT		NT		~
Toxaphene	0.00111	U	NT		NT		~
Metals, TCLP							
Arsenic	NT		NT		0.00400	U	13
Barium	NT		NT		0.134		350
Cadmium	NT		NT		0.00300	U	2.5
Chromium	NT		NT		0.00600	U	~
Copper	0.00333	U	NT		NT		50
Mercury	0.00020	U	NT		0.00020	U	0.18
Lead	NT		NT		0.00400	B	63
Nickel	0.00556	U	NT		NT		30
Selenium	NT		NT		0.0110	U	3.9
Silver	NT		NT		0.00600	U	2
Zinc	0.0722	B	NT		NT		109
Herbicides, TCLP							
2,4,5-TP (Silvex)	0.00500	U	NT		NT		3.8
2,4-D	0.00500	U	NT		NT		~

**NOTES:**

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B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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



**Table 6**  
**Waste Characterization Analytical Results for RCRA Characteristics**  
**11-28 31st Drive, Long Island city, NY**

Sample ID	WC-1 (0-8) Composite		WC-1-SB-2 (2-3) Grab		WC-SB-1 (3-4) Site Grab	
Sampling Date	6/20/2017		6/20/2017		6/20/2017	
Client Matrix	Soil		Soil		Soil	
Compound	Result	Q	Result	Q	Result	Q
<b>Corrosivity</b>						
pH	8.040		NT		NT	
<b>Ignitability</b>						
Ignitability	Non-Ignit.		NT		NT	
<b>Paint Filter Test</b>						
Paint Filter Test	NT		NT		No Free Liquid	
<b>Reactivity-Cyanide</b>						
Reactivity - Cyanide	0.25 mg/kg	U	NT		NT	
<b>Reactivity-Sulfide</b>						
Reactivity - Sulfide	15 mg/Kg	U	NT		NT	

**NOTES:**

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

E=result is estimated and cannot be accurately reported due to levels encountered or interferences

NT=this indicates the analyte was not a target for this sample

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



## **Attachment A: Soil Logs**





# Hydro Tech Environmental, Corp.

Main Office  
77 Arkay Drive Suite G  
Hauppauge, NY 11786  
T (631) 462-5866 · F (631) 462-5877  
[www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)

NYC Office  
15 Ocean Avenuet, 2nd Floor  
Brooklyn, New York 11225  
T (718) 636-0800 · F (718) 636-0900

## Soil Probe Log

Job No: 170183	Date: 6/20/2017	Page: 1 of 1
Location: 11-28 31 Drive		Sampling Interval: 2 Feet
	Long Island City, NY 11106	Sampling Method: Grab
Boring No.: SB-1		Driller: Envirodrill
Drilling Method: Geoprobe		Depth to Water: N/A
Total Depth: 4 Feet		

### USCS SYMBOLS

GW - Well Graded Gravel	SW - Well Graded Sand	ML - Inorganic Silt / Sandy Silt	CH - Inorganic Clay, High Plastic
GP - Poorly Graded Gravel	SP - Poorly Graded Sand	CL - Inorganic Clays/Sandy Clay	OH - Organic Silt / Clay
GM - Silty Gravel	SM - Silty Sand	OL - Inorganic Silts/Organic Silty Clay	PT - Peat/High Organics
GC - Clayey Gravel	SC - Clayey Sand	MH- Elastic Silts	

Depth Below Grade and Lithology	PID Reading (ppm)	USCS	Soil Description
0	0.0	SP	Cement, aspahl and brown silty sand. No odor.
-2	0.0	SP	Silty sand. No odor.
-4			





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## Soil Probe Log

Job No: 170183	Date: 6/20/2017	Page: 1 of 1
Location: 11-28 31 Drive Long Island City, NY 11106		Sampling Interval: 2 Feet
Boring No.: SB-2		Sampling Method: Grab
Drilling Method: Geoprobe		Driller: Envirodrill
Total Depth: 4 Feet		Depth to Water: N/A

### USCS SYMBOLS

GW - Well Graded Gravel	SW - Well Graded Sand	ML - Inorganic Silt / Sandy Silt	CH - Inorganic Clay, High Plastic
GP - Poorly Graded Gravel	SP - Poorly Graded Sand	CL - Inorganic Clays/Sandy Clay	OH - Organic Silt / Clay
GM - Silty Gravel	SM - Silty Sand	OL - Inorganic Silts/Organic Silty Clay	PT - Peat/High Organics
GC - Clayey Gravel	SC - Clayey Sand	MH- Elastic Silts	

Depth Below Grade and Lithology	PID Reading (ppm)	USCS	Soil Description
---------------------------------------	----------------------	------	------------------

0	0.0	SP	Cement, aspahlt and dark brown silty sand. No odor.
-2	0.0	SP	Light brown silty sand. No odor.
-4			





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15 Ocean Avenuet, 2nd Floor

Brooklyn, New York 11225

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## Soil Probe Log

Job No: 170183

Date: 6/20/2017

Page: 1 of 1

Location: 11-28 31 Drive  
Long Island City, NY 11106

Sampling Interval: 2 Feet

Sampling Method: Grab

Boring No.: SB-3

Driller: Envirodrill

Drilling Method: Geoprobe

Depth to Water: N/A

Total Depth: 8 Feet

### USCS SYMBOLS

GW - Well Graded Gravel	SW - Well Graded Sand	ML - Inorganic Silt / Sandy Silt	CH - Inorganic Clay, High Plastic
GP - Poorly Graded Gravel	SP - Poorly Graded Sand	CL - Inorganic Clays/Sandy Clay	OH - Organic Silt / Clay
GM - Silty Gravel	SM - Silty Sand	OL - Inorganic Silts/Organic Silty Clay	PT - Peat/High Organics
GC - Clayey Gravel	SC - Clayey Sand	MH- Elastic Silts	

Depth Below  
Grade and  
Lithology

PID Reading  
(ppm)

USCS

Soil Description

0	0.0	SP	Cement, asphalt and brown silty sand. No odor.
-2	0.0	SP	Brown silty sand. No odor.
-4	0.0	SP	Brown silty sand. No odor.
-6	0.0	SP	Brown silty sand. No odor.
-8			





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## Soil Probe Log

Job No: 170183

Date: 6/20/2017

Page: 1 of 1

Location: 11-28 31 Drive  
Long Island City, NY 11106

Sampling Interval: 2 Feet

Sampling Method: Grab

Boring No.: SB-4

Driller: Envirodrill

Drilling Method: Geoprobe

Depth to Water: N/A

Total Depth: 4 Feet

### USCS SYMBOLS

GW - Well Graded Gravel	SW - Well Graded Sand	ML - Inorganic Silt / Sandy Silt	CH - Inorganic Clay, High Plastic
GP - Poorly Graded Gravel	SP - Poorly Graded Sand	CL - Inorganic Clays/Sandy Clay	OH - Organic Silt / Clay
GM - Silty Gravel	SM - Silty Sand	OL - Inorganic Silts/Organic Silty Clay	PT - Peat/High Organics
GC - Clayey Gravel	SC - Clayey Sand	MH- Elastic Silts	

Depth Below  
Grade and  
Lithology

PID Reading  
(ppm)

USCS

Soil Description

0

0.0

SP

Cement, aspahl and brown silty sand. No odor.

-2

0.0

SP

Dark brown silty sand. No odor.

-4



## **Attachment B: Laboratory Data**





# Technical Report

prepared for:

## **Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 07/05/2017

**Client Project ID: 170154 - 11-28 31st Dr. Long Island City. NY**

York Project (SDG) No.: 17F0796

Revision No. 1.0



CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037

New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

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(203) 325-1371

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[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)



**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

---

**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 20, 2017 and listed below. The project was identified as your project: **170154 - 11-28 31st Dr. Long Island City. NY.**

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
17F0796-01	WC-1 (0-8) Composite	Soil	06/20/2017	06/20/2017
17F0796-02	WC-1SB-2 (2-3) Grab	Soil	06/20/2017	06/20/2017
17F0796-03	WC-SB-1 (3-4) Site Grab	Soil	06/20/2017	06/20/2017



## **General Notes for York Project (SDG) No.: 17F0796**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
9. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 07/05/2017







## Sample Information

**Client Sample ID:** WC-1 (0-8) Composite

**York Sample ID:** 17F0796-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17F0796

170154 - 11-28 31st Dr. Long Island City. NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Semi-Volatiles, 8270 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
95-57-8	2-Chlorophenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
95-48-7	2-Methylphenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
88-74-4	2-Nitroaniline	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
88-75-5	2-Nitrophenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ





## Sample Information

**Client Sample ID:** WC-1 (0-8) Composite

**York Sample ID:** 17F0796-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

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**Date Received**

17F0796

170154 - 11-28 31st Dr. Long Island City. NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Semi-Volatiles, 8270 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
99-09-2	3-Nitroaniline	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
106-47-8	4-Chloroaniline	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
100-01-6	4-Nitroaniline	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
100-02-7	4-Nitrophenol	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
83-32-9	Acenaphthene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
208-96-8	Acenaphthylene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
98-86-2	Acetophenone	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
62-53-3	Aniline	ND		ug/kg dry	191	381	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
120-12-7	Anthracene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
1912-24-9	Atrazine	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
100-52-7	Benzaldehyde	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
92-87-5	Benzidine	ND		ug/kg dry	191	381	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
65-85-0	Benzoic acid	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ





## Sample Information

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**York Sample ID:** 17F0796-01

**York Project (SDG) No.**

17F0796

**Client Project ID**

170154 - 11-28 31st Dr. Long Island City. NY

**Matrix**

Soil

**Collection Date/Time**

June 20, 2017 3:00 pm

**Date Received**

06/20/2017

### Semi-Volatiles, 8270 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
105-60-2	Caprolactam	ND		ug/kg dry	95.2	190	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
86-74-8	Carbazole	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
218-01-9	Chrysene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
132-64-9	Dibenzofuran	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
84-66-2	Diethyl phthalate	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
131-11-3	Dimethyl phthalate	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
117-84-0	<b>Di-n-octyl phthalate</b>	<b>176</b>		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
206-44-0	Fluoranthene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
86-73-7	Fluorene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
118-74-1	Hexachlorobenzene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
67-72-1	Hexachloroethane	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
78-59-1	Isophorone	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ





## Sample Information

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**York Sample ID:** 17F0796-01

**York Project (SDG) No.**

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17F0796

170154 - 11-28 31st Dr. Long Island City. NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Semi-Volatiles, 8270 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
98-95-3	Nitrobenzene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
87-86-5	Pentachlorophenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
85-01-8	Phenanthrene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
108-95-2	Phenol	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
129-00-0	Pyrene	ND		ug/kg dry	47.7	95.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/24/2017 10:08	06/28/2017 11:55	ZZZ
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
367-12-4	Surrogate: 2-Fluorophenol	67.4 %									
4165-62-2	Surrogate: Phenol-d5	55.0 %									
4165-60-0	Surrogate: Nitrobenzene-d5	63.4 %									
321-60-8	Surrogate: 2-Fluorobiphenyl	56.7 %									
118-79-6	Surrogate: 2,4,6-Tribromophenol	84.8 %									
1718-51-0	Surrogate: Terphenyl-d14	59.1 %									

### Semi-Volatiles, TCLP RCRA Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		ug/L	6.45	10.0	1	EPA 8270D/1311 Certifications: NELAC-NY10854,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	7.22	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	6.54	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	4.73	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
95-48-7	2-Methylphenol	ND		ug/L	1.71	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	7.43	20.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
1319-77-3	Cresols, total	ND		ug/L	7.40	30.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854	06/22/2017 08:22	06/27/2017 19:34	SR
118-74-1	Hexachlorobenzene	ND		ug/L	5.91	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR





## Sample Information

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### Semi-Volatiles, TCLP RCRA Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/L	6.62	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
67-72-1	Hexachloroethane	ND		ug/L	7.26	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
98-95-3	Nitrobenzene	ND		ug/L	3.93	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
87-86-5	Pentachlorophenol	ND		ug/L	7.53	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
110-86-1	Pyridine	ND		ug/L	6.37	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:22	06/27/2017 19:34	SR
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
367-12-4	Surrogate: 2-Fluorophenol	50.4 %			10-65						
4165-62-2	Surrogate: Phenol-d5	36.4 %			10-49						
4165-60-0	Surrogate: Nitrobenzene-d5	67.9 %			10-96						
321-60-8	Surrogate: 2-Fluorobiphenyl	50.5 %			10-93						
118-79-6	Surrogate: 2,4,6-Tribromophenol	70.0 %			10-128						
1718-51-0	Surrogate: Terphenyl-d14	60.6 %			10-100						

### Semi-Volatiles, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	06/24/2017 10:08	06/28/2017 11:55	ZZZ

### Pesticides, EPA TCL List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
72-55-9	4,4'-DDE	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
50-29-3	4,4'-DDT	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
309-00-2	Aldrin	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
319-84-6	alpha-BHC	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
319-85-7	beta-BHC	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
57-74-9	Chlordane, total	ND		ug/kg dry	3.82	3.82	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
319-86-8	delta-BHC	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA





## Sample Information

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**York Sample ID:** 17F0796-01

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17F0796

170154 - 11-28 31st Dr. Long Island City. NY

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### Pesticides, EPA TCL List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
60-57-1	Dieldrin	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
959-98-8	Endosulfan I	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
33213-65-9	Endosulfan II	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
72-20-8	Endrin	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
53494-70-5	Endrin ketone	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
76-44-8	Heptachlor	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.91	1.91	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
72-43-5	Methoxychlor	ND		ug/kg dry	9.55	9.55	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
8001-35-2	Toxaphene	ND		ug/kg dry	96.6	96.6	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 09:20	06/22/2017 21:13	SA
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
877-09-8	Surrogate: Tetrachloro-m-xylene	46.5 %			30-140						
2051-24-3	Surrogate: Decachlorobiphenyl	56.9 %			30-140						

### Pesticides, TCLP RCRA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
57-74-9	Chlordane, total	ND		ug/L	0.222	0.222	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:32	06/23/2017 10:50	SA
72-20-8	Endrin	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:32	06/23/2017 10:50	SA
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:32	06/23/2017 10:50	SA
76-44-8	Heptachlor	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:32	06/23/2017 10:50	SA
1024-57-3	Heptachlor epoxide	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:32	06/23/2017 10:50	SA
72-43-5	Methoxychlor	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:32	06/23/2017 10:50	SA
8001-35-2	Toxaphene	ND		ug/L	1.11	1.11	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/22/2017 08:32	06/23/2017 10:50	SA





## Sample Information

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### Pesticides, TCLP RCRA List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
877-09-8	Surrogate: Tetrachloro-m-xylene	52.9 %			30-120						
2051-24-3	Surrogate: Decachlorobiphenyl	90.7 %			30-120						

### Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/03/2017 11:55	07/03/2017 18:10	SA
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/03/2017 11:55	07/03/2017 18:10	SA
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/03/2017 11:55	07/03/2017 18:10	SA
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/03/2017 11:55	07/03/2017 18:10	SA
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/03/2017 11:55	07/03/2017 18:10	SA
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/03/2017 11:55	07/03/2017 18:10	SA
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	07/03/2017 11:55	07/03/2017 18:10	SA
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0193	1	EPA 8082A Certifications:	07/03/2017 11:55	07/03/2017 18:10	SA
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>					
877-09-8	Surrogate: Tetrachloro-m-xylene	55.5 %			30-140					
2051-24-3	Surrogate: Decachlorobiphenyl	44.0 %			30-140					

### Herbicides, TCLP Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	1	EPA 8151A/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP	06/23/2017 05:23	06/23/2017 19:02	LAB
94-75-7	2,4-D	ND		ug/L	5.00	1	EPA 8151A/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP	06/23/2017 05:23	06/23/2017 19:02	LAB
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>					
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid (E	85.6 %			30-150					

### Copper, TCLP by EPA 6010

Log-in Notes:

Sample Notes:





## Sample Information

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Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	Copper	ND		mg/L	0.00333	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:49	KML

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	9510		mg/kg dry	5.79	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-36-0	Antimony	ND		mg/kg dry	0.579	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-38-2	Arsenic	4.68		mg/kg dry	1.16	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-39-3	Barium	26.4		mg/kg dry	1.16	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-41-7	Beryllium	0.441		mg/kg dry	0.116	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-43-9	Cadmium	ND		mg/kg dry	0.347	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-70-2	Calcium	779	B	mg/kg dry	5.79	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-47-3	Chromium	14.6		mg/kg dry	0.579	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-48-4	Cobalt	12.9		mg/kg dry	0.579	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-50-8	Copper	12.5		mg/kg dry	0.579	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7439-89-6	Iron	19400		mg/kg dry	2.31	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7439-92-1	Lead	12.0		mg/kg dry	0.347	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7439-95-4	Magnesium	2770		mg/kg dry	5.79	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7439-96-5	Manganese	480		mg/kg dry	0.579	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-02-0	Nickel	13.9	B	mg/kg dry	0.579	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-09-7	Potassium	1120	B	mg/kg dry	5.79	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7782-49-2	Selenium	2.61		mg/kg dry	1.16	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-22-4	Silver	ND		mg/kg dry	0.579	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-23-5	Sodium	113	B	mg/kg dry	11.6	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	06/23/2017 11:55	06/24/2017 00:22	KML





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### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-28-0	Thallium	ND		mg/kg dry	1.16	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-62-2	Vanadium	20.8		mg/kg dry	1.16	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML
7440-66-6	Zinc	39.5		mg/kg dry	1.16	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:55	06/24/2017 00:22	KML

### Nickel, TCLP by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-02-0	Nickel	ND		mg/L	0.00556	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:49	KML

### Zinc, TCLP by EPA 6010

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc	0.0722	B	mg/L	0.0111	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:49	KML

### Mercury by 7473

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0347	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	06/23/2017 09:29	06/23/2017 14:37	SY

### Mercury, TCLP

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.000200	1	EPA 7470/1311 Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854	06/23/2017 14:28	06/23/2017 14:28	AA

### Ignitability

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Ignitability	Non-Ignit.		-	1	1	EPA 1030P Certifications: CTDOH,PADEP	06/22/2017 19:58	06/22/2017 20:11	AA

### Total Solids

### Log-in Notes:

### Sample Notes:





## Sample Information

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Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.4		%	0.100	1	SM 2540G Certifications: CTDOH	06/26/2017 10:07	06/26/2017 13:44	TAJ

### Chromium, Hexavalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.579	1	EPA 7196A Certifications: NJDEP,CTDOH,NELAC-NY10854,PADEP	06/21/2017 08:26	06/22/2017 12:57	AD

### Corrosivity

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	pH	8.04	HT-pH	pH units	0.500	1	EPA 9045D Certifications: NELAC-NY10854,CTDOH,PADEP	06/21/2017 11:42	06/21/2017 12:40	TJM
	* Temperature	23.2	HT-pH	pH units		1	EPA 9045D Certifications:	06/21/2017 11:42	06/21/2017 12:40	TJM

### Reactivity-Cyanide

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Cyanide	ND		mg/kg	0.250	1	EPA SW-846 Ch.7.3.3 Certifications: CTDOH,PADEP	06/26/2017 11:32	06/26/2017 14:27	AD

### Reactivity-Sulfide

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Reactivity - Sulfide	ND		mg/kg	15.0	1	EPA SW-846 Ch.7.3.4 Certifications: CTDOH,PADEP	06/26/2017 11:35	06/26/2017 14:29	AD

### TCLP Extraction for METALS EPA 1311

### Log-in Notes:

### Sample Notes: EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1	EPA 1311 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	06/21/2017 18:50	06/22/2017 13:29	TAJ

### TCLP Extraction for SVOCS/PEST/HERB

### Log-in Notes:

### Sample Notes: EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP extr. for SVOA/PEST/HERBS

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1	EPA 1311 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	06/21/2017 19:18	06/22/2017 13:30	TAJ





## Sample Information

**Client Sample ID:** WC-1SB-2 (2-3) Grab

**York Sample ID:** 17F0796-02

**York Project (SDG) No.**

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**Matrix**

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### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	06/23/2017 07:30	06/23/2017 21:04	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	06/23/2017 07:30	06/23/2017 21:04	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	57	110	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	06/23/2017 07:30	06/23/2017 21:04	SS





## Sample Information

**Client Sample ID:** WC-1SB-2 (2-3) Grab

**York Sample ID:** 17F0796-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17F0796

170154 - 11-28 31st Dr. Long Island City, NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
591-78-6	2-Hexanone	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
67-64-1	Acetone	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
107-02-8	Acrolein	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
71-43-2	Benzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
108-86-1	Bromobenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
75-25-2	Bromoform	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
67-66-3	Chloroform	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS
110-82-7	Cyclohexane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications:	06/23/2017 07:30 NELAC-NY10854,NJDEP,PADEP	06/23/2017 21:04	SS





## Sample Information

**Client Sample ID:** WC-1SB-2 (2-3) Grab

**York Sample ID:** 17F0796-02

**York Project (SDG) No.**

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**Matrix**

**Collection Date/Time**

**Date Received**

17F0796

170154 - 11-28 31st Dr. Long Island City. NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
79-20-9	Methyl acetate	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-09-2	<b>Methylene chloride</b>	<b>40</b>	CCV-E	ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
100-42-5	Styrene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
108-88-3	Toluene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS





## Sample Information

**Client Sample ID:** WC-1SB-2 (2-3) Grab

**York Sample ID:** 17F0796-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17F0796

170154 - 11-28 31st Dr. Long Island City. NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
108-05-4	Vinyl acetate	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.8	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.5	17	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	06/23/2017 07:30	06/23/2017 21:04	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	108 %		77-125							
2037-26-5	Surrogate: Toluene-d8	96.8 %		85-120							
460-00-4	Surrogate: p-Bromofluorobenzene	89.0 %		76-130							

### Volatile Organics, TCLP RCRA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 07:30	06/23/2017 21:04	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	108 %		77-125							
460-00-4	Surrogate: p-Bromofluorobenzene	89.0 %		76-130							
2037-26-5	Surrogate: Toluene-d8	96.8 %		85-120							





## Sample Information

**Client Sample ID:** WC-1SB-2 (2-3) Grab

**York Sample ID:** 17F0796-02

York Project (SDG) No.

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17F0796

170154 - 11-28 31st Dr. Long Island City. NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Volatile Organics, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Hexane isomer	14	N	ug/kg dry			1	EPA 8260C	06/23/2017 07:30	06/23/2017 21:04	SS
Certifications:											

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	83.0		%	0.100	1	SM 2540G	06/26/2017 10:07	06/26/2017 13:44	TAJ
Certifications: CTDOH										

### TCLP Extraction for VOA by EPA 1311 ZHE

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW 846-1311 TCLP ZHE for VOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		%	1.00	1	EPA 1311	06/22/2017 18:50	06/23/2017 12:08	TJM
Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP										

## Sample Information

**Client Sample ID:** WC-SB-1 (3-4) Site Grab

**York Sample ID:** 17F0796-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17F0796

170154 - 11-28 31st Dr. Long Island City. NY

Soil

June 20, 2017 3:00 pm

06/20/2017

### Metals, TCLP RCRA

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.		Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic		ND		mg/L	0.004	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:55	KML
7440-39-3	Barium		0.134		mg/L	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:55	KML
7440-43-9	Cadmium		ND		mg/L	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:55	KML
7440-47-3	Chromium		ND		mg/L	0.006	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:55	KML
7439-92-1	Lead		0.004	B	mg/L	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:55	KML
7782-49-2	Selenium		ND		mg/L	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:55	KML





## Sample Information

**Client Sample ID:** WC-SB-1 (3-4) Site Grab

**York Sample ID:** 17F0796-03

**York Project (SDG) No.**

17F0796

**Client Project ID**

170154 - 11-28 31st Dr. Long Island City. NY

**Matrix**

Soil

**Collection Date/Time**

June 20, 2017 3:00 pm

**Date Received**

06/20/2017

### Metals, TCLP RCRA

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-22-4	Silver	ND		mg/L	0.006	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	06/23/2017 11:38	06/24/2017 04:55	KML

### Mercury, TCLP

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.000200	1	EPA 7470/1311 Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854	06/23/2017 14:28	06/23/2017 14:28	AA

### Paint Filter Test

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Paint Filter Test	No Free Liquid		-	0	1	EPA 9095B Certifications: NELAC-NY10854,NJDEP	06/22/2017 19:56	06/22/2017 20:13	AA

### TCLP Extraction for METALS EPA 1311

#### Log-in Notes:

#### Sample Notes: EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1	EPA 1311 Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	06/21/2017 18:50	06/22/2017 13:29	TAJ





## Analytical Batch Summary

**Batch ID:** BF71088      **Preparation Method:** EPA SW846-3060      **Prepared By:** AD

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/21/17
BF71088-BLK1	Blank	06/21/17
BF71088-SRM1	Reference	06/21/17

**Batch ID:** BF71110      **Preparation Method:** Analysis Preparation      **Prepared By:** TJM

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/21/17

**Batch ID:** BF71146      **Preparation Method:** EPA SW 846-1311 TCLP ext. for metals      **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/21/17
17F0796-03	WC-SB-1 (3-4) Site Grab	06/21/17
BF71146-BLK1	Blank	06/21/17

**Batch ID:** BF71148      **Preparation Method:** EPA SW 846-1311 TCLP extr. for SVOCs      **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/21/17
BF71148-BLK1	Blank	06/21/17

**Batch ID:** BF71163      **Preparation Method:** EPA 3510C/1311      **Prepared By:** TMP

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/22/17
BF71163-BLK1	Blank	06/22/17
BF71163-BS1	LCS	06/22/17
BF71163-BSD1	LCS Dup	06/22/17

**Batch ID:** BF71164      **Preparation Method:** EPA 3510C/1311      **Prepared By:** TMP

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/22/17
BF71164-BLK1	Blank	06/22/17
BF71164-BS1	LCS	06/22/17
BF71164-BSD1	LCS Dup	06/22/17

**Batch ID:** BF71170      **Preparation Method:** EPA 3550C      **Prepared By:** TB

YORK Sample ID	Client Sample ID	Preparation Date
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17F0796-01	WC-1 (0-8) Composite	06/22/17
BF71170-BLK1	Blank	06/22/17
BF71170-BS1	LCS	06/22/17

**Batch ID:** BF71222      **Preparation Method:** Analysis Preparation      **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-03	WC-SB-1 (3-4) Site Grab	06/22/17

**Batch ID:** BF71224      **Preparation Method:** Analysis Preparation      **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/22/17

**Batch ID:** BF71228      **Preparation Method:** EPA 3535A/1311      **Prepared By:** CM

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/23/17
BF71228-BLK1	Blank	06/23/17
BF71228-BS1	LCS	06/23/17
BF71228-BSD1	LCS Dup	06/23/17

**Batch ID:** BF71237      **Preparation Method:** EPA 5035A      **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-02	WC-1SB-2 (2-3) Grab	06/23/17
BF71237-BLK1	Blank	06/23/17
BF71237-BLK2	Blank	06/23/17
BF71237-BS1	LCS	06/23/17
BF71237-BSD1	LCS Dup	06/23/17

**Batch ID:** BF71256      **Preparation Method:** EPA 7473 soil      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/23/17
BF71256-BLK1	Blank	06/23/17
BF71256-SRM1	Reference	06/23/17

**Batch ID:** BF71268      **Preparation Method:** EPA 3015A/1311      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/23/17
17F0796-03	WC-SB-1 (3-4) Site Grab	06/23/17
BF71268-BLK1	Blank	06/23/17
BF71268-BLK2	Blank	06/23/17
BF71268-SRM1	Reference	06/23/17





**Batch ID:** BF71271      **Preparation Method:** EPA SW 846-1311 TCLP ZHE for VO      **Prepared By:** TJM

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-02	WC-1SB-2 (2-3) Grab	06/22/17
BF71271-BLK1	Blank	06/23/17

**Batch ID:** BF71276      **Preparation Method:** EPA 3050B      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/23/17
BF71276-BLK1	Blank	06/23/17
BF71276-SRM1	Reference	06/23/17

**Batch ID:** BF71281      **Preparation Method:** EPA 5030B/1311      **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-02	WC-1SB-2 (2-3) Grab	06/23/17
BF71281-BLK1	Blank	06/23/17
BF71281-BS1	LCS	06/23/17
BF71281-BSD1	LCS Dup	06/23/17

**Batch ID:** BF71283      **Preparation Method:** EPA SW846-7470      **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/23/17
17F0796-03	WC-SB-1 (3-4) Site Grab	06/23/17
BF71283-BLK1	Blank	06/23/17
BF71283-BS1	LCS	06/23/17

**Batch ID:** BF71295      **Preparation Method:** EPA 3550C      **Prepared By:** CM

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/24/17
BF71295-BLK1	Blank	06/24/17
BF71295-BS1	LCS	06/24/17

**Batch ID:** BF71331      **Preparation Method:** % Solids Prep      **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/26/17
17F0796-02	WC-1SB-2 (2-3) Grab	06/26/17

**Batch ID:** BF71337      **Preparation Method:** Analysis Preparation      **Prepared By:** AD

YORK Sample ID	Client Sample ID	Preparation Date
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17F0796-01	WC-1 (0-8) Composite	06/26/17
BF71337-BLK1	Blank	06/26/17

<b>Batch ID:</b> BF71338	<b>Preparation Method:</b> Analysis Preparation	<b>Prepared By:</b> AD
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YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	06/26/17
BF71338-BLK1	Blank	06/26/17

<b>Batch ID:</b> BG70030	<b>Preparation Method:</b> EPA 3550C	<b>Prepared By:</b> TB
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YORK Sample ID	Client Sample ID	Preparation Date
17F0796-01	WC-1 (0-8) Composite	07/03/17





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71237 - EPA 5035A

##### Blank (BF71237-BLK1)

Prepared & Analyzed: 06/23/2017

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,1-Dichloropropylene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,3-Trichloropropane	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"
1,2,4-Trimethylbenzene	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	5.0	"
1,2-Dibromoethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
1,4-Dioxane	ND	100	"
2,2-Dichloropropane	ND	5.0	"
2-Butanone	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
2-Hexanone	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
4-Methyl-2-pentanone	ND	5.0	"
Acetone	ND	10	"
Acrolein	ND	10	"
Acrylonitrile	ND	5.0	"
Benzene	ND	5.0	"
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
Carbon disulfide	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
cis-1,2-Dichloroethylene	ND	5.0	"
cis-1,3-Dichloropropylene	ND	5.0	"
Cyclohexane	ND	5.0	"
Dibromochloromethane	ND	5.0	"
Dibromomethane	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71237 - EPA 5035A

##### Blank (BF71237-BLK1)

Prepared & Analyzed: 06/23/2017

Ethyl Benzene	ND	5.0	ug/kg wet
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
Methyl acetate	ND	5.0	"
Methyl tert-butyl ether (MTBE)	ND	5.0	"
Methylcyclohexane	ND	5.0	"
Methylene chloride	ND	10	"
n-Butylbenzene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-Butyl alcohol (TBA)	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
Trichloroethylene	ND	5.0	"
Trichlorofluoromethane	ND	5.0	"
Vinyl acetate	ND	5.0	"
Vinyl Chloride	ND	5.0	"
Xylenes, Total	ND	15	"

Surrogate: 1,2-Dichloroethane-d4	54.7	ug/L	50.0	109	77-125
Surrogate: Toluene-d8	49.3	"	50.0	98.5	85-120
Surrogate: p-Bromofluorobenzene	43.5	"	50.0	87.1	76-130





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71237 - EPA 5035A

#### Blank (BF71237-BLK2)

Prepared & Analyzed: 06/23/2017

1,1,1,2-Tetrachloroethane	ND	500	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	500	"
1,1,2,2-Tetrachloroethane	ND	500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	"
1,1,2-Trichloroethane	ND	500	"
1,1-Dichloroethane	ND	500	"
1,1-Dichloroethylene	ND	500	"
1,1-Dichloropropylene	ND	500	"
1,2,3-Trichlorobenzene	ND	500	"
1,2,3-Trichloropropane	ND	500	"
1,2,4-Trichlorobenzene	ND	500	"
1,2,4-Trimethylbenzene	ND	500	"
1,2-Dibromo-3-chloropropane	ND	500	"
1,2-Dibromoethane	ND	500	"
1,2-Dichlorobenzene	ND	500	"
1,2-Dichloroethane	ND	500	"
1,2-Dichloropropane	ND	500	"
1,3,5-Trimethylbenzene	ND	500	"
1,3-Dichlorobenzene	ND	500	"
1,3-Dichloropropane	ND	500	"
1,4-Dichlorobenzene	ND	500	"
1,4-Dioxane	ND	10000	"
2,2-Dichloropropane	ND	500	"
2-Butanone	ND	500	"
2-Chlorotoluene	ND	500	"
2-Hexanone	ND	500	"
4-Chlorotoluene	ND	500	"
4-Methyl-2-pentanone	ND	500	"
Acetone	ND	1000	"
Acrolein	ND	1000	"
Acrylonitrile	ND	500	"
Benzene	ND	500	"
Bromobenzene	ND	500	"
Bromochloromethane	ND	500	"
Bromodichloromethane	ND	500	"
Bromoform	ND	500	"
Bromomethane	ND	500	"
Carbon disulfide	ND	500	"
Carbon tetrachloride	ND	500	"
Chlorobenzene	ND	500	"
Chloroethane	ND	500	"
Chloroform	ND	500	"
Chloromethane	ND	500	"
cis-1,2-Dichloroethylene	ND	500	"
cis-1,3-Dichloropropylene	ND	500	"
Cyclohexane	ND	500	"
Dibromochloromethane	ND	500	"
Dibromomethane	ND	500	"
Dichlorodifluoromethane	ND	500	"
Ethyl Benzene	ND	500	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71237 - EPA 5035A

##### Blank (BF71237-BLK2)

Prepared & Analyzed: 06/23/2017

Hexachlorobutadiene	ND	500	ug/kg wet
Isopropylbenzene	ND	500	"
Methyl acetate	ND	500	"
Methyl tert-butyl ether (MTBE)	ND	500	"
Methylcyclohexane	ND	500	"
Methylene chloride	ND	1000	"
n-Butylbenzene	ND	500	"
n-Propylbenzene	ND	500	"
o-Xylene	ND	500	"
p- & m- Xylenes	ND	1000	"
p-Isopropyltoluene	ND	500	"
sec-Butylbenzene	ND	500	"
Styrene	ND	500	"
tert-Butyl alcohol (TBA)	ND	500	"
tert-Butylbenzene	ND	500	"
Tetrachloroethylene	ND	500	"
Toluene	ND	500	"
trans-1,2-Dichloroethylene	ND	500	"
trans-1,3-Dichloropropylene	ND	500	"
Trichloroethylene	ND	500	"
Trichlorofluoromethane	ND	500	"
Vinyl acetate	ND	500	"
Vinyl Chloride	ND	500	"
Xylenes, Total	ND	1500	"

Surrogate: 1,2-Dichloroethane-d4	52.7	ug/L	50.0	105	77-125
Surrogate: Toluene-d8	48.0	"	50.0	96.0	85-120
Surrogate: p-Bromofluorobenzene	44.2	"	50.0	88.4	76-130





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BF71237 - EPA 5035A</b>											
<b>LCS (BF71237-BS1)</b>						Prepared & Analyzed: 06/23/2017					
1,1,1,2-Tetrachloroethane	52		ug/L	50.0		105	75-129				
1,1,1-Trichloroethane	57		"	50.0		115	71-137				
1,1,2,2-Tetrachloroethane	52		"	50.0		104	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	69		"	50.0		137	58-146				
1,1,2-Trichloroethane	53		"	50.0		105	83-123				
1,1-Dichloroethane	58		"	50.0		115	75-130				
1,1-Dichloroethylene	65		"	50.0		131	64-137				
1,1-Dichloropropylene	57		"	50.0		113	77-127				
1,2,3-Trichlorobenzene	48		"	50.0		95.1	81-140				
1,2,3-Trichloropropane	51		"	50.0		102	81-126				
1,2,4-Trichlorobenzene	50		"	50.0		99.4	80-141				
1,2,4-Trimethylbenzene	50		"	50.0		101	84-125				
1,2-Dibromo-3-chloropropane	56		"	50.0		111	74-142				
1,2-Dibromoethane	52		"	50.0		104	86-123				
1,2-Dichlorobenzene	50		"	50.0		100	85-122				
1,2-Dichloroethane	59		"	50.0		118	71-133				
1,2-Dichloropropane	51		"	50.0		101	81-122				
1,3,5-Trimethylbenzene	50		"	50.0		99.8	82-126				
1,3-Dichlorobenzene	49		"	50.0		98.1	84-124				
1,3-Dichloropropane	52		"	50.0		104	83-123				
1,4-Dichlorobenzene	51		"	50.0		102	84-124				
1,4-Dioxane	1100		"	1000		106	10-228				
2,2-Dichloropropane	56		"	50.0		112	67-136				
2-Butanone	62		"	50.0		124	58-147				
2-Chlorotoluene	51		"	50.0		102	78-127				
2-Hexanone	53		"	50.0		107	70-139				
4-Chlorotoluene	52		"	50.0		104	79-125				
4-Methyl-2-pentanone	55		"	50.0		110	72-132				
Acetone	72		"	50.0		144	36-155				
Acrolein	59		"	50.0		118	10-238				
Acrylonitrile	61		"	50.0		122	66-141				
Benzene	57		"	50.0		115	77-127				
Bromobenzene	54		"	50.0		107	77-129				
Bromochloromethane	58		"	50.0		116	74-129				
Bromodichloromethane	55		"	50.0		110	81-124				
Bromoform	50		"	50.0		99.8	80-136				
Bromomethane	58		"	50.0		115	32-177				
Carbon disulfide	73		"	50.0		145	10-136	High Bias			
Carbon tetrachloride	57		"	50.0		114	66-143				
Chlorobenzene	52		"	50.0		105	86-120				
Chloroethane	64		"	50.0		128	51-142				
Chloroform	59		"	50.0		117	76-131				
Chloromethane	58		"	50.0		115	49-132				
cis-1,2-Dichloroethylene	56		"	50.0		111	74-132				
cis-1,3-Dichloropropylene	53		"	50.0		106	81-129				
Cyclohexane	56		"	50.0		112	70-130				
Dibromochloromethane	54		"	50.0		107	10-200				
Dibromomethane	53		"	50.0		106	83-124				
Dichlorodifluoromethane	53		"	50.0		107	28-158				
Ethyl Benzene	53		"	50.0		105	84-125				
Hexachlorobutadiene	45		"	50.0		91.0	83-133				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71237 - EPA 5035A

##### LCS (BF71237-BS1)

Prepared & Analyzed: 06/23/2017

Isopropylbenzene	51		ug/L	50.0		102	81-127				
Methyl acetate	73		"	50.0		147	41-143	High Bias			
Methyl tert-butyl ether (MTBE)	62		"	50.0		123	74-131				
Methylcyclohexane	52		"	50.0		103	70-130				
Methylene chloride	68		"	50.0		136	57-141				
n-Butylbenzene	51		"	50.0		103	80-130				
n-Propylbenzene	51		"	50.0		101	74-136				
o-Xylene	53		"	50.0		105	83-123				
p- & m- Xylenes	100		"	100		104	82-128				
p-Isopropyltoluene	50		"	50.0		99.2	85-125				
sec-Butylbenzene	51		"	50.0		101	83-125				
Styrene	50		"	50.0		101	86-126				
tert-Butyl alcohol (TBA)	63		"	50.0		127	70-130				
tert-Butylbenzene	51		"	50.0		102	80-127				
Tetrachloroethylene	49		"	50.0		97.8	80-129				
Toluene	49		"	50.0		97.6	85-121				
trans-1,2-Dichloroethylene	58		"	50.0		115	72-132				
trans-1,3-Dichloropropylene	53		"	50.0		107	78-132				
Trichloroethylene	51		"	50.0		102	84-123				
Trichlorofluoromethane	55		"	50.0		110	62-140				
Vinyl acetate	58		"	50.0		115	67-136				
Vinyl Chloride	65		"	50.0		130	52-130				
Surrogate: 1,2-Dichloroethane-d4	50.1		"	50.0		100	77-125				
Surrogate: Toluene-d8	46.2		"	50.0		92.4	85-120				
Surrogate: p-Bromofluorobenzene	47.5		"	50.0		95.0	76-130				

##### LCS Dup (BF71237-BSD1)

Prepared & Analyzed: 06/23/2017

1,1,1,2-Tetrachloroethane	53		ug/L	50.0		106	75-129		1.22	30	
1,1,1-Trichloroethane	56		"	50.0		112	71-137		2.36	30	
1,1,2,2-Tetrachloroethane	52		"	50.0		104	79-129		0.134	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	59		"	50.0		118	58-146		14.9	30	
1,1,2-Trichloroethane	53		"	50.0		107	83-123		1.15	30	
1,1-Dichloroethane	55		"	50.0		110	75-130		4.44	30	
1,1-Dichloroethylene	57		"	50.0		114	64-137		13.6	30	
1,1-Dichloropropylene	56		"	50.0		111	77-127		1.77	30	
1,2,3-Trichlorobenzene	48		"	50.0		95.9	81-140		0.880	30	
1,2,3-Trichloropropane	52		"	50.0		103	81-126		1.25	30	
1,2,4-Trichlorobenzene	49		"	50.0		98.9	80-141		0.525	30	
1,2,4-Trimethylbenzene	49		"	50.0		99.0	84-125		1.88	30	
1,2-Dibromo-3-chloropropane	56		"	50.0		112	74-142		0.644	30	
1,2-Dibromoethane	52		"	50.0		105	86-123		0.960	30	
1,2-Dichlorobenzene	50		"	50.0		99.6	85-122		0.361	30	
1,2-Dichloroethane	56		"	50.0		111	71-133		5.72	30	
1,2-Dichloropropane	51		"	50.0		101	81-122		0.336	30	
1,3,5-Trimethylbenzene	49		"	50.0		97.0	82-126		2.84	30	
1,3-Dichlorobenzene	49		"	50.0		98.2	84-124		0.0611	30	
1,3-Dichloropropane	51		"	50.0		102	83-123		2.38	30	
1,4-Dichlorobenzene	50		"	50.0		99.2	84-124		2.65	30	
1,4-Dioxane	1000		"	1000		102	10-228		3.66	30	
2,2-Dichloropropane	55		"	50.0		109	67-136		2.80	30	
2-Butanone	55		"	50.0		110	58-147		12.2	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BF71237 - EPA 5035A</b>											
<b>LCS Dup (BF71237-BSD1)</b>						Prepared & Analyzed: 06/23/2017					
2-Chlorotoluene	50		ug/L	50.0		100	78-127		1.54	30	
2-Hexanone	54		"	50.0		108	70-139		1.32	30	
4-Chlorotoluene	51		"	50.0		102	79-125		2.20	30	
4-Methyl-2-pentanone	55		"	50.0		110	72-132		0.0364	30	
Acetone	59		"	50.0		118	36-155		19.5	30	
Acrolein	46		"	50.0		92.0	10-238		24.4	30	
Acrylonitrile	57		"	50.0		113	66-141		7.07	30	
Benzene	56		"	50.0		113	77-127		1.85	30	
Bromobenzene	53		"	50.0		106	77-129		1.75	30	
Bromochloromethane	57		"	50.0		113	74-129		1.87	30	
Bromodichloromethane	55		"	50.0		110	81-124		0.0911	30	
Bromoform	50		"	50.0		99.4	80-136		0.381	30	
Bromomethane	50		"	50.0		99.5	32-177		14.8	30	
Carbon disulfide	58		"	50.0		117	10-136		21.7	30	
Carbon tetrachloride	55		"	50.0		111	66-143		2.96	30	
Chlorobenzene	52		"	50.0		104	86-120		1.11	30	
Chloroethane	56		"	50.0		113	51-142		12.6	30	
Chloroform	57		"	50.0		113	76-131		3.31	30	
Chloromethane	57		"	50.0		114	49-132		1.52	30	
cis-1,2-Dichloroethylene	52		"	50.0		105	74-132		5.63	30	
cis-1,3-Dichloropropylene	52		"	50.0		104	81-129		1.73	30	
Cyclohexane	53		"	50.0		107	70-130		4.45	30	
Dibromochloromethane	54		"	50.0		108	10-200		0.818	30	
Dibromomethane	52		"	50.0		103	83-124		2.03	30	
Dichlorodifluoromethane	50		"	50.0		101	28-158		5.69	30	
Ethyl Benzene	52		"	50.0		104	84-125		0.993	30	
Hexachlorobutadiene	47		"	50.0		93.8	83-133		3.12	30	
Isopropylbenzene	50		"	50.0		100	81-127		1.96	30	
Methyl acetate	67		"	50.0		135	41-143		8.51	30	
Methyl tert-butyl ether (MTBE)	57		"	50.0		114	74-131		7.88	30	
Methylcyclohexane	53		"	50.0		105	70-130		2.11	30	
Methylene chloride	63		"	50.0		126	57-141		7.67	30	
n-Butylbenzene	51		"	50.0		102	80-130		1.04	30	
n-Propylbenzene	50		"	50.0		99.1	74-136		1.92	30	
o-Xylene	53		"	50.0		105	83-123		0.190	30	
p- & m- Xylenes	100		"	100		102	82-128		1.62	30	
p-Isopropyltoluene	50		"	50.0		99.1	85-125		0.182	30	
sec-Butylbenzene	50		"	50.0		101	83-125		0.317	30	
Styrene	51		"	50.0		101	86-126		0.496	30	
tert-Butyl alcohol (TBA)	62		"	50.0		124	70-130		1.88	30	
tert-Butylbenzene	50		"	50.0		100	80-127		1.60	30	
Tetrachloroethylene	50		"	50.0		100	80-129		2.64	30	
Toluene	49		"	50.0		98.2	85-121		0.654	30	
trans-1,2-Dichloroethylene	55		"	50.0		110	72-132		4.88	30	
trans-1,3-Dichloropropylene	52		"	50.0		105	78-132		1.66	30	
Trichloroethylene	52		"	50.0		104	84-123		1.11	30	
Trichlorofluoromethane	54		"	50.0		107	62-140		2.47	30	
Vinyl acetate	51		"	50.0		103	67-136		11.2	30	
Vinyl Chloride	60		"	50.0		120	52-130		8.46	30	
Surrogate: 1,2-Dichloroethane-d4	50.2		"	50.0		100	77-125				
Surrogate: Toluene-d8	46.7		"	50.0		93.3	85-120				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71237 - EPA 5035A

##### LCS Dup (BF71237-BSD1)

Prepared & Analyzed: 06/23/2017

Surrogate: <i>p</i> -Bromofluorobenzene	47.0		ug/L	50.0		93.9	76-130			
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#### Batch BF71281 - EPA 5030B/1311

##### Blank (BF71281-BLK1)

Prepared & Analyzed: 06/23/2017

1,1-Dichloroethylene	ND	5.0	ug/L							
1,2-Dichloroethane	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
2-Butanone	ND	5.0	"							
Benzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroform	ND	5.0	"							
Tetrachloroethylene	ND	5.0	"							
Trichloroethylene	ND	5.0	"							
Vinyl Chloride	ND	5.0	"							

Surrogate: 1,2-Dichloroethane- <i>d</i> 4	54.7		"	50.0		109	77-125			
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Surrogate: <i>p</i> -Bromofluorobenzene	43.5		"	50.0		87.1	76-130			
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Surrogate: Toluene- <i>d</i> 8	49.3		"	50.0		98.5	85-120			
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##### LCS (BF71281-BS1)

Prepared & Analyzed: 06/23/2017

1,1-Dichloroethylene	65		ug/L	50.0		131	68-134			
1,2-Dichloroethane	59		"	50.0		118	69-133			
1,4-Dichlorobenzene	51		"	50.0		102	82-124			
2-Butanone	62		"	50.0		124	44-169			
Benzene	57		"	50.0		115	72-134			
Carbon tetrachloride	57		"	50.0		114	62-145			
Chlorobenzene	52		"	50.0		105	85-119			
Chloroform	59		"	50.0		117	74-131			
Tetrachloroethylene	49		"	50.0		97.8	78-133			
Trichloroethylene	51		"	50.0		102	81-125			
Vinyl Chloride	65		"	50.0		130	42-136			

Surrogate: 1,2-Dichloroethane- <i>d</i> 4	50.1		"	50.0		100	77-125			
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Surrogate: <i>p</i> -Bromofluorobenzene	47.5		"	50.0		95.0	76-130			
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Surrogate: Toluene- <i>d</i> 8	46.2		"	50.0		92.4	85-120			
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## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71281 - EPA 5030B/1311

##### LCS Dup (BF71281-BSD1)

Prepared & Analyzed: 06/23/2017

1,1-Dichloroethylene	57		ug/L	50.0		114	68-134		13.6	30	
1,2-Dichloroethane	56		"	50.0		111	69-133		5.72	30	
1,4-Dichlorobenzene	50		"	50.0		99.2	82-124		2.65	30	
2-Butanone	55		"	50.0		110	44-169		12.2	30	
Benzene	56		"	50.0		113	72-134		1.85	30	
Carbon tetrachloride	55		"	50.0		111	62-145		2.96	30	
Chlorobenzene	52		"	50.0		104	85-119		1.11	30	
Chloroform	57		"	50.0		113	74-131		3.31	30	
Tetrachloroethylene	50		"	50.0		100	78-133		2.64	30	
Trichloroethylene	52		"	50.0		104	81-125		1.11	30	
Vinyl Chloride	60		"	50.0		120	42-136		8.46	30	
Surrogate: 1,2-Dichloroethane-d4	50.2		"	50.0		100	77-125				
Surrogate: p-Bromofluorobenzene	47.0		"	50.0		93.9	76-130				
Surrogate: Toluene-d8	46.7		"	50.0		93.3	85-120				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71163 - EPA 3510C/1311

##### Blank (BF71163-BLK1)

Prepared: 06/22/2017 Analyzed: 06/23/2017

1,4-Dichlorobenzene	ND	10.0	ug/L								
2,4,5-Trichlorophenol	ND	10.0	"								
2,4,6-Trichlorophenol	ND	10.0	"								
2,4-Dinitrotoluene	ND	10.0	"								
2-Methylphenol	ND	10.0	"								
3- & 4-Methylphenols	ND	20.0	"								
Cresols, total	ND	30.0	"								
Hexachlorobenzene	ND	10.0	"								
Hexachlorobutadiene	ND	10.0	"								
Hexachloroethane	ND	10.0	"								
Nitrobenzene	ND	10.0	"								
Pentachlorophenol	ND	10.0	"								
Pyridine	ND	10.0	"								
<i>Surrogate: 2-Fluorophenol</i>	98.3		"	154		64.0	10-65				
<i>Surrogate: Phenol-d5</i>	72.2		"	152		47.5	10-49				
<i>Surrogate: Nitrobenzene-d5</i>	89.5		"	107		83.8	10-96				
<i>Surrogate: 2-Fluorobiphenyl</i>	72.3		"	102		71.1	10-93				
<i>Surrogate: 2,4,6-Tribromophenol</i>	151		"	154		97.9	10-128				
<i>Surrogate: Terphenyl-d14</i>	73.1		"	100		72.8	10-100				

##### LCS (BF71163-BS1)

Prepared: 06/22/2017 Analyzed: 06/23/2017

1,4-Dichlorobenzene	29.4	10.0	ug/L	50.0		58.7	42-82				
2,4,5-Trichlorophenol	37.1	10.0	"	50.0		74.3	36-112				
2,4,6-Trichlorophenol	35.5	10.0	"	50.0		70.9	41-107				
2,4-Dinitrotoluene	42.9	10.0	"	50.0		85.8	41-114				
2-Methylphenol	31.7	10.0	"	50.0		63.4	10-90				
3- & 4-Methylphenols	24.4	20.0	"	50.0		48.8	10-101				
Cresols, total	56.1	30.0	"	100		56.1	30-130				
Hexachlorobenzene	36.6	10.0	"	50.0		73.3	27-120				
Hexachlorobutadiene	32.8	10.0	"	50.0		65.6	25-106				
Hexachloroethane	27.7	10.0	"	50.0		55.3	33-84				
Nitrobenzene	31.4	10.0	"	50.0		62.9	32-113				
Pentachlorophenol	35.3	10.0	"	50.0		70.5	19-127				
Pyridine	20.1	10.0	"	50.0		40.2	10-46				
<i>Surrogate: 2-Fluorophenol</i>	87.7		"	154		57.1	10-65				
<i>Surrogate: Phenol-d5</i>	67.1		"	152		44.1	10-49				
<i>Surrogate: Nitrobenzene-d5</i>	80.2		"	107		75.1	10-96				
<i>Surrogate: 2-Fluorobiphenyl</i>	70.9		"	102		69.8	10-93				
<i>Surrogate: 2,4,6-Tribromophenol</i>	157		"	154		101	10-128				
<i>Surrogate: Terphenyl-d14</i>	71.8		"	100		71.5	10-100				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71163 - EPA 3510C/1311

##### LCS Dup (BF71163-BS1)

Prepared: 06/22/2017 Analyzed: 06/23/2017

1,4-Dichlorobenzene	29.1	10.0	ug/L	50.0		58.2	42-82		0.821	20	
2,4,5-Trichlorophenol	34.2	10.0	"	50.0		68.4	36-112		8.30	20	
2,4,6-Trichlorophenol	32.5	10.0	"	50.0		64.9	41-107		8.83	20	
2,4-Dinitrotoluene	38.1	10.0	"	50.0		76.2	41-114		12.0	20	
2-Methylphenol	32.7	10.0	"	50.0		65.3	10-90		2.98	20	
3- & 4-Methylphenols	25.0	20.0	"	50.0		49.9	10-101		2.19	20	
Cresols, total	57.6	30.0	"	100		57.6	30-130		2.64	20	
Hexachlorobenzene	33.4	10.0	"	50.0		66.7	27-120		9.37	20	
Hexachlorobutadiene	29.8	10.0	"	50.0		59.6	25-106		9.46	20	
Hexachloroethane	26.9	10.0	"	50.0		53.8	33-84		2.86	20	
Nitrobenzene	30.1	10.0	"	50.0		60.1	32-113		4.49	20	
Pentachlorophenol	30.2	10.0	"	50.0		60.3	19-127		15.6	20	
Pyridine	18.4	10.0	"	50.0		36.7	10-46		9.05	20	
Surrogate: 2-Fluorophenol	84.5		"	154		55.0	10-65				
Surrogate: Phenol-d5	62.8		"	152		41.3	10-49				
Surrogate: Nitrobenzene-d5	75.2		"	107		70.4	10-96				
Surrogate: 2-Fluorobiphenyl	66.4		"	102		65.3	10-93				
Surrogate: 2,4,6-Tribromophenol	144		"	154		93.4	10-128				
Surrogate: Terphenyl-d14	67.6		"	100		67.3	10-100				

#### Batch BF71295 - EPA 3550C

##### Blank (BF71295-BLK1)

Prepared: 06/24/2017 Analyzed: 06/25/2017

1,1-Biphenyl	ND	41.7	ug/kg wet
1,2,4,5-Tetrachlorobenzene	ND	83.3	"
1,2,4-Trichlorobenzene	ND	41.7	"
1,2-Dichlorobenzene	ND	41.7	"
1,2-Diphenylhydrazine (as Azobenzene)	ND	41.7	"
1,3-Dichlorobenzene	ND	41.7	"
1,4-Dichlorobenzene	ND	41.7	"
2,3,4,6-Tetrachlorophenol	ND	83.3	"
2,4,5-Trichlorophenol	ND	41.7	"
2,4,6-Trichlorophenol	ND	41.7	"
2,4-Dichlorophenol	ND	41.7	"
2,4-Dimethylphenol	ND	41.7	"
2,4-Dinitrophenol	ND	83.3	"
2,4-Dinitrotoluene	ND	41.7	"
2,6-Dinitrotoluene	ND	41.7	"
2-Chloronaphthalene	ND	41.7	"
2-Chlorophenol	ND	41.7	"
2-Methylnaphthalene	ND	41.7	"
2-Methylphenol	ND	41.7	"
2-Nitroaniline	ND	83.3	"
2-Nitrophenol	ND	41.7	"
3- & 4-Methylphenols	ND	41.7	"
3,3-Dichlorobenzidine	ND	41.7	"
3-Nitroaniline	ND	83.3	"
4,6-Dinitro-2-methylphenol	ND	83.3	"
4-Bromophenyl phenyl ether	ND	41.7	"
4-Chloro-3-methylphenol	ND	41.7	"
4-Chloroaniline	ND	41.7	"





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71295 - EPA 3550C

##### Blank (BF71295-BLK1)

Prepared: 06/24/2017 Analyzed: 06/25/2017

4-Chlorophenyl phenyl ether	ND	41.7	ug/kg wet								
4-Nitroaniline	ND	83.3	"								
4-Nitrophenol	ND	83.3	"								
Acenaphthene	ND	41.7	"								
Acenaphthylene	ND	41.7	"								
Acetophenone	ND	41.7	"								
Aniline	ND	167	"								
Anthracene	ND	41.7	"								
Atrazine	ND	41.7	"								
Benzaldehyde	ND	41.7	"								
Benzidine	ND	167	"								
Benzo(a)anthracene	ND	41.7	"								
Benzo(a)pyrene	ND	41.7	"								
Benzo(b)fluoranthene	ND	41.7	"								
Benzo(g,h,i)perylene	ND	41.7	"								
Benzo(k)fluoranthene	ND	41.7	"								
Benzoic acid	ND	41.7	"								
Benzyl alcohol	ND	41.7	"								
Benzyl butyl phthalate	ND	41.7	"								
Bis(2-chloroethoxy)methane	ND	41.7	"								
Bis(2-chloroethyl)ether	ND	41.7	"								
Bis(2-chloroisopropyl)ether	ND	41.7	"								
Bis(2-ethylhexyl)phthalate	ND	41.7	"								
Caprolactam	ND	83.3	"								
Carbazole	ND	41.7	"								
Chrysene	ND	41.7	"								
Dibenzo(a,h)anthracene	ND	41.7	"								
Dibenzofuran	ND	41.7	"								
Diethyl phthalate	ND	41.7	"								
Dimethyl phthalate	ND	41.7	"								
Di-n-butyl phthalate	ND	41.7	"								
Di-n-octyl phthalate	ND	41.7	"								
Fluoranthene	ND	41.7	"								
Fluorene	ND	41.7	"								
Hexachlorobenzene	ND	41.7	"								
Hexachlorobutadiene	ND	41.7	"								
Hexachlorocyclopentadiene	ND	41.7	"								
Hexachloroethane	ND	41.7	"								
Indeno(1,2,3-cd)pyrene	ND	41.7	"								
Isophorone	ND	41.7	"								
Naphthalene	ND	41.7	"								
Nitrobenzene	ND	41.7	"								
N-Nitrosodimethylamine	ND	41.7	"								
N-nitroso-di-n-propylamine	ND	41.7	"								
N-Nitrosodiphenylamine	ND	41.7	"								
Pentachlorophenol	ND	41.7	"								
Phenanthrene	ND	41.7	"								
Phenol	ND	41.7	"								
Pyrene	ND	41.7	"								
Surrogate: 2-Fluorophenol	2140		"	2650		81.0	20-108				
Surrogate: Phenol-d5	1920		"	2710		70.9	23-114				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BF71295 - EPA 3550C</b>											
<b>Blank (BF71295-BLK1)</b>						Prepared: 06/24/2017 Analyzed: 06/25/2017					
Surrogate: Nitrobenzene-d5	1440		ug/kg wet	1740		82.9	22-108				
Surrogate: 2-Fluorobiphenyl	1610		"	1780		90.5	21-113				
Surrogate: 2,4,6-Tribromophenol	3020		"	2510		120	19-110				
Surrogate: Terphenyl-d14	1310		"	1740		75.1	24-116				
<b>LCS (BF71295-BS1)</b>						Prepared: 06/24/2017 Analyzed: 06/25/2017					
1,1-Biphenyl	678	41.7	ug/kg wet	833		81.4	22-103				
1,2,4,5-Tetrachlorobenzene	516	83.3	"	833		61.9	10-144				
1,2,4-Trichlorobenzene	624	41.7	"	833		74.9	23-130				
1,2-Dichlorobenzene	654	41.7	"	833		78.5	26-113				
1,2-Diphenylhydrazine (as Azobenzene)	576	41.7	"	833		69.1	10-140				
1,3-Dichlorobenzene	620	41.7	"	833		74.4	32-113				
1,4-Dichlorobenzene	548	41.7	"	833		65.8	28-111				
2,3,4,6-Tetrachlorophenol	1630	83.3	"	833		196	30-130	High Bias			
2,4,5-Trichlorophenol	566	41.7	"	833		67.9	14-138				
2,4,6-Trichlorophenol	643	41.7	"	833		77.2	27-122				
2,4-Dichlorophenol	738	41.7	"	833		88.5	23-133				
2,4-Dimethylphenol	736	41.7	"	833		88.3	15-131				
2,4-Dinitrophenol	868	83.3	"	833		104	10-149				
2,4-Dinitrotoluene	714	41.7	"	833		85.7	30-123				
2,6-Dinitrotoluene	654	41.7	"	833		78.4	30-125				
2-Chloronaphthalene	581	41.7	"	833		69.8	22-115				
2-Chlorophenol	674	41.7	"	833		80.9	25-121				
2-Methylnaphthalene	675	41.7	"	833		81.0	16-127				
2-Methylphenol	573	41.7	"	833		68.8	10-146				
2-Nitroaniline	695	83.3	"	833		83.4	24-126				
2-Nitrophenol	773	41.7	"	833		92.8	17-129				
3- & 4-Methylphenols	588	41.7	"	833		70.5	20-109				
3,3-Dichlorobenzidine	498	41.7	"	833		59.8	10-147				
3-Nitroaniline	529	83.3	"	833		63.5	23-123				
4,6-Dinitro-2-methylphenol	691	83.3	"	833		83.0	10-149				
4-Bromophenyl phenyl ether	690	41.7	"	833		82.8	30-138				
4-Chloro-3-methylphenol	726	41.7	"	833		87.2	16-138				
4-Chloroaniline	480	41.7	"	833		57.6	10-117				
4-Chlorophenyl phenyl ether	539	41.7	"	833		64.6	18-132				
4-Nitroaniline	586	83.3	"	833		70.3	14-125				
4-Nitrophenol	601	83.3	"	833		72.1	10-136				
Acenaphthene	671	41.7	"	833		80.6	17-124				
Acenaphthylene	601	41.7	"	833		72.1	16-124				
Acetophenone	779	41.7	"	833		93.5	28-105				
Aniline	483	167	"	833		58.0	10-111				
Anthracene	648	41.7	"	833		77.8	24-124				
Atrazine	804	41.7	"	833		96.5	22-120				
Benzaldehyde	806	41.7	"	833		96.7	21-100				
Benzo(a)anthracene	646	41.7	"	833		77.5	25-134				
Benzo(a)pyrene	689	41.7	"	833		82.7	29-144				
Benzo(b)fluoranthene	664	41.7	"	833		79.7	20-151				
Benzo(g,h,i)perylene	718	41.7	"	833		86.2	10-153				
Benzo(k)fluoranthene	646	41.7	"	833		77.5	10-148				
Benzoic acid	912	41.7	"	833		109	10-116				
Benzyl alcohol	639	41.7	"	833		76.6	17-128				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71295 - EPA 3550C

#### LCS (BF71295-BS1)

Prepared: 06/24/2017 Analyzed: 06/25/2017

Benzyl butyl phthalate	602	41.7	ug/kg wet	833		72.2	10-132				
Bis(2-chloroethoxy)methane	704	41.7	"	833		84.4	10-129				
Bis(2-chloroethyl)ether	650	41.7	"	833		78.0	14-125				
Bis(2-chloroisopropyl)ether	627	41.7	"	833		75.3	14-122				
Bis(2-ethylhexyl)phthalate	656	41.7	"	833		78.7	10-141				
Caprolactam	760	83.3	"	833		91.2	10-123				
Carbazole	634	41.7	"	833		76.1	31-120				
Chrysene	567	41.7	"	833		68.1	24-116				
Dibenzo(a,h)anthracene	717	41.7	"	833		86.1	17-147				
Dibenzofuran	629	41.7	"	833		75.4	23-123				
Diethyl phthalate	658	41.7	"	833		79.0	23-122				
Dimethyl phthalate	597	41.7	"	833		71.6	28-127				
Di-n-butyl phthalate	622	41.7	"	833		74.6	19-123				
Di-n-octyl phthalate	663	41.7	"	833		79.6	10-132				
Fluoranthene	615	41.7	"	833		73.8	36-125				
Fluorene	591	41.7	"	833		70.9	16-130				
Hexachlorobenzene	655	41.7	"	833		78.6	10-129				
Hexachlorobutadiene	628	41.7	"	833		75.4	22-153				
Hexachlorocyclopentadiene	319	41.7	"	833		38.2	10-134				
Hexachloroethane	520	41.7	"	833		62.4	20-112				
Indeno(1,2,3-cd)pyrene	668	41.7	"	833		80.2	10-155				
Isophorone	673	41.7	"	833		80.7	14-131				
Naphthalene	587	41.7	"	833		70.5	20-121				
Nitrobenzene	628	41.7	"	833		75.4	20-121				
N-Nitrosodimethylamine	595	41.7	"	833		71.4	10-124				
N-nitroso-di-n-propylamine	596	41.7	"	833		71.5	21-119				
N-Nitrosodiphenylamine	733	41.7	"	833		87.9	10-163				
Pentachlorophenol	720	41.7	"	833		86.4	10-143				
Phenanthrene	663	41.7	"	833		79.5	24-123				
Phenol	591	41.7	"	833		70.9	15-123				
Pyrene	625	41.7	"	833		75.0	24-132				
Surrogate: 2-Fluorophenol	2030		"	2650		76.6	20-108				
Surrogate: Phenol-d5	1780		"	2710		65.6	23-114				
Surrogate: Nitrobenzene-d5	1500		"	1740		86.3	22-108				
Surrogate: 2-Fluorobiphenyl	1290		"	1780		72.5	21-113				
Surrogate: 2,4,6-Tribromophenol	2730		"	2510		109	19-110				
Surrogate: Terphenyl-d14	1250		"	1740		71.6	24-116				





## Organochlorine Pesticides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71164 - EPA 3510C/1311

##### Blank (BF71164-BLK1)

Prepared & Analyzed: 06/22/2017

Chlordane, total	ND	0.400	ug/L								
Endrin	ND	0.0800	"								
gamma-BHC (Lindane)	ND	0.0800	"								
Heptachlor	ND	0.0800	"								
Heptachlor epoxide	ND	0.0800	"								
Methoxychlor	ND	0.0800	"								
Toxaphene	ND	2.00	"								
<i>Surrogate: Tetrachloro-m-xylene</i>	2.86		"	4.00		71.5	30-120				
<i>Surrogate: Decachlorobiphenyl</i>	3.39		"	4.00		84.9	30-120				

##### LCS (BF71164-BS1)

Prepared & Analyzed: 06/22/2017

Endrin	1.80	0.0800	ug/L	2.00		89.8	40-120				
gamma-BHC (Lindane)	1.77	0.0800	"	2.00		88.6	40-120				
Heptachlor	1.60	0.0800	"	2.00		80.0	40-120				
Heptachlor epoxide	1.61	0.0800	"	2.00		80.6	40-120				
Methoxychlor	1.94	0.0800	"	2.00		97.1	40-120				
<i>Surrogate: Tetrachloro-m-xylene</i>	2.42		"	4.00		60.6	30-120				
<i>Surrogate: Decachlorobiphenyl</i>	2.46		"	4.00		61.4	30-120				

##### LCS Dup (BF71164-BSD1)

Prepared & Analyzed: 06/22/2017

Endrin	2.14	0.0800	ug/L	2.00		107	40-120		17.4	30	
gamma-BHC (Lindane)	2.00	0.0800	"	2.00		100	40-120		12.2	30	
Heptachlor	1.73	0.0800	"	2.00		86.7	40-120		8.03	30	
Heptachlor epoxide	1.86	0.0800	"	2.00		92.9	40-120		14.2	30	
Methoxychlor	2.24	0.0800	"	2.00		112	40-120		14.3	30	
<i>Surrogate: Tetrachloro-m-xylene</i>	2.68		"	4.00		67.1	30-120				
<i>Surrogate: Decachlorobiphenyl</i>	2.72		"	4.00		68.1	30-120				





## Organochlorine Pesticides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71170 - EPA 3550C

##### Blank (BF71170-BLK1)

Prepared & Analyzed: 06/22/2017

4,4'-DDD	ND	0.330	ug/kg wet								
4,4'-DDE	ND	0.330	"								
4,4'-DDT	ND	0.330	"								
Aldrin	ND	0.330	"								
alpha-BHC	ND	0.330	"								
beta-BHC	ND	0.330	"								
Chlordane, total	ND	0.660	"								
delta-BHC	ND	0.330	"								
Dieldrin	ND	0.330	"								
Endosulfan I	ND	0.330	"								
Endosulfan II	ND	0.330	"								
Endosulfan sulfate	ND	0.330	"								
Endrin	ND	0.330	"								
Endrin aldehyde	ND	0.330	"								
Endrin ketone	ND	0.330	"								
gamma-BHC (Lindane)	ND	0.330	"								
Heptachlor	ND	0.330	"								
Heptachlor epoxide	ND	0.330	"								
Methoxychlor	ND	1.65	"								
Toxaphene	ND	16.7	"								
Surrogate: Tetrachloro-m-xylene	51.6		"	66.7		77.5	30-140				
Surrogate: Decachlorobiphenyl	50.5		"	66.7		75.8	30-140				

##### LCS (BF71170-BS1)

Prepared & Analyzed: 06/22/2017

4,4'-DDD	39.2	0.330	ug/kg wet	33.3		118	40-140				
4,4'-DDE	33.5	0.330	"	33.3		101	40-140				
4,4'-DDT	36.0	0.330	"	33.3		108	40-140				
Aldrin	31.9	0.330	"	33.3		95.8	40-140				
alpha-BHC	35.2	0.330	"	33.3		105	40-140				
beta-BHC	32.1	0.330	"	33.3		96.4	40-140				
delta-BHC	35.2	0.330	"	33.3		106	40-140				
Dieldrin	33.5	0.330	"	33.3		101	40-140				
Endosulfan I	35.9	0.330	"	33.3		108	40-140				
Endosulfan II	35.4	0.330	"	33.3		106	40-140				
Endosulfan sulfate	38.3	0.330	"	33.3		115	40-140				
Endrin	33.4	0.330	"	33.3		100	40-140				
Endrin aldehyde	34.4	0.330	"	33.3		103	40-140				
Endrin ketone	38.1	0.330	"	33.3		114	40-140				
gamma-BHC (Lindane)	32.4	0.330	"	33.3		97.1	40-140				
Heptachlor	28.0	0.330	"	33.3		83.9	40-140				
Heptachlor epoxide	29.8	0.330	"	33.3		89.4	40-140				
Methoxychlor	34.1	1.65	"	33.3		102	40-140				
Surrogate: Tetrachloro-m-xylene	44.4		"	66.7		66.6	30-140				
Surrogate: Decachlorobiphenyl	43.0		"	66.7		64.5	30-140				





## Chlorinated Herbicides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71228 - EPA 3535A/1311

##### Blank (BF71228-BLK1)

Prepared & Analyzed: 06/23/2017

2,4,5-TP (Silvex)	ND	5.00	ug/L								
2,4-D	ND	5.00	"								
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	144		"	125		115	30-150				

##### LCS (BF71228-BS1)

Prepared & Analyzed: 06/23/2017

2,4,5-TP (Silvex)	36.5	5.00	ug/L	40.0		91.2	40-140				
2,4-D	29.8	5.00	"	40.0		74.4	40-140				
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	116		"	125		92.8	30-150				

##### LCS Dup (BF71228-BSD1)

Prepared & Analyzed: 06/23/2017

2,4,5-TP (Silvex)	37.5	5.00	ug/L	40.0		93.8	40-140		2.70	30	
2,4-D	30.0	5.00	"	40.0		75.0	40-140		0.837	30	
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	112		"	125		89.8	30-150				





## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71268 - EPA 3015A/1311

##### Blank (BF71268-BLK1)

Prepared: 06/23/2017 Analyzed: 06/24/2017

Arsenic	ND	0.004	mg/L								
Barium	ND	0.011	"								
Cadmium	ND	0.003	"								
Chromium	ND	0.006	"								
Copper	ND	0.00333	"								
Lead	0.007	0.003	"								
Nickel	ND	0.00556	"								
Selenium	ND	0.011	"								
Silver	ND	0.006	"								
Zinc	0.0315	0.0111	"								

##### Blank (BF71268-BLK2)

Prepared: 06/23/2017 Analyzed: 06/24/2017

Arsenic	ND	0.004	mg/L								
Barium	ND	0.011	"								
Cadmium	ND	0.003	"								
Chromium	ND	0.006	"								
Copper	ND	0.00333	"								
Lead	ND	0.003	"								
Nickel	ND	0.00556	"								
Selenium	ND	0.011	"								
Silver	ND	0.006	"								
Zinc	0.0257	0.0111	"								

##### Reference (BF71268-SRM1)

Prepared: 06/23/2017 Analyzed: 06/24/2017

Arsenic	0.582		ug/mL	0.669	87.0	84.3-114.3					
Barium	0.496		"	0.570	87.0	85-115					
Cadmium	0.642		"	0.779	82.4	84.9-115	Low Bias				
Chromium	0.226		"	0.260	86.8	85-115					
Copper	0.394		"	0.420	93.7	85-115					
Lead	0.120		"	0.140	85.7	85-115					
Nickel	0.458		"	0.510	89.8	87-113.7					
Selenium	0.383		"	0.470	81.6	85.1-115.1	Low Bias				
Silver	0.439		"	0.510	86.1	85-115					
Zinc	0.580		"	0.679	85.4	84.9-115					





## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71276 - EPA 3050B

##### Blank (BF71276-BLK1)

Prepared & Analyzed: 06/23/2017

Aluminum	ND	5.00	mg/kg wet
Antimony	ND	0.500	"
Arsenic	ND	1.00	"
Barium	ND	1.00	"
Beryllium	ND	0.100	"
Cadmium	ND	0.300	"
Calcium	5.41	5.00	"
Chromium	ND	0.500	"
Cobalt	ND	0.500	"
Copper	ND	0.500	"
Iron	ND	2.00	"
Lead	ND	0.300	"
Magnesium	ND	5.00	"
Manganese	ND	0.500	"
Nickel	0.516	0.500	"
Potassium	11.2	5.00	"
Selenium	ND	1.00	"
Silver	ND	0.500	"
Sodium	106	10.0	"
Thallium	ND	1.00	"
Vanadium	ND	1.00	"
Zinc	ND	1.00	"

##### Reference (BF71276-SRM1)

Prepared & Analyzed: 06/23/2017

Aluminum	7080	5.00	mg/kg wet	8770	80.8	39.6-160.89
Antimony	131	0.500	"	117	112	19.6-259.6
Arsenic	27.1	1.00	"	29.6	91.5	67-161.9
Barium	175	1.00	"	198	88.2	72-129.1
Beryllium	83.4	0.100	"	92.0	90.6	73.8-126.4
Cadmium	61.3	0.300	"	71.5	85.7	73.3-126.7
Calcium	5810	5.00	"	6310	92.1	73.9-126.9
Chromium	88.1	0.500	"	102	86.4	68.2-132
Cobalt	47.2	0.500	"	51.4	91.8	74.3-125.7
Copper	140	0.500	"	153	91.2	72.5-131.4
Iron	13700	2.00	"	15200	90.1	36.4-163.9
Lead	119	0.300	"	139	85.3	69.7-130.8
Magnesium	2370	5.00	"	2760	86.0	64.6-135.1
Manganese	245	0.500	"	270	90.8	73.9-126
Nickel	120	0.500	"	129	93.1	70.3-129.7
Potassium	2050	5.00	"	2420	84.7	60.3-140.1
Selenium	55.7	1.00	"	60.6	91.9	63.2-136.9
Silver	30.1	0.500	"	36.4	82.7	66.8-133.4
Sodium	814	10.0	"	819	99.4	59.2-141.1
Thallium	90.9	1.00	"	101	90.0	68.5-130.9
Vanadium	70.0	1.00	"	81.3	86.1	53.3-146.5
Zinc	194	1.00	"	223	86.8	69.7-129.8





## Mercury by EPA 7000/200 Series Methods - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BF71256 - EPA 7473 soil

##### Blank (BF71256-BLK1)

Prepared & Analyzed: 06/23/2017

Mercury	ND	0.0300	mg/kg wet
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##### Reference (BF71256-SRM1)

Prepared & Analyzed: 06/23/2017

Mercury	19.315		mg/kg	13.8		140	51.4-168.8
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#### Batch BF71283 - EPA SW846-7470

##### Blank (BF71283-BLK1)

Prepared & Analyzed: 06/23/2017

Mercury	ND	0.000200	mg/L
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##### LCS (BF71283-BS1)

Prepared & Analyzed: 06/23/2017

Mercury	0.00212	0.000200	mg/L	0.00200		106	80-120
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**Wet Chemistry Parameters - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BF71088 - EPA SW846-3060</b>										
<b>Blank (BF71088-BLK1)</b>							Prepared: 06/21/2017 Analyzed: 06/22/2017			
Chromium, Hexavalent	ND	0.500	mg/kg wet							
<b>Reference (BF71088-SRM1)</b>							Prepared: 06/21/2017 Analyzed: 06/22/2017			
Chromium, Hexavalent	28.2		mg/L	46.6		60.5	18.3-202			
<b>Batch BF71146 - EPA SW 846-1311 TCLP ext. for metals</b>										
<b>Blank (BF71146-BLK1)</b>							Prepared: 06/21/2017 Analyzed: 06/22/2017			
TCLP Extraction	Completed	1.00	N/A							
<b>Batch BF71148 - EPA SW 846-1311 TCLP extr. for SVOA/PEST/HERBS</b>										
<b>Blank (BF71148-BLK1)</b>							Prepared: 06/21/2017 Analyzed: 06/22/2017			
TCLP Extraction	Completed	1.00	N/A							
<b>Batch BF71271 - EPA SW 846-1311 TCLP ZHE for VOA</b>										
<b>Blank (BF71271-BLK1)</b>							Prepared & Analyzed: 06/23/2017			
TCLP Extraction	Completed	1.00	%							
<b>Batch BF71337 - Analysis Preparation</b>										
<b>Blank (BF71337-BLK1)</b>							Prepared & Analyzed: 06/26/2017			
Reactivity - Cyanide	ND	0.250	mg/kg							





**Wet Chemistry Parameters - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BF71338 - Analysis Preparation**

**Blank (BF71338-BLK1)**

Prepared & Analyzed: 06/26/2017

Reactivity - Sulfide	ND	15.0	mg/kg
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### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17F0796-02	WC-1SB-2 (2-3) Grab	Encore Sampler
17F0796-02	WC-1SB-2 (2-3) Grab	Encore Sampler





## Notes and Definitions

S-08	The recovery of this surrogate was outside of QC limits.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
PF-01	No Free Liquid
N	The Tentatively Identified Compound reported indicates the presence of an possible analyte or class of analyte that has been 'tentatively identified' and the associated numerical value represents its estimated concentration.
M-CCVO	CCV Out. Samples bracketed by acceptable CCVs.
IGN-01	Non-Ignit.
HT-pH	HOLDING TIME EXCEEDED. Samples for pH must be measured in the field or within 15 minutes of sample collection.
EXT-Temp	Extraction temperture slightly exceeded acceptance range.
EXT-COMP	Completed
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.





Non-Dir. Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

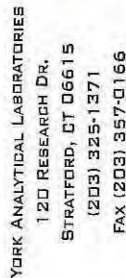
Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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Revision Description: This report has been revised to correct the PCB results for 17F0796-01.





# Field Chain-of-Custody Record

Page 1 of 1

(203) 325-1371  
FAX (203) 357-0166

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested. signature binds you to York's Std. Terms & Conditions.

York Project No. 17F0796

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type			
Company: <u>Hydro Tech Environmental</u> Address: <u>15 Ocean Ave 2nd Floor</u> <u>Brockton, MA 01923</u> Phone No. <u>781-636-0800</u> Contact Person: <u>Paul Mella</u> E-Mail Address: <u>pmella@hydrotechenvironmental.com</u>		Company: <u>Same</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		Company: <u>Same</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<u>170154-11-28 31st Dr</u> <u>Long Island City, NY</u> <b>Purchase Order No.</b> <u>1190</u> Samples from: CT _____ NY _____ NJ _____		<input type="checkbox"/> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input checked="" type="checkbox"/> RUSH - Four Day <b>Standard (5-7 Days)</b> <input type="checkbox"/>		Summary Report <input checked="" type="checkbox"/> Summary w/ QA Summary <input checked="" type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DOA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input type="checkbox"/> NIDEP Red. Deliv. <input type="checkbox"/> <u>Electronic Data Deliverables (EDD)</u> Simple Excel <input type="checkbox"/> NY SDEC EQuIS <input checked="" type="checkbox"/> EQuIS (std) <input type="checkbox"/> EZ-EDD (EQuIS) <input type="checkbox"/> NIDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other _____ York Regulatory Comparison <input type="checkbox"/> Excel Spreadsheet <input checked="" type="checkbox"/> Compare to the following Regs. (please fill in): _____			
<b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b>													
Samples Collected/Authorized By (Signature) <u>[Signature]</u> Name (printed) <u>Sidley Perez</u>		Matrix Codes S - soil Other - specify (oil, etc.) _____ WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor		Volatiles 8260 full TICS 624 Site Spec. STARS list Nassau Co. BTEX Suffolk Co. MTBE Ketones TCL list Oxygenates TAGM list TCLP list CT RCP list Arom. only 502.2 Halog. only NIDEP list App IX list SPLP or TCLP 8021B list		Semi-Vols, Pest/PCB list 8270 or 625 RCKA8 STARS list 8081 Pest BN Only 8151 Herb Acids Only CT RCP PAH list App. IX TAGM list Site Spec. CT RCP list SPLP or TCLP TCL list NIDEP list App. IX SPLP or TCLP BNA SPLP or TCLP 608 PCB		Metals RCKA8 PP13 list TAL CT ETPH NY 310-13 TAGM list NIDEP list Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium		Misc. Org. TPH GRO TPH DRO TCL Oganix TAL MetCN Full TCLP Full App. IX Part 360-Routine Part 360-Residue Part 360-Residue Part 360-Residue Part 360-Residue NY CDEP Sewer NY SDEC Sewer TAGM Silica		Container Description(s) <u>3/802 Jars</u> <u>3 jars 1/402 Jar</u> <u>1/802 Jar.</u>	
<b>Choose Analyses Needed from the Menu Above and Enter Below</b>													
Sample Identification <u>WC-1(08) composite</u> <u>WC-1SB-2(2-3) Grab</u> <u>WC-SB-1(3-4) Site Grab</u>		Date/Time Sampled <u>6/20/17</u> <u>J</u>		Sample Matrix <u>S</u> <u>J</u>		4°C _____ Frozen _____ HCl _____ MeOH _____ ZnAc _____ Ascorbic Acid _____ HNO <sub>3</sub> _____ H <sub>2</sub> SO <sub>4</sub> _____ NaOH _____ Other _____		Preservation Check those Applicable Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>		Comments <u>Parameters wanted are attached. Also include parameters listed on the chair.</u>			
Temperature on Receipt <u>2.5°C</u>													



17F0796

## Sampling Requirements - PA Management of Fill Sites

PARAMETERS		TOTAL VOLATILE ORGANICS (TCL+10)		TOTAL SEMI-VOLATILE ORGANICS (TCL + 20)		TAL METALS WITH HEXAVALENT CHROMIUM & MERCURY		PCBs		TOTAL PESTICIDES (TCL)	
METHODS (1)	TYPE OF MATERIAL	8260B - with EnCore sampling devices		8270D		6010/7196/7471		8082A		8081B	
		FREQUENCY									
PA Regulated Fill & Clean Fill		Grab Sample every 1000 CY With EnCore		X							
		5 point composite sample every 1,000 CY				X		X		X	

(1) The methods provided are standard EPA methods. The method revisions are subject to change and the most current method should always be utilized by the laboratory.

Analysis must be performed by a PA certified laboratory.

Protocol for sampling requires the screening of each of the five (5) grab samples with a PID.

The highest PID grab sample for every 1,000 cy is to be submitted for the VOC portion of the testing utilizing an ENCORE sampling device.

The five (5) grab samples are then to be composited for every 1,000 cy and submitted for the remaining parameters.



17F0796

METHODS	PARAMETERS	FREQUENCY	TOTAL PETROLEUM HYDROCARBONS (TPHC); GRO & DRO - Expanded to C44	BTX (GRAB SAMPLE)	TOX (GRAB SAMPLE)	TOTAL VOLATILE ORGANICS (GRAB SAMPLE)	TOTAL SEMI VOLATILE ORGANICS	TOTAL METALS RCRA + Cu, Ni, Zn	TCLP METALS RCRA + Cu, Ni, Zn	IGNITABILITY	CORROSIVITY (PH)	REACTIVITY - SULFIDE AND CYANIDE	PCBs	TOTAL SULFUR	TCLP VOLATILE ORGANICS (GRAB SAMPLE)	TCLP SEMI VOLATILE ORGANICS	TCLP HERBICIDES	TCLP PESTICIDES	1311/ 8081B	1311/ 8151A	1311/ 8270D	1311/ 8260B	ASTM D129 or equivalent	1311/ 8260B	SW846 CHAPTER 7.3	9040C	1010A	1311/6010	6010	8270D	8260B	9023	8260B	GRO <30,000; DRO <100,000	5 point composite - every 1000 tons	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit 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(mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit 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(mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)	Limit (mg/Kg)</
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(1) The methods provided are standard EPA methods. The method revisions are either in change and the most current method should always be utilized in the laboratory.



# Concrete Waste Characterization





# Technical Report

prepared for:

## **Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 10/04/2017

**Client Project ID: #170154 11-28 31 Drive, LIC NY**

York Project (SDG) No.: 17I1195

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371



132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)



Report Date: 10/04/2017  
Client Project ID: #170154 11-28 31 Drive, LIC NY  
York Project (SDG) No.: 17I1195

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

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**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on September 28, 2017 and listed below. The project was identified as your project: **#170154 11-28 31 Drive, LIC NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
17I1195-01	Concrete washed	Concrete	09/28/2017	09/28/2017
17I1195-02	Concrete in contact with soil	Concrete	09/28/2017	09/28/2017



## **General Notes for York Project (SDG) No.: 17I1195**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 10/04/2017







## Sample Information

**Client Sample ID:** Concrete washed

**York Sample ID:** 17I1195-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17I1195

#170154 11-28 31 Drive, LIC NY

Concrete

September 28, 2017 1:00 pm

09/28/2017

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	4620		mg/kg dry	5.21	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-36-0	Antimony	1.26		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-38-2	Arsenic	3.80		mg/kg dry	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-39-3	Barium	55.8		mg/kg dry	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-41-7	Beryllium	ND		mg/kg dry	0.104	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-43-9	Cadmium	0.644		mg/kg dry	0.313	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-70-2	Calcium	103000		mg/kg dry	52.1	10	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/03/2017 11:42	KML
7440-47-3	Chromium	10.4		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-48-4	Cobalt	2.40		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-50-8	Copper	5.96		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7439-89-6	Iron	5920		mg/kg dry	2.09	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7439-92-1	Lead	2.69		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7439-95-4	Magnesium	17000		mg/kg dry	5.21	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7439-96-5	Manganese	119		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-02-0	Nickel	7.55		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-09-7	Potassium	477	B	mg/kg dry	5.21	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7782-49-2	Selenium	ND		mg/kg dry	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-22-4	Silver	ND		mg/kg dry	0.521	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-23-5	Sodium	136	B	mg/kg dry	10.4	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-28-0	Thallium	ND		mg/kg dry	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML
7440-62-2	Vanadium	51.9		mg/kg dry	1.04	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML





## Sample Information

**Client Sample ID:** Concrete washed

**York Sample ID:** 17I1195-01

**York Project (SDG) No.**

17I1195

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Concrete

**Collection Date/Time**

September 28, 2017 1:00 pm

**Date Received**

09/28/2017

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc	26.5		mg/kg dry	1.56	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 21:57	KML

### Mercury by 7473

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0313	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854-CT,PADEP	10/03/2017 09:01	10/03/2017 13:28	SY

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	95.9		%	0.100	1	SM 2540G Certifications: CTDOH	09/29/2017 11:22	09/29/2017 14:49	TJM

### Chromium, Hexavalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	4.30		mg/kg dry	0.521	1	EPA 7196A Certifications: NJDEP,CTDOH,NELAC-NY10854-CT,PADEP	10/02/2017 09:46	10/02/2017 17:10	DM1

### Chromium, Trivalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	* Chromium, Trivalent	6.10		mg/kg	0.500	1	Calculation Certifications:	10/04/2017 09:48	10/04/2017 09:51	PAM

## Sample Information

**Client Sample ID:** Concrete in contact with soil

**York Sample ID:** 17I1195-02

**York Project (SDG) No.**

17I1195

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Concrete

**Collection Date/Time**

September 28, 2017 1:00 pm

**Date Received**

09/28/2017

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:





## Sample Information

**Client Sample ID:** Concrete in contact with soil

**York Sample ID:** 17I1195-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17I1195

#170154 11-28 31 Drive, LIC NY

Concrete

September 28, 2017 1:00 pm

09/28/2017

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	6340		mg/kg dry	5.13	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-36-0	Antimony	1.79		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-38-2	Arsenic	5.56		mg/kg dry	1.03	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-39-3	Barium	79.2		mg/kg dry	1.03	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-41-7	Beryllium	ND		mg/kg dry	0.103	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-43-9	Cadmium	0.825		mg/kg dry	0.308	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-70-2	Calcium	102000		mg/kg dry	51.3	10	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/03/2017 11:46	KML
7440-47-3	Chromium	13.7		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-48-4	Cobalt	3.93		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-50-8	Copper	18.2		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7439-89-6	Iron	11000		mg/kg dry	2.05	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7439-92-1	Lead	52.9		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7439-95-4	Magnesium	11600		mg/kg dry	5.13	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7439-96-5	Manganese	152		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-02-0	Nickel	10.6		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-09-7	Potassium	746	B	mg/kg dry	5.13	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7782-49-2	Selenium	ND		mg/kg dry	1.03	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-22-4	Silver	ND		mg/kg dry	0.513	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-23-5	Sodium	168	B	mg/kg dry	10.3	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-28-0	Thallium	ND		mg/kg dry	1.03	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-62-2	Vanadium	56.1		mg/kg dry	1.03	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML
7440-66-6	Zinc	62.1		mg/kg dry	1.54	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/02/2017 13:26	10/02/2017 22:02	KML





## Sample Information

**Client Sample ID:** Concrete in contact with soil

**York Sample ID:** 17I1195-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17I1195

#170154 11-28 31 Drive, LIC NY

Concrete

September 28, 2017 1:00 pm

09/28/2017

### Mercury by 7473

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.0811		mg/kg dry	0.0308	1	EPA 7473	10/03/2017 09:01	10/03/2017 13:37	SY
							Certifications:	CTDOH,NJDEP,NELAC-NY10854-CT,PADEP		

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	97.5		%	0.100	1	SM 2540G	09/29/2017 11:22	09/29/2017 14:49	TJM
							Certifications:	CTDOH		

### Chromium, Hexavalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	3.49		mg/kg dry	0.513	1	EPA 7196A	10/02/2017 09:46	10/02/2017 17:10	DM1
							Certifications:	NJDEP,CTDOH,NELAC-NY10854-CT,PADEP		

### Chromium, Trivalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	* Chromium, Trivalent	10.2		mg/kg	0.500	1	Calculation	10/04/2017 09:48	10/04/2017 09:51	PAM
							Certifications:			





## Analytical Batch Summary

**Batch ID:** BI71400      **Preparation Method:** % Solids Prep      **Prepared By:** TJM

YORK Sample ID	Client Sample ID	Preparation Date
17I1195-01	Concrete washed	09/29/17
17I1195-02	Concrete in contact with soil	09/29/17
BI71400-DUP1	Duplicate	09/29/17

**Batch ID:** BJ70025      **Preparation Method:** EPA SW846-3060      **Prepared By:** DM1

YORK Sample ID	Client Sample ID	Preparation Date
17I1195-01	Concrete washed	10/02/17
17I1195-02	Concrete in contact with soil	10/02/17
BJ70025-BLK1	Blank	10/02/17
BJ70025-DUP1	Duplicate	10/02/17
BJ70025-MS1	Matrix Spike	10/02/17
BJ70025-SRM1	Reference	10/02/17

**Batch ID:** BJ70043      **Preparation Method:** EPA 3050B      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17I1195-01	Concrete washed	10/02/17
17I1195-01RE1	Concrete washed	10/02/17
17I1195-02	Concrete in contact with soil	10/02/17
17I1195-02RE1	Concrete in contact with soil	10/02/17
BJ70043-BLK1	Blank	10/02/17
BJ70043-SRM1	Reference	10/02/17

**Batch ID:** BJ70086      **Preparation Method:** EPA 7473 soil      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17I1195-01	Concrete washed	10/03/17
17I1195-02	Concrete in contact with soil	10/03/17
BJ70086-BLK1	Blank	10/03/17
BJ70086-SRM1	Reference	10/03/17

**Batch ID:** BJ70160      **Preparation Method:** Analysis Preparation      **Prepared By:** PAM

YORK Sample ID	Client Sample ID	Preparation Date
17I1195-01	Concrete washed	10/04/17
17I1195-02	Concrete in contact with soil	10/04/17





## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70043 - EPA 3050B

##### Blank (BJ70043-BLK1)

Prepared & Analyzed: 10/02/2017

Aluminum	ND	5.00	mg/kg wet
Antimony	ND	0.500	"
Arsenic	ND	1.00	"
Barium	ND	1.00	"
Beryllium	ND	0.100	"
Cadmium	ND	0.300	"
Calcium	ND	5.00	"
Chromium	ND	0.500	"
Cobalt	ND	0.500	"
Copper	ND	0.500	"
Iron	ND	2.00	"
Lead	ND	0.500	"
Magnesium	ND	5.00	"
Manganese	ND	0.500	"
Nickel	ND	0.500	"
Potassium	8.47	5.00	"
Selenium	ND	1.00	"
Silver	ND	0.500	"
Sodium	42.0	10.0	"
Thallium	ND	1.00	"
Vanadium	ND	1.00	"
Zinc	ND	1.50	"

##### Reference (BJ70043-SRM1)

Prepared & Analyzed: 10/02/2017

Aluminum	7240	5.00	mg/kg wet	8770	82.5	39.6-160.89
Antimony	130	0.500	"	117	111	19.6-259.6
Arsenic	31.5	1.00	"	29.6	106	67-161.9
Barium	214	1.00	"	198	108	72-129.1
Beryllium	100	0.100	"	92.0	109	73.8-126.4
Cadmium	81.9	0.300	"	71.5	115	73.3-126.7
Calcium	6710	5.00	"	6310	106	73.9-126.9
Chromium	106	0.500	"	102	104	68.2-132
Cobalt	57.5	0.500	"	51.4	112	74.3-125.7
Copper	160	0.500	"	153	105	72.5-131.4
Iron	11400	2.00	"	15200	75.2	36.4-163.9
Lead	140	0.500	"	139	101	69.7-130.8
Magnesium	2550	5.00	"	2760	92.5	64.6-135.1
Manganese	284	0.500	"	270	105	73.9-126
Nickel	151	0.500	"	129	117	70.3-129.7
Potassium	2200	5.00	"	2420	90.8	60.3-140.1
Selenium	67.2	1.00	"	60.6	111	63.2-136.9
Silver	34.1	0.500	"	36.4	93.8	66.8-133.4
Sodium	874	10.0	"	819	107	59.2-141.1
Thallium	112	1.00	"	101	111	68.5-130.9
Vanadium	79.4	1.00	"	81.3	97.6	53.3-146.5
Zinc	230	1.50	"	223	103	69.7-129.8





Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag
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Batch BJ70086 - EPA 7473 soil

Blank (BJ70086-BLK1)

Prepared & Analyzed: 10/03/2017

Mercury ND 0.0300 mg/kg wet

Reference (BJ70086-SRM1)

Prepared & Analyzed: 10/03/2017

Mercury 13.387 mg/kg 13.8 97.0 51.4-168.8





## Miscellaneous Physical Parameters - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BI71400 - % Solids Prep

<b>Duplicate (BI71400-DUP1)</b>		*Source sample: 17I1195-02 (Concrete in contact with soil)						Prepared & Analyzed: 09/29/2017			
% Solids	96.8	0.100	%		97.5				0.660	20	





## Wet Chemistry Parameters - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BJ70025 - EPA SW846-3060</b>											
<b>Blank (BJ70025-BLK1)</b>											
										Prepared & Analyzed: 10/02/2017	
Chromium, Hexavalent	ND	0.500	mg/kg wet								
<b>Duplicate (BJ70025-DUP1)</b>											
*Source sample: 17I1195-02 (Concrete in contact with soil)										Prepared & Analyzed: 10/02/2017	
Chromium, Hexavalent	3.28	0.513	mg/kg dry		3.49				6.06	35	
<b>Matrix Spike (BJ70025-MS1)</b>											
*Source sample: 17I1195-02 (Concrete in contact with soil)										Prepared & Analyzed: 10/02/2017	
Chromium, Hexavalent	18.3	0.513	mg/kg dry	20.5	3.49	72.2	75-125	Low Bias			
<b>Reference (BJ70025-SRM1)</b>											
										Prepared & Analyzed: 10/02/2017	
Chromium, Hexavalent	95.6		mg/L	207		46.2	25.6-116.9				









## Sample and Data Qualifiers Relating to This Work Order

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

### Definitions and Other Explanations

- \* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
- ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
- RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
- LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
- LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
- MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
- Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
- NR Not reported
- RPD Relative Percent Difference
- Wet The data has been reported on an as-received (wet weight) basis
- Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- Non-Dir. Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.







**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document.

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 1711195

[illegible]



# Disposal Facility Acceptance Letters



# Evergreen Recycling of Corona

127-50 Northern Blvd. Flushing, N.Y. 11368  
718-205-8038 Fax 718-205-8202  
Yard: 35<sup>th</sup> ave & Willets Point Blvd.

October 6, 2017

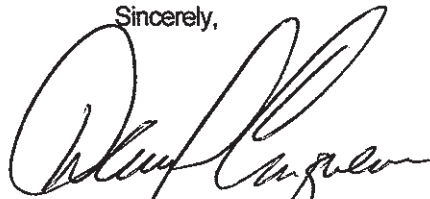
George Man  
GBT Real Estate, LLC  
57 Allen Street  
New York, NY 10002

Dear George,

Evergreen Recycling of Corona permit #41W93 an approved NYSDEC C&D facility has reviewed York Analytical Labs Inc. ID 1711195 for 11-28 31 drive, LIC. The material represented can be accepted at our Corona facility providing it does not contain any historical fill, wood, slag, ash, garbage, tile or other deleterious materials.

If there are any questions please feel free to contact me at any time.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Cinquemani', written in a cursive style.

David Cinquemani  
General Manager





July 21, 2017

Mr. George Man  
57 Allen Street,  
New York, NY 10002

Re: Morgan Construction NY, Inc.  
11 – 28 31st Drive,  
Long Island City, NY 11106

Dear Mr. Man,

Clean Earth of Carteret, LLC. (CEC) is pleased to provide you with this acceptance letter for the soil material being generated from the site referenced above. CEC has reviewed the Material Profile Sheet, Waste Characterization Sampling Report and the Laboratory analysis representing the project soil material for offsite disposal. Based on the review, soil sample procedure and soil sample analytical data results represented by York Analytical, Inc. meet the analytical criteria of our NJDEP permitted Class-B Recycling Facility in Carteret, NJ.

This letter serves as approval of ~ 400 tons of non-hazardous contaminated soil/urban fill represented by composite sample IDs: WC-1(0-7) Composite and all related grab samples to be generated from construction activities at the site.

CEC is aware that the soil located at the site is contaminated soil, coming from a NYS Brownfield Clean-up site of which the Remedial Engineer of Record is Ariel Czemerinski P. E. (ariel@amc-engineering.com), of AMC Engineering, PLLC (O: 516-417-8588)

Please note that provided laboratory data package is missing TPH analysis. The facility is permitted to analyze missing parameters by collecting soil samples from incoming loads. Please note that TPH analysis (every 150 Tons) will be required to comply with CEC's Class B permit. In the essence of saving time, CEC will collect the additional TPH samples as required upon arrival at the facility to meet the CEC analytical requirements.

Please provide the approval number when scheduling and include the approval number on all manifests when shipping soils generated from this site. CEC can only accept Non Hazardous petroleum impacted soils. Any soils with free petroleum product or liquids, sludge's, or hazardous waste cannot be accepted. The generator will be notified of any non-conforming material.

Clean Earth Inc. and its Subsidiaries would like to thank you in advance for giving us this opportunity to manage this waste stream. If you should have any questions or require any additional information, please call me at (732) 541-8909.

Sincerely,  
Clean Earth of Carteret, LLC

Tejas R. Shah





# Waste Manifests



This Invoice is submitted on behalf of Clean Earth, Inc. located at 334 S. Warminster Road, Hatboro, PA 19040.

**Clean Earth of Carteret, LLC**

Remit To:

P.O. Box 95000-3755  
Philadelphia, PA 19195-0001  
Phone: 215-734-1400  
Fax: 215-734-1423



Faster, smarter, greener solutions..

**Invoice**

**Invoice Number:**  
PSI0100568  
**Invoice Date:**  
10/16/17  
**Order Number**

**Page:**  
1

**Sold To:**

MORGAN CONSTRUCTION NY INC  
57 ALLEN STREET  
NEW YORK, NY 10002

**Site Address:**

11-28 31st Drive  
George Man  
11-28 31st Drive  
Long Island City, NY 11106  
917-416-2002

Customer No.	Customer PO	Payment Terms
MOR717		Net 30 Days
Sales Rep ID	Approval Number	Payment Due
RICH CRAWFORD	173071349	11/15/17

Job No.	Description	Scale Date:	Ticket No.	Manifest No.	Quantity	Unit	Unit Price	Total Price
145639	Soil Treatment Type II	10/13/17	700000738588	1612584	27.67	Tons	39.00	1,079.13
145639	Soil Treatment Type II	10/13/17	700000738871	1612583	30.22	Tons	39.00	1,178.58
145639	Soil Treatment Type II	10/13/17	700000739121	1612582	30.98	Tons	39.00	1,208.22
145639	Soil Treatment Type II	10/13/17	700000739262	1612577	10.73	Tons	39.00	418.47
145639	22 Ton Minimum (1 Load)				11.27	Tons	14.00	157.78
145639	Env, Energy, and Ins Fee					N/C		

Amount Subject to Sales Tax	Amount Exempt from Sales Tax	Total Quantity:	Subtotal:	4,042.18
4,042.18	0.00	99.60	Invoice Discount:	0.00
			Total Sales Tax:	358.74
			<b>Total:</b>	<b>4,400.92</b>



**Clean Earth of Carteret**  
**Profile Report**

Transactions from 10/13/2017 through 10/13/2017  
Inbound Tickets Only  
Third Party and Intercompany Customers  
Recycle and Disposal Material  
Sent and Unsent Tickets  
Full Details

sRpPrf.rpt

Profile: 173071349  
Site ID: 307

Ticket	Date	Truck	In / Out	Manifest	Customer	Bill. Units	Cubic Yards	Tons	Estimated Tons
173071349 - GBT Real Estate LLC/11-28 31st St									
						Global Job Number: 145639			
700000738588	10/13/17	07SHIR12	I	1612584	MOR717-MORGAN CONSTRUCTIO	27.670 Tn	0.00	27.67	0.00
700000738871	10/13/17	07SHIR44	I	1612583	MOR717-MORGAN CONSTRUCTIO	30.220 Tn	0.00	30.22	0.00
700000739121	10/13/17	07SHIR12	I	1612582	MOR717-MORGAN CONSTRUCTIO	30.980 Tn	0.00	30.98	0.00
700000739262	10/13/17	07SHIR44	I	1612577	MOR717-MORGAN CONSTRUCTIO	10.730 Tn	0.00	10.73	0.00
173071349 - GBT Real Estate LLC/11-28 31st St									
4 tickets and 4 transactions						0.00	0.00	99.60	0.00
<b>Report Grand Totals</b>						0.00	0.00	99.60	0.00
4 tickets and 4 transactions									



Ticket: 700000739262

Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

In: 10/13/2017 13:08:47 Scale CE  
Out: 10/13/2017 13:08:54 P.T.

	Lbs	Tns
Gross:	50220	25.11
Tare:	28760	14.38
Net:	21460	10.73

Manifest: 1612577  
Vehicle ID: 07SHIR44  
Vehicle Permit:  
Customer: MORGAN CONSTRUCTION NY IN

Facility Approval#: 173071349  
Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive  
Long Island City, NY 11106  
Quantity Unit

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Materials & Services

Origin

10.73 Tns

Soil Treatment Type II

Contaminate Type: 2 Oil  
Treatment Type: Bio  
Fac Waste Code: Petroleum Contaminated Soil  
Storage Area: Not Applicable  
Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Rendon, Adres

GENERATOR





Manifest # 1612577

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

**Please Check One:**

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

**Non-Hazardous Material Manifest**

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:	GROSS WEIGHT:
GBT Real Estate LLC/11-28 31 <sup>st</sup> ST	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
11-28 31 <sup>st</sup> Drive	TARE WEIGHT:
Long Island City, NY	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	NET WEIGHT:
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards

**DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION**CLEAN SOIL/AIR  
(0' - 4')**GENERATOR'S CERTIFICATION** – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: KOSOLFO Title: P.M.  
Signature: [Signature] Date and Time: 10/13/2017 12:20 PM

**TRANSPORTER**

Company: Shirley Express LLC Phone Number: (908) 258-9597  
Address: 702 Ramsey Ave, Hillside, NJ 07205 Truck # and License Plate: D5317  
Driver: Paul Alex SW Haulers Permit #: NI-983  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10/13/17

**DESTINATION**

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 10/13/17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10-13-17

**GENERATOR**



Ticket: 700000739121

Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

In: 10/13/2017 11:59:45 Scale CE  
Out: 10/13/2017 11:59:52 P.T.

	Lbs	Tns
Gross:	91360	45.68
Tare:	29400	14.70
Net:	61960	30.98

Manifest: 1612582  
Vehicle ID: 07SHIR12

Vehicle Permit:

Customer: MORGAN CONSTRUCTION NY IN

Facility Approval#: 173071349

Generator: GBT Real Estate LLC

Gen Address: 57 Allen Street

New York, NY 10002

Job Address: 11-28 31st Drive

Long Island City, NY 11106

Materials & Services

Quantity Unit

Origin

New York

Soil Treatment Type II

30.98 Tns

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Rendon, Adres

**GENERATOR**





Manifest # 1612582

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

**Please Check One:**

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

**Non-Hazardous Material Manifest**

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:	GROSS WEIGHT:	
GBT Real Estate LLC/11-28 31st ST	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	
11-28 31st Drive	TARE WEIGHT:	
Long Island City, NY	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	
GENERATOR'S PHONE: _____	NET WEIGHT:	
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	

**DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION**

CLEAN/5014/6111  
(0-4')

**GENERATOR'S CERTIFICATION** – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Rodolfo Title: P.M.  
Signature: [Signature] Date and Time: 10/13/2017 10:30 AM

**TRANSPORTER**

Company: Shirley Express LLC Phone Number: (908) 258-0597  
Address: 702 Ramsey Ave. Hillside, NJ 07205 Truck # and License Plate: 1A-11 6B #12  
Driver: [Signature] SW Haulers Permit #: NJ-983  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10-13-17

**DESTINATION**

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 10-13-17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10-13-17

**GENERATOR**



Ticket: 700000738871

Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

In: 10/13/2017 10:27:50 Scale DE  
Out: 10/13/2017 10:27:57 P.T.

Manifest: 1612583  
Vehicle ID: 07SHIR44  
Vehicle Permit:  
Customer: MORGAN CONSTRUCTION NY IN

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Facility Approval#: 173071349

Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive  
Long Island City, NY 11106

Materials & Services

Quantity Unit

Origin

New York

Soil Treatment Type II

30.22 Tns

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Rendon, Adres \_\_\_\_\_

**GENERATOR**





Manifest # 1612583

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

**Please Check One:**

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

**Non-Hazardous Material Manifest**

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:	GROSS WEIGHT:
GBT Real Estate LLC/11-28 31 <sup>st</sup> ST	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
11-28 31 <sup>st</sup> Drive	TARE WEIGHT:
Long Island City, NY	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	NET WEIGHT:
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards

**DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION**

clean/soil fill dirt  
(0' - 4')

**GENERATOR'S CERTIFICATION** – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: RODOLFO Title: P.M.  
Signature: Paul Date and Time: 10/13/2017

**TRANSPORTER**

Company: Shirley Express LLC Phone Number: (908) 258-0597 #44  
Address: 702 Ramsey Ave, Hillside, NJ 07205 Truck # and License Plate: A5317W  
Driver: Paul Alex SW Haulers Permit #: NJ-983  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10/13/17

**DESTINATION**

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 10/13/17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10-13-17

**GENERATOR**



Clean Earth of Carteret

24 Middlesex Avenue

Carteret, NJ 07008

Ph: (732) 541-8909 Fax: (732) 541-8105

Manifest: 1612584

Vehicle ID: 07SHIR12

Vehicle Permit:

Customer: MORGAN CONSTRUCTION NY IN

Generator: GBT Real Estate LLC

Gen Address: 57 Allen Street

New York, NY 10002

Materials & Services

Origin

New York

Soil Treatment Type II

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver: \_\_\_\_\_

#Facility: \_\_\_\_\_

Gibson, Barry

**GENERATOR**

Ticket: 700000738588

Date Time Scale

In: 10/13/2017 08:38:59 Scale CE

Out: 10/13/2017 08:39:07 P.T.

Lbs Tns

Gross: 84740 42.37

Tare: 29400 14.70

Net: 55340 27.67

Facility Approval#: 173071349

Job Name: GBT Real Estate LLC/11-28 31s

Job Address: 11-28 31st Drive

Long Island City, NY 11106

Quantity Unit

27.67 Tns





Manifest # 1612584

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

## Please Check One:

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

## Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:	GROSS WEIGHT:
GBT Real Estate LLC/11-28 31 <sup>st</sup> ST	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
11-28 31 <sup>st</sup> Drive	TARE WEIGHT:
Long Island City, NY	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE:	NET WEIGHT:
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards

## DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

SOIL
(0' - 4')

## GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: ROBERTO Title: P.M.  
Signature: [Signature] Date and Time: 10/13/2017 7:30 AM

## TRANSPORTER

Company: Shirley Express LLC Phone Number: (908) 758-0597  
Address: 702 Ramsey Ave, Hillside, NJ 07205 Truck # and License Plate: AS116B  
Driver: [Signature] SW Haulers Permit #: NJ-983  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10-13-17

## DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 10/13/17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10/13/17

GENERATOR



This Invoice is submitted on behalf of Clean Earth, Inc. located at 334 S. Warminster Road, Hatboro, PA 19040.

**Clean Earth of Carteret, LLC**

Remit To:

P.O. Box 95000-3755

Philadelphia, PA 19195-0001

Phone: 215-734-1400

Fax: 215-734-1423



Faster, smarter, greener solutions..

**Invoice**

Invoice Number:

PSI0100547

Invoice Date:

10/16/17

Order Number

Page:

1

**Sold To:**

MORGAN CONSTRUCTION NY INC

57 ALLEN STREET

NEW YORK, NY 10002

**Site Address:**

11-28 31st Drive

George Man

11-28 31st Drive

Long Island City, NY 11106

917-416-2002

Customer No.	Customer PO	Payment Terms
MOR717		Net 30 Days
Sales Rep ID	Approval Number	Payment Due
RICH CRAWFORD	173071349	11/15/17

Job No.	Description	Scale Date:	Ticket No.	Manifest No.	Quantity	Unit	Unit Price	Total Price
145639	Soil Treatment Type II	10/12/17	700000737523	1288779	24.14	Tons	39.00	941.46
145639	Soil Treatment Type II	10/12/17	700000737581	1288780	27.36	Tons	39.00	1,067.04
145639	Soil Treatment Type II	10/12/17	700000737610	1614904	26.84	Tons	39.00	1,046.76
145639	Soil Treatment Type II	10/12/17	700000737757	1288781	28.11	Tons	39.00	1,096.29
145639	Soil Treatment Type II	10/12/17	700000738103	1614901	30.04	Tons	39.00	1,171.56
145639	Soil Treatment Type II	10/12/17	700000738134	1618451	27.8	Tons	39.00	1,084.20
145639	Soil Treatment Type II	10/12/17	700000738203	1618448	30.48	Tons	39.00	1,188.72
145639	Soil Treatment Type II	10/12/17	700000738222	1612570	29.13	Tons	39.00	1,136.07
145639	Env, Energy, and Ins Fee					N/C		

Amount Subject to Sales Tax	Amount Exempt from Sales Tax	Total Quantity:	Subtotal:	8,732.10
8,732.10	0.00	223.90	Invoice Discount:	0.00
			Total Sales Tax:	774.97
			<b>Total:</b>	<b>9,507.07</b>



**Profile Report**

Transactions from 10/12/2017 through 10/12/2017

Inbound Tickets Only

Third Party and Intercompany Customers

Recycle and Disposal Material

Sent and Unsent Tickets

Full Details

Ticket	Date	Truck	In / Out	Manifest	Customer	Bill. Units	Cubic Yards	Tons	Estimated Tons
173071349 - GBT Real Estate LLC/11-28 31st St									
Global Job Number: 145639									
700000737523	10/12/17	07LOGI3	I	1288779	MOR717-MORGAN CONSTRUCTIO	24.140 Tn	0.00	24.14	0.00
700000737581	10/12/17	07SHIR12	I	1288780	MOR717-MORGAN CONSTRUCTIO	27.360 Tn	0.00	27.36	0.00
700000737610	10/12/17	07SHIR44	I	1614904	MOR717-MORGAN CONSTRUCTIO	26.840 Tn	0.00	26.84	0.00
700000737757	10/12/17	07SHIR6	I	1288781	MOR717-MORGAN CONSTRUCTIO	28.110 Tn	0.00	28.11	0.00
700000738103	10/12/17	07SHIR44	I	1614901	MOR717-MORGAN CONSTRUCTIO	30.040 Tn	0.00	30.04	0.00
700000738134	10/12/17	07SHIR12	I	1618451	MOR717-MORGAN CONSTRUCTIO	27.800 Tn	0.00	27.80	0.00
700000738203	10/12/17	07LOGI3	I	1618448	MOR717-MORGAN CONSTRUCTIO	30.480 Tn	0.00	30.48	0.00
700000738222	10/12/17	07SHIR6	I	1612570	MOR717-MORGAN CONSTRUCTIO	29.130 Tn	0.00	29.13	0.00
173071349 - GBT Real Estate LLC/11-28 31st St							0.00	223.90	0.00
8 tickets and 8 transactions									

**Report Grand Totals**

8 tickets and 8 transactions

0.00	223.90	0.00
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Ticket: 700000738222

Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

In: 10/12/2017 14:52:18 Scale CE  
Out: 10/12/2017 14:52:31 P.T.

Gross: 87720 Tns 43.86  
Tare: 29460 14.73  
Net: 58260 29.13

Manifest: 1612570  
Vehicle ID: 07SHIR6  
Vehicle Permit:  
Customer: MORGAN CONSTRUCTION NY IN

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Facility Approval#: 173071349  
Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive  
Long Island City, NY 11106

Materials & Services

Quantity Unit

Origin

New York

Soil Treatment Type II

29.13 Tns

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Rendon, Adres

GENERATOR





Manifest # 1612570

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

## Please Check One:

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

## Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28 31st Drive LONG ISLAND CITY NEW YORK	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

## DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

SOIL / FILL MATERIAL  
(0'-4')

## GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: 1-0001 PRO Title: P.M.  
Signature: [Signature] Date and Time: 10/12/2017 1:30 PM

## TRANSPORTER

Company: SHIRLEY EXPRESS Phone Number: \_\_\_\_\_  
Address: 702 RAMSEY AVE Truck # and License Plate: #06 AS125L  
Driver: DENNIS T SW Haulers Permit #: \_\_\_\_\_  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: DENNIS T Date and Time: 10-12-17

## DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: DENNIS T Date and Time: 10-12-17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10/12/17

GENERATOR



Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
PH: (732) 541-8988

Fax: (732) 541-8105

Manifest: 1618448  
Vehicle ID: 07LOGI3

Vehicle Permit:  
Customer: MORGAN CONSTRUCTION NY IN

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Origin  
New York  
Materials & Services

Soil Treatment Type II  
Contaminate Type: 2 Oil  
Treatment Type: Bio  
Fac Waste Code: Petroleum Contaminated Soil  
Storage Area: Not Applicable  
Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Rendon, Adres

Ticket: 700000738203

Date Time Scale  
In: 10/12/2017 14:37:44 Scale CE  
Out: 10/12/2017 14:37:55 P.T.

Lbs Tns  
Gross: 87180 43.59  
Tare: 26220 13.11  
Net: 60960 30.48

Facility Approval#: 173071349  
Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive  
Long Island City, NY 11106  
Quantity Unit

30.48 Tns

GENERATOR





Manifest # 1618448

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

## Please Check One:

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

## Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28-31st Drive LONG ISLAND CITY NEW YORK	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

## DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

SOIL / FILL MATERIAL  
(0' - 4')

## GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Rodolfo P.M.  
Signature: [Signature] Title: P.M.  
Date and Time: 10/12/2017 1:15 PM

## TRANSPORTER

Company: Logitech Transport Inc. Phone Number: \_\_\_\_\_  
Address: P.O. Box 787 Hillside Truck # and License Plate: AS369X #03  
Driver: [Signature] SW Haulers Permit #: \_\_\_\_\_  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10-12-17

## DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 10-12-17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10/12/17

GENERATOR



Ticket: 700000738134

Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

Date Time Scale  
In: 10/12/2017 13:49:00 Scale CE  
Out: 10/12/2017 13:49:09 P.T.

Lbs Tns  
Gross: 85000 42.50  
Tare: 29400 14.70  
Net: 55600 27.80

Manifest: 1618451  
Vehicle ID: 07SHIR12

Vehicle Permit:

Customer: MORGAN CONSTRUCTION NY IN

Facility Approval#: 173071349

Generator: GBT Real Estate LLC

Gen Address: 57 Allen Street

New York, NY 10002

Materials & Services

Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive

Long Island City, NY 11106  
Quantity Unit

Origin

27.80 Tns

Soil Treatment Type II

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver:

Facility:

Rendon, Adres

GENERATOR





Manifest # 1618451

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

## Please Check One:

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

## Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28 31st Drive LONG ISLAND CITY NEW YORK.	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATIONSOIL / FILL MATERIAL  
(01-41)GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: ROBERTO Title: P.M.  
Signature: [Signature] Date and Time: 10/12/2017 12:45pm

TRANSPORTER

Company: SHILLO Phone Number: \_\_\_\_\_  
Address: \_\_\_\_\_ Truck # and License Plate: AS716B-12  
Driver: [Signature] SW Haulers Permit #: \_\_\_\_\_  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10-12-17

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: \_\_\_\_\_

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10/12/17

GENERATOR



Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

Ticket: 700000738103

In:	Date	Time	Scale
10/12/2017	13:34:59		Scale
Out:	10/12/2017	13:35:08	P.T.

Manifest: 1614901  
Vehicle ID: 07SHIR44  
Vehicle Permit:  
Customer: MORGAN CONSTRUCTION NY IN

Gross:	Lbs	Tns
88840		44.42
Tare: 28760		14.38
Net: 60080		30.04

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Facility Approval#: 173071349

Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive

Long Island City, NY 11106  
Quantity Unit

Origin

New York

Soil Treatment Type II

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

30.04 Tns

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Rendon, Adres

**GENERATOR**





Manifest # 1614901

GLOBAL JOB NUMBER: 145639 FACILITY APPROVAL NUMBER: 173071349

## Please Check One:

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

## Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28 31 Street DRIVE LONG ISLAND CITY NEW YORK	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATIONSOIL FILL MATERIAL  
(0'-4')GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: \_\_\_\_\_ Title: P.M.  
Signature: \_\_\_\_\_ Date and Time: 10/12/2017 12:15p

TRANSPORTER

Company: Stanley Exter Phone Number: #44  
Address: Hillside Truck # and License Plate: AS371W  
Driver: Paul Driver SW Haulers Permit #: \_\_\_\_\_  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: \_\_\_\_\_ Date and Time: 10/12/17

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: \_\_\_\_\_ Date and Time: 10/12/17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: \_\_\_\_\_ Date and Time: 10/12/17

GENERATOR



\*Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

Ticket: 700000737757

Date Time Scale  
In: 10/12/2017 11:08:45 Scale CE  
Out: 10/12/2017 11:08:56 P.T.

Manifest: 1288781  
Vehicle ID: 07SHIR6  
Vehicle Permit:  
Customer: MORGAN CONSTRUCTION NY IN

Lbs Tns  
Gross: 85680 42.84  
Tare: 29460 14.73  
Net: 56220 28.11

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Facility Approval#: 173071349

Job Name: GBT Real Estate LLC/11-28 31st  
Job Address: 11-28 31st Drive  
Long Island City, NY 11106  
Quantity Unit

Origin Materials & Services

New York Soil Treatment Type II  
Contaminate Type: 2 Oil  
Treatment Type: Bio  
Fac Waste Code: Petroleum Contaminated Soil  
Storage Area: Not Applicable

28.11 Tns

Comment:

Driver: \_\_\_\_\_

Facility: Gibson, Barry



Manifest # 1288781

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

**Please Check One:**

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other: \_\_\_\_\_

**Non-Hazardous Material Manifest**

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28 31st Street Drive Long Island City, NY New York	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

**DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION**

**GENERATOR'S CERTIFICATION** – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date and Time: 10/12/2017 9:10 AM

**TRANSPORTER**

Company: SHIRLEY EVANS  
Address: 702 BUNSEN AVE  
Phone Number: \_\_\_\_\_  
Truck # and License Plate: #06-AS125L



Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

Ticket: 700000737610

Date Time Scale  
In: 10/12/2017 10:07:06 Scale CE  
Out: 10/12/2017 10:07:17 P.T.

Manifest: 1614904  
Vehicle ID: 07SHIR44  
Vehicle Permit:  
Customer: MORGAN CONSTRUCTION NY IN

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002  
Facility Approval#: 173071349  
Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive  
Long Island City, NY 11106

Origin Materials & Services

Quantity Unit

New York

Soil Treatment Type II

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Gibson, Barry

GENERATOR





Manifest # 1614904

GLOBAL JOB NUMBER: 145639

FACILITY APPROVAL NUMBER: 173071349

**Please Check One:**

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

**Non-Hazardous Material Manifest**

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28 31st Street Drive Long Island City New York	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: _____	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

**DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION**

Mix Dirt  
SOIL/HILL MATERIAL  
(0-2)

**GENERATOR'S CERTIFICATION** – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date and Time: 10/12/2017

**TRANSPORTER**

Company: Sherley Express Phone Number: \_\_\_\_\_  
Address: Hillside NJ Truck # and License Plate: A5317W #44  
Driver: Paul Alex SW Haulers Permit #: \_\_\_\_\_  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: \_\_\_\_\_ Date and Time: 10/12/17

**DESTINATION**

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: \_\_\_\_\_ Date and Time: 10/12/17

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: \_\_\_\_\_ Date and Time: 10/12/17

**GENERATOR**



Ticket: 700000737581

Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008

Ph: (732) 541-8909 Fax: (732) 541-8105

Manifest: 1288780  
Vehicle ID: 07SHIR12  
Vehicle Permit:

Customer: MORGAN CONSTRUCTION NY IN

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Origin

Materials & Services

Facility Approval#: 173071349

Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive

Long Island City, NY 11106

Quantity Unit

New York

Soil Treatment Type II

27.36 Tns

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Gibson, Barry

**GENERATOR**





Manifest # 1288780

GLOBAL JOB NUMBER:

145639

FACILITY APPROVAL NUMBER:

173071349

## Please Check One:

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

## Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28 31st Drive LONG ISLAND CITY NEW YORK	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE:	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

## DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

SOIL/FILL MATERIAL (0'-2')
-------------------------------

## GENERATOR'S CERTIFICATION – Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: ROLOFF Title: P.M.  
Signature: [Signature] Date and Time: 10/12/2017 8:25AM

## TRANSPORTER

Company: Shuler Phone Number: \_\_\_\_\_  
Address: \_\_\_\_\_ Truck # and License Plate: A 5116 B (12)  
Driver: [Signature] SW Haulers Permit #: \_\_\_\_\_  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10-12-17

## DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: \_\_\_\_\_

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10/12/17

GENERATOR



Ticket: 700000737523

Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: (732) 541-8909 Fax: (732) 541-8105

In: 10/12/2017 09:32:49 Scale CE  
Out: 10/12/2017 09:33:07 P.T.

	Lbs	Tns
Gross:	74500	37.25
Tare:	26220	13.11
Net:	48280	24.14

Manifest: 1288779  
Vehicle ID: 07LOGI3  
Vehicle Permit:

Customer: MORGAN CONSTRUCTION NY IN

Facility Approval#: 173071349

Generator: GBT Real Estate LLC  
Gen Address: 57 Allen Street  
New York, NY 10002

Job Name: GBT Real Estate LLC/11-28 31s  
Job Address: 11-28 31st Drive  
Long Island City, NY 11106

Materials & Services

Quantity Unit

Origin

New York

Soil Treatment Type II

24.14 Tns

Contaminate Type: 2 Oil

Treatment Type: Bio

Fac Waste Code: Petroleum Contaminated Soil

Storage Area: Not Applicable

Comment:

Driver: \_\_\_\_\_

Facility: \_\_\_\_\_

Gibson, Barry

GENERATOR





Manifest # 1288779

GLOBAL JOB NUMBER: 148639

FACILITY APPROVAL NUMBER: 173071349

**Please Check One:**

- ☒ Clean Earth of Carteret  
24 Middlesex Avenue  
Carteret, NJ 07008  
Ph: 732-541-8909
- ☐ Clean Earth of Maryland  
1469 Oak Ridge Place  
Hagerstown, MD 21740  
Ph: 301-791-6220
- ☐ Clean Earth of New Castle  
94 Pyles Lane  
New Castle, DE 19720  
Ph: 302-427-6633
- ☐ Clean Earth of Greater Washington  
6250 Dower House Road  
Upper Marlboro, MD 20772  
Ph: 301-599-0939
- ☐ Clean Earth of Philadelphia  
3201 S. 61st Street  
Philadelphia, PA 19153  
Ph: 215-724-5520
- ☐ Clean Earth of North Jersey  
115 Jacobus Avenue  
Kearny, NJ 07032  
Ph: 973-344-4004
- ☐ Clean Earth of Southeast Pennsylvania  
7 Steel Road East  
Morrisville, PA 19067  
Ph: 215-428-1700
- ☐ Other \_\_\_\_\_

**Non-Hazardous Material Manifest**

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: 11-28 31 Street Drive LONG ISLAND CITY NEW YORK	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE:	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

**DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION**SOIL/FML MATERIAL  
(0'-2')**GENERATOR'S CERTIFICATION** -- Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Rodol AO Title: P.M.  
Signature: [Signature] Date and Time: 10/12/2017

**TRANSPORTER**

Company: Logitech Transport Phone Number: \_\_\_\_\_  
Address: 7-8-Box 787 Hillside Truck # and License Plate: A5369X A03  
Driver: [Signature] SW Haulers Permit #: \_\_\_\_\_  
(Type or Print Clearly) (applicable state permit #)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 10-12-2017

**DESTINATION**

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 10-12-2017

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: 10/12/17

**GENERATOR**



Please read all instructions before completing this tracking document.

Please type or print clearly.

**Instructions** (See Subdivision 360-16.4)(1)(i)

1. **Generating C&D processing facility:** complete numbers 1-6, keep a copy and give a copy to the hauler.
2. **Hauler:** complete numbers 7 and 8, keep a copy and give a copy to the receiving facility.
3. **Receiving Facility:** complete numbers 9 and 10, keep a copy and return a copy to the generating C&D facility within two weeks.

**Generating C&D Processing Facility Section**

1. Generating C&D processing facility name:

GST Real Estate LLC

2. Hauler name:

Two Cousins

Truck 12

Mailing address (street):

57 Allen St

Mailing address (street):

1502 137th

City, State and Zip:

N4 NY 10002

City, State and Zip:

College Pt NY 11756

Telephone number:

( )

Telephone number:

(917) 642-6789

3. Part 360 permit number:

5. Materials transported (use additional sheets if necessary)

Type

Quantity

Indicate tons or cubic yards

Date of permit expiration:

1/1/11

4. Destination Facility name:

Evangelon Recycling

Mailing address (street):

12750 Northern Blvd

City, State and Zip:

Flushing NY 11368

Telephone number:

(718) 205-8078

6. Generator's certification:

I hereby affirm under penalty of perjury that information provided on this document and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have authorized as Project Foreman (title) of GST Real Estate LLC (entity) to sign this tracking document pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Printed/Typed Name

Tim Bunney

Signature



Mo. | Day | Year

1 | 0 | 1 | 1 | 1 | 1

**Hauler Section**

7. Hauler Section (Certification of Receipt of Construction and Demolition Debris as described in item 5)

Printed/Typed Name



Signature



Mo. | Day | Year

1 | 0 | 1 | 1 | 1 | 1

8. Hauler Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)

**Receiving Facility Section (Transfer, Recycling, Disposal)**

9. Receiving Facility Section (Certification of Receipt of Construction and Demolition Debris as described in item 5)

Printed/Typed Name

Signature

Mo. | Day | Year

1 | 0 | 1 | 1 | 1 | 1

(Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)





# Construction and Demolition Debris Tracking Document

Please read all instructions before completing this tracking document.

2

Please type or print clearly

## Instructions (See Subdivision 360-16.4(f))

1. **Generating C&D processing facility:** complete numbers 1-6, keep a copy and give a copy to the hauler.
2. **Hauler:** complete numbers 7 and 8, keep a copy and give a copy to the receiving facility.
3. **Receiving Facility:** complete numbers 9 and 10, keep a copy and return a copy to the generating C&D facility within two weeks.

## Generating C&D Processing Facility Section

1. Generating C&D processing facility name:

GDT Real Estate LLC

2. Hauler name:

Two Cousins

Mailing address (street):

57 Allen St

Mailing address (street):

15-02 127th

City, State and Zip:

NY NY 10002

City, State and Zip:

College Pt NY 11716

Telephone number:

( )

Telephone number:

( )

3. Part 360 permit number:

Date of permit expiration:

1 1

5. Materials transported (use additional sheets if necessary)

Type

Quantity

indicate tons or cubic yards

4. Destination Facility name:

Evergreen Recycling

Mailing address (street):

12710 Northern Blvd

City, State and Zip:

Flushing NY 11768

Telephone number:

(718) 205-8070

6. Generator's certification:

I hereby affirm under penalty of perjury that information provided on this document and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have authority as project foreman (title) of GDT Real Estate LLC (entity) to sign this tracking document pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Printed/Typed Name

Tim Runyon

Signature

Mo. : Day : Year

11 : 01 : 11 : 7

## Hauler Section

7. Hauler Section (Certification of Receipt of Construction and Demolition Debris as described in item 5)

Printed/Typed Name

Alexis Cordeiro

Signature

Mo. : Day : Year

11 : 01 : 11 : 7

8. Hauler Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)





# Construction and Demolition Debris Tracking Document

Please read all instructions before completing this tracking document.

Please type or print clearly

Instructions (See Subdivision M6-15-R01C)

1. Generating C&D processing facility; complete numbers 1-6, keep a copy and give a copy to the hauler.
2. Hauler; complete numbers 7 and 8, keep a copy and give a copy to the receiving facility.
3. Receiving Facility; complete numbers 9 and 10, keep a copy and return a copy to the generating C&D facility within two weeks.

## Generating C&D Processing Facility Section

1. Generating C&D processing facility name: <u>GBT Real Estate LLC</u>	2. Hauler name: <u>Tim Collins</u>														
Mailing address (street): <u>57 Allen St</u>	Mailing address (street): <u>11-02 123rd</u>														
City, State and Zip: <u>NY, NY 10002</u>	City, State and Zip: <u>Long Pt NY 11766</u>														
Telephone number: ( )	Telephone number: ( )														
3. Part 360 permit number:  Date of permit expiration: <u>1/1/2000</u>	5. Materials transported (use additional sheets if necessary) <table border="1"> <thead> <tr> <th>Type</th> <th>Quantity <small>Indicate tons or cubic yards</small></th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Type	Quantity <small>Indicate tons or cubic yards</small>												
Type	Quantity <small>Indicate tons or cubic yards</small>														
4. Destination Facility name: <u>Evergreen Recycling</u>															
Mailing address (street): <u>12750 Northern Blvd</u>															
City, State and Zip: <u>Flushing NY 11358</u>															
Telephone number: <u>(718) 205-8038</u>															

### 6. Generator's certification:

I hereby affirm under penalty of perjury that information provided on this document and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have authorized as President in forma (title) of Evergreen GDT Real Estate (entity) to sign this tracking document pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Printed/Typed Name	Signature	Mo. : Day : Year

## Hauler Section

7. Hauler Section ( Certification of Receipt of Construction and Demolition Debris as described in item 5)

Printed/Typed Name <u>DAVID JOE</u>	Signature <u>[Signature]</u>	Mo. : Day : Year <u>1/10/11/11/11</u>
--	---------------------------------	--

8. Hauler Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)

## Receiving Facility Section (Transfer, Recycling, Disposal)

9. Receiving Facility Section ( Certification of Receipt of Construction and Demolition Debris as described in item 5)

Printed/Typed Name	Signature	Mo. : Day : Year

10. Receiving Facility Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)





# Construction and Demolition Debris Tracking Document

Please read all instructions below completing this tracking document

Please type or print clearly

## Instructions (See Subdivision 360-26-4.1(a))

1. Generating C&D processing facility: complete numbers 1-6, keep a copy and give a copy to the hauler.
2. Hauler: complete numbers 7 and 8, keep a copy and give a copy to the receiving facility.
3. Receiving Facility: complete numbers 9 and 10, keep a copy and return a copy to the generating C&D facility within two weeks.

### Generating C&D Processing Facility Section

1. Generating C&D processing facility name: <u>GRT Real Estate LLC</u>	2. Hauler name: <u>Enviro Control</u>																
Mailing address (street): <u>57 Ave A</u>	Mailing address (street): <u>1507 125th</u>																
City, State and Zip: <u>NY, NY 10022</u>	City, State and Zip: <u>Coleen pt Ny 11736</u>																
Telephone number: ( )	Telephone number: ( )																
3. Part 360 permit number: Date of permit expiration: <u>1/1/11</u>	5. Materials transported (use additional sheets if necessary) <table border="1"> <thead> <tr> <th>Type</th> <th>Quantity</th> </tr> <tr> <th></th> <th>Indicate tons or cubic yards</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Type	Quantity		Indicate tons or cubic yards												
Type	Quantity																
	Indicate tons or cubic yards																
4. Destination Facility name: <u>Evergreen Recycling</u>																	
Mailing address (street): <u>12750 Southern Blvd</u>																	
City, State and Zip: <u>Flushing NY 11358</u>																	
Telephone number: (718) <u>205-8070</u>																	

### 6. Generator's certification:

I hereby affirm under penalty of perjury that information provided on this document and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have authority as Project Manager (title) of GRT Real Estate (entity) to sign this tracking document pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Printed/Typed Name <u>Tam Bunja</u>	Signature <u>[Signature]</u>	Mo. : <u>1</u> Day : <u>1</u> Year : <u>7</u>
--	---------------------------------	---

### Hauler Section

#### 7. Hauler Section ( Certification of Receipt of Construction and Demolition Debris as described in item 5)

Printed/Typed Name <u>NESTOR GALINDO</u>	Signature <u>[Signature]</u>	Mo. : <u>1</u> Day : <u>1</u> Year : <u>7</u>
---	---------------------------------	---

#### 8. Hauler Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)

### Receiving Facility Section (Transfer, Recycling, Disposal)

#### 9. Receiving Facility Section ( Certification of Receipt of Construction and Demolition Debris as described in item 5)

Printed/Typed Name	Signature	Mo. : Day : Year :
--------------------	-----------	--------------------

#### 10. Receiving Facility Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)

Sign and return to generating C&D processing Facility within two weeks.



Counting Call processing fees; complete number 1-6, keep a copy, and give a copy to the bank.

- Interviewing Faculty, complete numbers 1 and 2, keep a copy and give a copy to the records mg. faculty.  
Interviewing Faculty, complete numbers 3 and 4, keep a copy and return a copy to the dean's office.  
C&D faculty in about two weeks.

2000年12月12日

1. Permitting & processing facility name COT BSM 2500	2. Handler name TSC COT # 14	3. Shipping address (street) 53 RD	4. City, State and Zip NY NY 10012	5. Telephone number ( )	6. Part 360 permit number	7. Date of permit expiration	8. Destination Facility name Evergreen Recycling	9. Mailing address (street) 1270 Morris Ave	10. City, State and Zip Fairfield NY 11736	11. Telephone number (716) 205-6078
5. Materials transported (use additional sheets if necessary) Quantity Type Indicate tons or cubic yards										

I hereby affirm under penalty of perjury that information provided on this document and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have authorized the undersigned to execute this document pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Patricia Joseph (name) of EBI Real Estate (entity) to sign this tracking document pursuant to 6 NYCRR Part 360.

Printed/Typed Name	<u>1/11/11</u>	<u>8/11/11</u>
Signature		
Md. : (No) : Year	11 : 11 : 11	7

**Abstract**

Printed/Typed Name <b>NEIL K. GALINDO</b>		Signature <b>NEIL K. GALINDO</b>	No. of Pages <b>17</b>
7. Header Section ( Certification of Receipt of Construction and Demolition Debris as described in item 5)			
8. Header Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number)			

Receiving Facility Section (Transfer, Recycling, Disposal)

(Printed/Typed Name) Signature		Date:      Mo.      Day      Year
10. Rectifying Facility Discrepancy Box (Any discrepancies in items 2, 4 or 5 should be noted here and by the item number.)		

*Sign and return to: Processing Center, 10000 Highway 100, Suite 100, Houston, TX 77036.*



EVERGREEN RECYCLING  
127-50 NORTHERN BLVD  
FLUSHING, NY 11368  
718-446-7000

**SALE**

MID: 7060 Store: 0001 Term: 0005  
Batch #: 541 REF#: 00000002  
10/16/17 RRN: 728909402067  
Trans ID: 1016MEB0YDUGR 055330  
APPR CODE: 06556E  
MASTERCARD  
\*\*\*\*\*8293  
Manual CP  
\*\*/

**AMOUNT \$910.00**

APPROVED

CUSTOMER COPY

g of Corona Inc.  
ern Blvd.  
Y 11368  
illets Point Blvd.  
ax: 718-205-8202

EB \$910.00//MORGAN CONS

31TH ST BR LLC QN

Concrete Disposal - In

100 774708

**SCALE TICKET**

Ticket Number:

Date:

Trucker:

Truck No.:

License No.:

Job No.:

Entered By:

100582648

10/16/2017 5:56 PM

Two Cousins, 18

MORGAN CONS

YARDS / TONS

YARDS / TONS

20.00

CURB DELIVERIES ONLY—OTHERS MADE ELSEWHERE SOLELY AT THE PURCHASER'S RISK

RECEIVED BY

FULL SIGNATURE—NO INITIALS

FERNANDEZ



# Disposal Facility Permits



47-14-020 (01/94)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SOLID WASTEREGISTRATION FORM FOR A  
SOLID WASTE MANAGEMENT FACILITYPlease read and follow all instructions before completing  
this registration form

Please Type or Print clearly

THIS IS NOT A LPA PERMIT

## DEPARTMENT USE ONLY


DEC REGISTRATION #

41W93

DEC ADMINISTRATION #

DATE RECEIVED

9.10.98

1. FACILITY NAME AND LOCATION		2. FACILITY OWNER'S NAME	
EVERGREEN RECYCLING OF CORONA		TULLY ENVIRONMENTAL, INC.	
Street WILLETS POINT BLVD.		Mailing Address 127-50 NORTHERN BLVD.	
City/Village CORONA MEADOWS YARD		City/Town/Village FLUSHING	
Town CORONA		State/Zip Code NEW YORK, 11368	
County QUEENS		Telephone Number (718) 446-7000 ex 248 297	
Telephone Number (718) 446-7000		3. FACILITY OPERATOR'S NAME (if different)	
TULLY ENVIRONMENTAL, INC.		4. SITE OWNER'S NAME (if different)	
Mailing Address 127-50 NORTHERN BLVD.		METROPOLITAN TRANSPORTATION AUTHORITY	
City/Town/Village FLUSHING		Mailing Address 347 MADISON AVENUE	
State/Zip Code NEW YORK 11368		City/Town/Village NEW YORK	
Telephone Number (718) 446-7000 ex 248		State/Zip Code NEW YORK 10017-3739	
Telephone Number (718) 446-7000 ex 248		Telephone Number (212) 878-7048	
5. TYPE OF FACILITY REGISTRATION (check all applicable boxes)			
<input type="checkbox"/> Energy Recovery Incinerators or Pyrolysis Units [360-5.1(c)]		<input type="checkbox"/> Source Separated, Nonputrescible Solid Waste Recyclables Sorting and Recovery Facilities [360-12.1(d)]	
<input type="checkbox"/> Land Application and Sludge Storage Facilities [360-4.1(c)]		<input type="checkbox"/> Waste Tire Retreaders [360-13.1(d)(1)(i)]	
<input type="checkbox"/> Composting and Other Distribution and Marketing Facilities [360-5.3(h)]		<input type="checkbox"/> Waste Tires Stored for On-site Energy Recovery [360-13.1(d)(1)(ii)]	
<input type="checkbox"/> Land Clearing Debris Landfills three acres or less [360-7.2(a)]		<input type="checkbox"/> Tire Bunkers Storing Waste Tires [360-13.1(d)(1)(iii)]	
<input type="checkbox"/> Transfer Stations (non-cipally owned/operated/contracted) receiving less than 50,000 cubic yards or 12,500 tons of household solid waste annually [360-11.1(b)(1)]		<input type="checkbox"/> Tire Manufacturing Facilities [360-13.1(d)(1)(iv)]	
<input type="checkbox"/> Transfer Stations (non-cipally owned/operated/contracted) receiving less than 50,000 cubic yards or 12,500 tons of containerized solid waste annually [360-11.1(b)(2)]		<input checked="" type="checkbox"/> Processing Facilities Receiving Only Recognizable Uncontaminated Concrete, Asphalt Pavement, Brick, Soil or Rock [360-16.1(d)(1)(i)]	
<input type="checkbox"/> Other Facilities not specifically described above. Specify type		<input type="checkbox"/> Uncontaminated Unadulterated Wood Processing Facilities [360-16.1(d)(1)(ii)]	
6. SOLID WASTE HANDLED		7. OPERATIONS SCHEDULE - Normal schedule of operation	
a. List wastes and/or materials to be accepted: Concrete Fill, Virgin Sand, Gravel, Asphalt		Mon-Fri 7am-6pm	
b. Capacity (Specify Units - see instructions) design capacity 10,000 yards storage on site 50,000 yards		8. NAME(S) OF ALL MUNICIPALITIES SERVED	
9. CERTIFICATION: I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority as President (title) of Tully Environmental (Entity) to sign this registration form pursuant to 6 NYCRR Part 360. By signing this registration form, I affirm that I have read the applicable regulation(s) and will abide by all conditions of the registration requirements. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.			
Printed/Typed Name Peter K. Tully		Signature 	
		No. Day Year 09 08 98	

REGIONAL OFFICE COPY - COPY 01

PAGE 3/3

ID: S156713362

SEP-01-98 13:36 FROM: GANNETT FLEMING TV



**NYS DEC REGION 2**  
**County: New York**

<b>Consolidated Edison of NY</b>	<b>[31W13]</b>	NYUTM East: 586100 NYUTM North: 4492500
ACTIVITY DESCRIPTION:	C&D processing - registration	
OWNER TYPE:	Private	360 PERMIT NUMBER: 31W13
REGULATORY STATUS:	Registration	PERMIT ISSUED: 10/12/2005
OWNER:	Consolidated Edison company of New York	PERMIT EXPIRES: ---
ADDRESS:	4 Irving Place Rm 15NE	CONTACT: George Ruiz
(Mailing):	New York, NY 10003	ADDRESS: 276-290 Avenue C ( East 16th Street)
PHONE:	(212)460-2278	(Location): New York, NY 10009
WASTE TYPE:	Construction & Demolition Debris, Asphalt, Street Sweepings	PHONE: (212)253-9553
		Date of Last Inspection:

**NYS DEC REGION 2**  
**County: Queens**

<b>Durante Brothers Construction</b>	<b>[41W22]</b>	NYUTM East: 597431 NYUTM North: 4513760
ACTIVITY DESCRIPTION:	C&D processing - registration	
OWNER TYPE:	Private	360 PERMIT NUMBER: 41W22
REGULATORY STATUS:	Registration	PERMIT ISSUED: 04/20/1995
OWNER:	John and Michael Durante	PERMIT EXPIRES: ---
ADDRESS:	31-40 123 Street	CONTACT: John L. Durante Jr
(Mailing):	Flushing, NY 11354	ADDRESS: 31-40 123 STREET
PHONE:	(718)762-2500	(Location): Flushing, NY 11354
WASTE TYPE:	Rock, Soil (Clean), Concrete, Metals (Ferrous), Metals (Non-Ferrous)	PHONE: (718)762-2500
		Date of Last Inspection:

<b>Evergreen Recycling of Corona (Willets Point Blvd)</b>	<b>[41W93]</b>	NYUTM East: 597757 NYUTM North: 4512582
ACTIVITY DESCRIPTION:	C&D processing - registration	
OWNER TYPE:		360 PERMIT NUMBER: 41W93
REGULATORY STATUS:	Registration	PERMIT ISSUED: ---
OWNER:	Tully Environmental, Inc.	PERMIT EXPIRES: ---
ADDRESS:	127-50 Northern Blvd.	CONTACT: Daniel Scully
(Mailing):	Flushing, NY 11368	ADDRESS: Willets Point Blvd
PHONE:	(718)446-7000	(Location): Corona, NY 11368
WASTE TYPE:	Asphalt, Concrete, Soil (Clean), Construction & Demolition Debris, Metals (Ferrous), Metals (Non-Ferrous), Brick, Rock	PHONE: (718)205-8038
		Date of Last Inspection:

<b>Hunters Point Recycling Inc</b>	<b>[41MB1]</b>	NYUTM East: 589575 NYUTM North: 4510523
ACTIVITY DESCRIPTION:	C&D processing - registration	
OWNER TYPE:	Private	360 PERMIT NUMBER: 41MB1
REGULATORY STATUS:	Registration	PERMIT ISSUED: ---
OWNER:	James Juliano	PERMIT EXPIRES: ---
ADDRESS:	213-19 99 Avenue	CONTACT: James Juliano
(Mailing):	Queens village, NY 11429	ADDRESS: 29-55 Hunters Point Ave
PHONE:	(718)465-5600	(Location): Long Island City, NY 11101
WASTE TYPE:	Concrete, Rock, Soil (Clean), Metals (Ferrous), Metals (Non-Ferrous), Wood (Unadulterated)	PHONE: (516)779-6081
		Date of Last Inspection:





## State of New Jersey

CHRIS CHRISTIE  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTIN  
Commissioner

KIM GUADAGNO  
Lt. Governor

Division of Solid & Hazardous Waste  
Bureau of Recycling & Hazardous Waste Management  
401 East State Street  
P.O. Box 420, Mail Code 401-02C  
Trenton, NJ 08625-0420  
Tel (609) 984-3438 Fax (609) 777-1951/984-0565  
[www.nj.gov/dep/dshw/recycling](http://www.nj.gov/dep/dshw/recycling)

August 31, 2017

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

John Eshelman, Manager  
Clean Earth of Carteret, LLC  
24 Middlesex Avenue  
Carteret, NJ 07008

Re: Renewal of Class B Recycling Center General Approval  
Clean Earth of Carteret, LLC  
Borough of Carteret, Middlesex County  
Facility ID No: 132310  
Permit No.: CBG160002

Dear Mr. Eshelman:

Please be advised that the New Jersey Department of Environmental Protection, Division of Solid and Hazardous Waste, Bureau of Recycling and Hazardous Waste Management (Bureau) has reached a final determination to renew the above Class B Recycling Center General Approval. Enclosed is a copy of the final document.

Should you wish to contest any of the conditions of the enclosed general approval, you must file a request for an adjudicatory hearing within twenty (20) days of the date you receive this decision notice in accordance with the procedures found in N.J.A.C. 7:26A-3.14. A copy of the request should also be mailed to this office.

If you have any questions concerning this matter, please contact Nick Nader at (609) 984-2067 or [nicholas.nader@dep.nj.gov](mailto:nicholas.nader@dep.nj.gov).

Sincerely,

Zafar M. Billah, Acting Chief  
Bureau of Recycling & Hazardous Waste Management



Enc.

C(w/enc.): \*Tom Farrell, Chief, Bureau of Solid Waste Compliance and Enforcement  
\*Paul Smith, Supervisor, BSWC&E – Central Region  
Les Jones, Middlesex County Health Officer  
Christopher Sikorski, Middlesex County Solid Waste Coordinator  
Kathleen M. Barney, Municipal Clerk, Borough of Carteret

\*By e-mail only





## State of New Jersey

CHRIS CHRISTIE  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTIN  
Commissioner

KIM GUADAGNO  
Lt. Governor

Division of Solid & Hazardous Waste  
Bureau of Recycling & Hazardous Waste Management  
401 East State Street  
P.O. Box 420, Mail Code 401-02C  
Trenton, NJ 08625-0420  
Tel (609) 984-3438 Fax (609) 777-1951/984-0565  
[www.state.nj.gov/dep/dshw/recycling](http://www.state.nj.gov/dep/dshw/recycling)

### RECYCLING CENTER GENERAL APPROVAL FOR CLASS B RECYCLABLE MATERIALS

Under the provisions of N.J.S.A. 13:1E-1 et seq. and N.J.S.A. 13:1E-99.11 et seq., known as the Solid Waste Management Act and New Jersey Statewide Mandatory Source Separation and Recycling Act, respectively, and pursuant to N.J.A.C. 7:26A-1 et seq., known as the Recycling Regulations, this approval is hereby issued to:

#### Clean Earth of Carteret, LLC

Facility Type:	Recycling Center for Class B Materials
Lot & Block No.:	3.02/1
Municipality:	Borough of Carteret
County:	Middlesex
Facility ID No.:	132310
Permit No.:	CBG160002

This General Approval is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection (Department).

This General Approval shall not prejudice any claim the State may have to riparian land nor does it allow the registrant to fill or alter, or allow to be filled or altered, in any way, lands that are deemed to be riparian, wetlands, stream encroachment or flood plains, or within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this State without prior acquisition of the necessary grants, permits, or approvals from the Department of Environmental Protection.

August 31, 2017  
Issuance Date

March 7, 2022  
Expiration Date

Zafar M. Billah, Acting Chief  
Bureau of Recycling & Hazardous Waste Management



### Scope of Approval

This General Approval (approval), along with the referenced application documents herein specified, shall constitute the sole approval of Recycling Center operations for Class B Recyclable Material (petroleum contaminated soil, street sweepings, brick, block, concrete, stone, rock, and asphalt) by Clean Earth of Carteret, LLC, located in the Borough of Carteret, Middlesex County, New Jersey. Any registration, approval or permit previously issued by the Division of Solid and Hazardous Waste, or its predecessor agencies, for the specific activities as described below and as conditioned herein, is hereby superseded.

### Regulated Activities at the Facility

Items 1 through 39 of this approval contain the general conditions applicable to all recycling centers. Items 40 through 87 of this approval contain the operating requirements specific to the recycling center for receipt, storage, processing, or transfer of Class B recyclable materials including non-hazardous petroleum contaminated soils. Items 88 through 91 of this approval are the sampling requirements for testing the street sweepings. Items 92 through 101 of this approval contain the conditions for the aggregate crushing operations.

### Facility Description

The recycling center is a Class B facility owned and operated by Clean Earth of Carteret, LLC. The recycling center is located at 24 Middlesex Avenue on Block 1, Lot 3.02, in Borough of Carteret, Middlesex County. This regional recycling center receives petroleum contaminated soil from soil remediation contractors and street sweepings from municipalities. The recycling center is authorized to receive, process and transfer brick, block, concrete, stone, rock, and asphalt from construction and demolition contractors, construction companies, municipalities, and counties. Hours of operation for the receipt, treatment/processing and transferring source separated recyclable material can occur 24 hours per day, 7 days per week. The operation of the crushers shall be limited to: 7:00 a.m. to 7:00 p.m., Monday through Friday and Saturdays from 7:00 a.m. to 4:00 p.m.

The recycling center is also utilized for finished product storage and equipment storage as shown on the site plan. The recycling center markets clean soil and dense graded aggregate from the site.

When the Approval was last renewed on October 27, 2014 by the Division of Solid and Hazardous Waste, some of the authorized equipment, described in Requirement #94, were inadvertently omitted. Requirement #94 has been revised to include an actual list of authorized equipment.

### Approved General Approval Application and Associated Documents

The registrant shall construct and operate the facility in accordance with N.J.A.C. 7:26A-1 *et seq.*, the conditions of this Approval, and the following documents:



- a) Site plan entitled "As-Built Site Map Clean Earth of Carteret, Carteret, Middlesex County, NJ", prepared by Bradley J. Cunningham, P.E. of Compliance Plus Services, Inc., dated May 9, 2014 and last revised May 2, 2017.
- b) Clean Earth of Carteret, Submittal of signed transfer agreement, prepared and signed by Michael D. Logan, Vice President, Compliance Plus Services, dated May 22, 2003.
- c) Plan SB-01 entitled "Unprocessed PHC Soil Storage Building Layout, Clean Earth of Carteret, LLC, Carteret, Middlesex County, New Jersey", prepared by Bradley J. Cunningham, P.E., of Compliance Plus Services, Inc., dated May 2, 2014.
- d) Clean Earth of Carteret, Inc., Request to utilize cement kiln dust or lime as a drying agent to remove moisture from its treated soils, prepared and signed by Michael D. Logan, Vice President, Compliance Plus Services, dated December 27, 2006.
- e) Notification of Proposed Stock Purchase of Clean Earth Holdings, Inc. dated August 20, 2014 and prepared by Michael D. Logan, Vice President of Compliance Plus Services, Inc.
- f) Class B Recycling Center General Permit Renewal and Modification Application for the Acceptance of Restricted Use Aggregate ("RUA") and Direct Reuse Soils ("DRS SOILS"), dated March 5, 2012, prepared by Michael D. Logan, Vice President of Compliance Plus Services, Inc.
- g) Class B Recycling Center General Approval Renewal Application, dated June 10, 2014, and prepared by Michael D. Logan, Vice President of Compliance Plus Services, Inc. This Renewal of the Application does not include any modification approval requested to the proposed acceptance and processing of Direct Reuse of Soils (DRS) and Restricted Reuse Aggregate (RUA) referenced in the Compliance Plus Services, Inc. letter dated March 5, 2012.
- h) Class B Recycling Center Renewal Application of General Approval dated November 21, 2016 and signed by Michael D. Logan, Vice President – Environmental Services, Compliance Plus Services, Inc. and including the following:
  - 1. Ground Lease Agreement dated November 1, 2010;
  - 2. List of Permitted Equipment; and
  - 3. Certification dated November 21, 2016, signed by Christopher Dods, President – Clean Earth of Carteret and certifying that there have been no changes in the operations of the recycling since the most recent Approval modification.
- i) Supplemental information dated February 17, 2017 and signed by Michael D. Logan, Compliance Plus Services.



In case of conflict, the provisions of N.J.A.C. 7:26A-1 *et seq.* shall have precedence over the conditions of this Approval, and the conditions of this Approval shall have precedence over plans and specifications listed above.



**CLEAN EARTH OF CARTERET LLC**  
132310 CBG160002 Class B Recycling Ctr General Apprv -Renewal  
Requirements Report

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**Subject Item: PI 132310 -**

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1. All persons issued a general approval to operate a recycling center for Class B, Class C and/or Class D recyclable material pursuant to N.J.A.C. 7:26A-1 et seq. shall comply with all conditions of the approval [N.J.A.C. 7:26A-3.1(a)]
2. The holder of this general approval shall prominently post and maintain a legible sign, at or near the entrance to the recycling center, indicating that the recycling center is an approved New Jersey Department of Environmental Protection recycling center. The sign shall also indicate the following: Hours of operation of the recycling center; Listing of the source separated materials to be received; The size, weight, or other restrictions regarding materials to be received; The maximum amount of contaminants allowed in each load; Warning that loads will be inspected and will be barred from offloading if the contaminant level is exceeded; and Notice that the person offloading shall certify the amount of material per load, municipality of origin of the material and any other information contained on the Recyclable Material Receipt Form [N.J.A.C. 7:26A-3.5(f)]
3. Application for renewal of this general approval shall be submitted at least three months prior to expiration of the current approval and shall comply with all requirements for renewal set forth in N.J.A.C. 7:26A-3.6 et seq. One copy of the application for renewal of the general approval shall be submitted by the applicant to the municipal clerk of the municipality in which the recycling center is located, and to the solid waste or recycling coordinator of the county in which the recycling center is located [N.J.A.C. 7:26A-3.6(a)]
4. The applicant for renewal of this general approval shall certify in writing to the Department that there have been no changes in the operations of the recycling center since the issuance of the general approval in order to renew the approval in its existing form. In the event that there have been changes in the operations of the recycling center or where changes are planned, the application for renewal of a general approval shall be accompanied by a written request to modify the general approval in accordance with N.J.A.C. 7:26A-3.10 [N.J.A.C. 7:26A-3.6(b)]
5. In a case where the holder of this general approval does not comply with N.J.A.C. 7:26A-3.6(a) and (b) and continues to operate without renewal of the general approval, the Department may take enforcement action including the assessment of penalties under N.J.S.A. 13:1E-9; require the holder of this general approval to file an application as a new applicant for a general approval in accordance with N.J.A.C. 7:26A-3.2 and pay the application fee as per N.J.A.C. 7:26A-2; and/or take any other appropriate actions [N.J.A.C. 7:26A-3.6(c)]
6. All persons granted a renewal pursuant to N.J.A.C. 7:26A-3.6(d) shall continue to pay the annual fee as specified in N.J.A.C. 7:26A-2 [N.J.A.C. 7:26A-3.6(h)]
7. The holder of this general approval shall obtain prior approval from the Department for any modification of the general approval [N.J.A.C. 7:26A-3.10(a)]
8. Any change affecting the conditions of this general approval requires the prior approval of the Department [N.J.A.C. 7:26A-3.10(b)1]
9. Any change to the information submitted pursuant to N.J.A.C. 7:26A-3.2(a), 3.4, 3.8, 3.18, 3.19 or 3.20 requires the prior approval of the Department, except that changes in end-market information submitted pursuant to N.J.A.C. 7:26A-3.2(a) 7 shall not require the prior approval of the Department but shall be handled in accordance with N.J.A.C. 7:26A-3.10(f). [N.J.A.C. 7:26A- 3.10(b)2]



**CLEAN EARTH OF CARTERET LLC**  
132310 CBG160002 Class B Recycling Ctr General Apprv -Renewal  
Requirements Report

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**Subject Item: PI 132310 -**

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10. The holder of this general approval shall notify the Department in writing of the intended modification and shall update the information submitted pursuant to N.J.A.C. 7:26A-3.2(a), 3.4, 3.8, 3.18, 3.19 or 3.20. The holder of this general approval shall also provide written notice to the solid waste or recycling coordinator of the applicable county of any request to modify a general approval. [N.J.A.C. 7:26A-3.10(c)]
11. The holder of this general approval shall not institute the modification until it receives written approval from the Department [N.J.A.C. 7:26A-3.10(e)]
12. Within one week of any change to the end-market information submitted to the Department pursuant to N.J.A.C. 7:26A-3.2(a)7, the holder of this general approval shall submit to the Department a written notification which details any change in the use of the recyclable material transferred from the recycling center to an end-market or in the end-market location to which the recyclable material is transferred. The written notification shall be sent to: New Jersey Department of Environmental Protection, Division of Solid and Hazardous Waste, Bureau of Recycling & Hazardous Waste Management, 401 East State Street, P.O. Box 420, Mail Code 401-02C, Trenton, New Jersey 08625-0420. [N.J.A.C. 7:26A- 3.10(f)]
13. The Department may revoke this general approval upon a determination that the holder of the general approval has violated any provision of N.J.S.A. 13:1E-1 et seq., the New Jersey Statewide Mandatory Source Separation and Recycling Act, or any rule, regulation or administrative order promulgated pursuant to N.J.S.A. 13:1E-1 et seq. and the New Jersey Statewide Mandatory Source Separation and Recycling Act [N.J.A.C. 7:26A-3.13(a)1]
14. The Department may revoke this general approval upon a determination that the holder of the general approval has violated any solid waste utility law at N.J.S.A. 48:2-1 et seq. or 48:13A-1 et seq., or any rule, regulation or administrative order promulgated pursuant to N.J.S.A. 48:2-1 et seq. or 48:13A-1 et seq [N.J.A.C. 7:26A-3.13(a)2]
15. The Department may revoke this general approval upon a determination that the holder of the general approval has violated any provision of any laws related to pollution of the waters, air or land surfaces of the State or of any other State or Federal environmental laws including criminal laws related to environmental protection [N.J.A.C. 7:26A-3.13(a)3]
16. The Department may revoke this general approval upon a determination that the holder of the general approval has refused or failed to comply with any lawful order of the Department [N.J.A.C. 7:26A-3.13(a)4]
17. The Department may revoke this general approval upon a determination that the holder of the general approval has failed to comply with any of the conditions of this general approval issued by the Department [N.J.A.C. 7:26A-3.13(a)5]
18. The Department may revoke this general approval upon a determination that the holder of the general approval has transferred a general approval to a new owner or operator pursuant to N.J.A.C. 7:26A-3.15 without the prior approval of the Department [N.J.A.C. 7:26A-3.13(a)6]
19. The Department may revoke this general approval upon a determination that the holder of the general approval has failed to obtain any required permit or approval from the Department or other State or Federal agency [N.J.A.C. 7:26A-3.13(a)7]



**CLEAN EARTH OF CARTERET LLC**  
132310 CBG160002 Class B Recycling Ctr General Apprv -Renewal  
Requirements Report

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**Subject Item: PI 132310 -**

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20. The Department may revoke this general approval upon a determination that the holder of the general approval has committed any of the acts which are criteria for denial of a general approval set forth in N.J.A.C. 7:26A-3.12. [N.J.A.C. 7:26A-3.13(a)8]
21. This general approval shall not be transferred to a new owner or operator without the Department's prior approval [N.J.A.C. 7:26A-3.15(a)]
22. A written request for permission to allow a transfer of this general approval must be received by the Department at least 60 days in advance of the proposed transfer of ownership or operational control of the recycling center. The request for approval shall include the following: the name, address and social security number of all prospective new owners or operators; a written certification by the proposed transferee that the terms and conditions contained in the general approval will be met by the proposed transferee; and a written agreement between the current owner or operator of the recycling center and the proposed new owner or operator containing a specific future date for transfer of ownership or operational control [N.J.A.C. 7:26A-3.15(a)1]
23. A new owner or operator may commence operations at the recycling center only after the existing approval has been revoked and a new approval is issued to the new owner or operator pursuant to N.J.A.C. 7:26A-3.5 [N.J.A.C. 7:26A-3.15(a)2]
24. The holder of this general approval remains liable for ensuring compliance with all conditions of the approval unless and until the existing approval is revoked and a new approval is issued to the new owner or operator pursuant to N.J.A.C. 7:26A-3.5 [N.J.A.C. 7:26A-3.15(a)3]
25. Compliance with the transfer requirements set forth at N.J.A.C. 7:26A-3.15 shall not relieve the holder of this general approval from the separate responsibility of providing notice of such transfer pursuant to the requirements of any other statutory or regulatory provision [N.J.A.C. 7:26A-3.15(a)4]
26. The transfer of a controlling interest in the stock or assets of the recycling center that is the subject of this general approval shall constitute a transfer of this general approval [N.J.A.C. 7:26A-3.15(b)]
27. The holder of this general approval shall maintain a daily record of the amounts of each recyclable material by type and municipality of origin which are received, stored, processed or transferred each day, expressed in tons, cubic yards, cubic feet or gallons. Those operators specifying this information in cubic yards shall also indicate the conversion ratio of the materials from cubic yards to tons [N.J.A.C. 7:26A-3.17(a)1]
28. The holder of this general approval shall maintain a daily record of the name, address and telephone number of the end-markets for all recyclable materials transported from the recycling center, including the amounts, in tons, cubic yards, cubic feet or gallons, transported to each end-market. Those persons specifying this information in cubic yards shall also indicate the conversion ratio of the materials from cubic yards to tons [N.J.A.C. 7:26A-3.17(a)2]
29. The holder of this general approval shall maintain a daily record of the amount of residue disposed of, expressed in tons, cubic yards, cubic feet or gallons, including the name and New Jersey Department of Environmental Protection solid waste registration number of the solid waste collector/hauler contracted to provide the haulage/disposal service. Those persons specifying the amount of residue in cubic yards shall also indicate the conversion ratio of the residue from cubic yards to tons. [N.J.A.C. 7:26A-3.17(a)3]



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30. The holder of this general approval shall retain all Recyclable Material Receipt Forms required pursuant to N.J.A.C. 7:26A-3.2(a)16iii for three calendar years following the calendar year for which an annual report is required pursuant to N.J.A.C. 7:26A-3.17(c) [N.J.A.C. 7:26A-3.17(b)]
31. The holder of this general approval shall submit an annual report containing monthly summary statements of the information required pursuant to N.J.A.C. 7:26A-3.17(a) to the New Jersey Department of Environmental Protection, Division of Solid and Hazardous Waste, on or before March 1 of each year, for the previous calendar year. The summaries shall include the following: monthly totals of the amount of recyclable material received from each customer by municipality of origin; monthly totals of the amount of recyclable product transferred to each end-market; and the amount of residue disposed of during each month. [N.J.A.C. 7:26A- 3.17(c)]
32. The holder of this general approval shall certify in writing to the Department that all residue generated at the recycling center has been disposed of in accordance with the solid waste management rules at N.J.A.C. 7:26. The certification shall be submitted annually as part of the annual report [N.J.A.C. 7:26A-3.17(e)]
33. All information submitted to the Department pursuant N.J.A.C. 7:26A shall be handled in accordance with the requirements of the Public Records law, N.J.S.A. 47:1-1 et seq. The Department will hold confidential all end-market information, as well as information pertaining to the municipality of origin of recyclable material, submitted pursuant to N.J.A.C 7:26A-3.2, 3.7, and 3.17 through 3.20 for a period of two years from the date on which the information is submitted to the Department, where specified as confidential by the applicant and where there are no health, safety or environmental concerns which require the release of the information, as determined by the Department. [N.J.A.C. 7:26A-3.17(f)]
34. The holder of this general approval shall provide a recycling tonnage report by March 1 of each year to all municipalities from which recyclable material is received in the previous calendar year. The report shall detail the amount of each source separated recyclable material, expressed in tons or cubic yards, brought to the recycling center, as well as the date on which the recyclable materials were delivered to the recycling center. Those persons specifying this information in cubic yards shall also indicate the conversion ratio of the materials from cubic yards to tons. [N.J.A.C. 7:26A-4.4(a)]
35. The recycling center shall not commence operations unless and until it is included in the applicable district solid waste management plan [N.J.A.C. 7:26A-4.2]
36. The construction of the recycling center that is the subject of this general approval shall be in conformance with the New Jersey Uniform Construction Code, N.J.S.A. 52:27D-119 et seq., and the rules promulgated pursuant thereto [N.J.A.C. 7:26A-4.1(b)]
37. The New Jersey Department of Environmental Protection or an authorized representative acting pursuant to the County Environmental Health Act, N.J.S.A. 26:3A2-1 et seq. shall have the right to enter and inspect any building or other portion of the recycling center at any time in order to determine compliance with the provisions of all applicable laws or rules and regulations adopted pursuant thereto. This right to inspect includes, but is not limited to: sampling any materials on site; photographing any portion of the recycling center; investigating an actual or suspected source of pollution of the environment; and, ascertaining compliance or non-compliance with the statutes, rules or regulations of the Department, including conditions of the recycling center approval issued by the Department. [N.J.A.C. 7:26-1.7(a)]



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- 38. The right of entry specified at N.J.A.C. 7:26A-1.7(a) shall be limited to normal operating hours for the purpose of reviewing and copying all applicable records, which shall be made available to the Department during an inspection and submitted to the Department upon request. [N.J.A.C. 7:26-1.7(b)]
  - 39. The facility shall comply with the general operating requirements for all Recycling Centers as provided at N.J.A.C. 7:26A-4.1 [N.J.A.C. 7:26A-4]
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**Subject Item: RCBG139162 - General Class B & Soil Conditions**

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- 40. Recycling centers receiving petroleum contaminated soil must have a preparedness and prevention plan. The contingency plan contained in the approved documents must be maintained on-site and updated as necessary. [N.J.A.C. 7:26A- 3.5(e)]
- 41. Upon detection of a release of contaminants to the environment, the facility shall perform the following cleanup steps: stop the release, contain the released contaminants, clean up and manage properly the released contaminants and other materials and if necessary, repair or replace any leaking soil containment systems prior to returning them to service. [N.J.A.C. 7:26A-3.5(e)]
- 42. Upon closure of the facility the owner or operator shall remove or decontaminate petroleum contaminated soils, containment system components, and structures and equipment and manage them as hazardous waste, unless the materials are not hazardous waste under N.J.A.C. 7:26G-5. [N.J.A.C. 7:26A- 3.5(e)]
- 43. All equipment and portions of the facility designated for the storage or processing of petroleum contaminated soils shall be visually inspected each operating day for integrity and leaks. [N.J.A.C. 7:26A-3.5(e)]
- 44. Records shall be maintained for all visual inspections. These records shall document that inspections were performed, any problems found, and the subsequent correction of such problems. All records shall be kept for a minimum of three years. [N.J.A.C. 7:26A-3.5(e)]



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45. The facility shall keep a record of each shipment of petroleum contaminated soil accepted for processing. These records may take the form of a log, invoice, manifest, bill of lading or other shipping documents. All tracking records shall be maintained by the holder of this general approval as required by N.J.A.C. 7:26A-3.2(a) 16iii for three calendar years.

Records for each shipment shall include the following information: the name and address of the transporter who delivered the soil to the facility, the name and address of the generator from whom the soil was sent, the NJDEP registration number of the transporter, EPA ID number (if applicable) of the generator, the quantity of soil accepted and the date of acceptance.

Prior to the receipt of a shipment of soil from a generation source, the holder of this approval shall have received a completed Clean Earth of Carteret Material Characterization Report, as referenced in the approved General Approval Application, and associated documents for that shipment. The report shall include at least the following information: name and address of the generation site, contact information, quantity of soil, type of oil contaminating the soil, contamination source (i.e. underground storage tank, above ground storage tank, spill, historic or other), past use of generation site (i.e. industrial, commercial, residential or historic fill), analytical results conducted on the soil and a certification that the information provided is true and accurate. The holder of this approval shall review the information provided to ensure the shipment complies with the facility's acceptance criteria for soil prior to authorizing acceptance of a shipment. [N.J.A.C. 7:26A- 3.5(e)]

46. The facility shall maintain on-site a written operating record showing analysis records, tracking records, and summary reports of incidents requiring implementation of the contingency plan. This information shall be made available to Department personnel upon request and shall be kept for a minimum of three years. [N.J.A.C. 7:26A-3.5(e)]
47. The following source separated Class B recyclable materials, which have been separated at the point of generation from other waste materials or separated at a permitted solid waste facility authorized to separate recyclable materials, may be received, stored, processed or transferred at this recycling center: NJDOT street sweepings (that meet NJ Non-Residential Direct Contact Soil Remediation Standards) and non-hazardous petroleum contaminated soils which otherwise would be ID 27 if not recycled. Only soil contaminated with the following compounds shall be accepted and processed at this facility: gasoline, kerosene, jet fuel, Numbers 1 through 6 fuel oil, and used oil. Used oil shall be defined as any oil that has been and as a result of such use, is contaminated by physical or chemical impurities. No soils may be accepted that have been contaminated with materials that are other waste materials, or waste by-products, such as sludges. No soils with free petroleum product or other liquids shall be accepted at the facility. For soils containing greater than 17,000 ppm EPH, the soil shall be determined not to contain free liquids by USEPA SW-846, Method 9095. No hazardous waste, as defined by N.J.A.C. 7:26G-5, shall be accepted by the facility. [N.J.A.C. 7:26A- 3.5(e)]
48. At no time shall the receipt, storage, processing, or transferring of non-source separated construction and demolition material be allowed at this recycling center. The prohibition of this material shall be strictly enforced and any incident shall be considered a serious violation to the conditions of this Approval. [N.J.A.C. 7:26A-3.5(e)]



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49. The recycling center may not receive, store, process, or transfer source separated petroleum contaminated soils and NJDOT street sweepings with any other Class B recyclable materials. The commingling of petroleum contaminated soil and NJDOT street sweepings shall only be allowed after the testing requirements identified in this approval have been met. The commingling of any other materials not described above is prohibited. [N.J.A.C. 7:26A-3.5(e)]
50. The maximum amount of contaminants, as defined in N.J.A.C. 7:26A-1.3, allowed in each incoming load of Class B recyclable material shall be limited to 1% by volume. Incidental by-product materials shall not be considered to be contaminants. [N.J.A.C. 7:26A-3.5(e)]
51. Incidental amounts of rebar, metal, soil, and other by-products which adhere to the Class B recyclable materials, as specified in this Approval, and which are returned to the economic mainstream as raw material or products, may be received, stored, processed, or transferred at this recycling center. The receipt of such incidental amounts of these materials need not be separately accounted for, but the storage and end-markets for these materials shall be subject to specific conditions of this Approval. [N.J.A.C. 7:26A-3.5(e)]
52. The holder of this general approval shall operate the recycling center and construct or install associated appurtenances thereto, in accordance with the provisions of N.J.A.C. 7:26A-1 et seq., the conditions of this general approval, and the general approval application documents. [N.J.A.C. 7:26A-3.5(e)]
53. In case of conflict, the provisions of N.J.A.C. 7:26A-1 et seq. shall have precedence over the conditions of this Approval, and the conditions of this Approval shall have precedence over plans and specifications listed above. [N.J.A.C. 7:26A- 3.5(e)]
54. One complete set of the general approval application documents, this general approval, and all records, reports and plans as may be required pursuant to this approval shall be kept on file at the recycling center and shall be available for inspection by authorized representatives of the Department or delegated agents upon presentation of credentials. [N.J.A.C. 7:26A-3.5(e)]
55. Hours of operation for the receipt, treatment/processing and transferring source separated petroleum contaminated soils and NJDOT street sweepings material can occur 24 hours per day, 7 days per week. [N.J.A.C. 7:26A- 3.5(e)]
56. Material deliveries to the recycling center shall be scheduled in such a manner as to minimize truck queuing on the recycling center property. Under no circumstances shall delivery trucks be allowed to back-up or queue onto public roads. [N.J.A.C. 7:26A-3.5(e)]
57. The recycling center may receive no more than 2,700 tons per day of petroleum contaminated soils and street sweepings. This condition is contingent upon the traffic on the public roads adjacent to the facility not being adversely affected. Should the traffic be impacted by the facility, the Department reserves the right to reduce the capacity of the facility. [N.J.A.C. 7:26A- 3.5(e)]
58. The total amount of unprocessed soil material stored in the "soil storage warehouse" shall not exceed 18,287 cubic yards. Materials stored in the "soil storage warehouse" shall be stored only in those areas designated for that purpose as indicated on the approved interior layout drawing. In addition "Area B" on the approved site plan may be used to temporarily store 15,000 cy of unprocessed soils until further processing in the "soil storage warehouse". The unprocessed soils in "Area B" will be segregated on an asphalt base with Jersey barriers and tarped during storage. [N.J.A.C. 7:26A-3.5(e)]



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59. If at any time, the amount of soil material stored inside the building exceeds 18,287 cubic yards and the temporary storage "Area B" exceeds 15,000 cubic yards, the recycling center shall immediately cease receiving any unprocessed soil material until the amount of unprocessed soil material combined fall below 33,287 cubic yards. [N.J.A.C. 7:26A- 3.5(e)]
60. Unprocessed recyclable material shall not remain on-site, in its unprocessed form, for more than one (1) year. [N.J.A.C. 7:26A-3.9(b)]
61. The total amount of processed soil materials stored outside shall not exceed 31,674 cubic yards. Processed material shall be stored only in those areas designated for that purpose as indicated on the approved site plan drawings. [N.J.A.C. 7:26A-3.5(e)]
62. If at any time, the amount of processed soil material stored on-site exceeds 31,674 cubic yards, the recycling center shall immediately cease processing activities until the amount of processed material falls below 31,674 cubic yards. [N.J.A.C. 7:26A-3.5(e)]
63. All processed material shall be stored separately from residues. [N.J.A.C. 7:26A-3.5(e)]
64. By-products shall be stored in the container(s) or area(s) as depicted on the approved site plan and shall be removed off-site to the end markets as referenced in the approved documents. [N.J.A.C. 7:26A-3.5(e)]
65. Horizontal and vertical control points for the unprocessed and processed materials soil stockpile areas shall be set and maintained on-site. Horizontal limitation markers shall be set at the corners of the stockpile areas as depicted on the approved site plan. Vertical limitation markers shall be set at locations in close proximity of the stockpile areas and shall clearly establish elevation height of 18 feet above the existing grade for the stockpile areas located inside the building and 20 feet above the existing grade for the processed stockpile areas located outside. [N.J.A.C. 7:26A- 3.5(e)]
66. Metal pipe or metal rods or the equivalent as approved by the Department shall be used to establish these control points. [N.J.A.C. 7:26A-3.5(e)]
67. Ingress and egress of the facility shall be restricted to Middlesex Avenue only. [N.J.A.C. 7:26A-3.5(e)]
68. Methods of effectively controlling dust shall be implemented at the facility in order to prevent offsite migration. [N.J.A.C. 7:26A-3.5(e)]
69. Fire fighting and emergency procedures shall be posted, and shall include the telephone numbers of local fire, police, ambulance, and hospital facilities. If a fire occurs on-site, the facility shall immediately notify the local fire official and the N.J.D.E.P. Environmental Action Hotline at 1-877-927-6337. [N.J.A.C. 7:26A-3.5(e)]
70. Any suspected or prohibited hazardous waste, as defined at N.J.A.C. 7:26G-5, found in a load accepted at the recycling center shall not be returned to the generator. Such materials shall be segregated and stored in a secure manner and shall be immediately reported to the N.J.D.E.P. Environmental Action Hotline at 1-877-927-6337. The owner/operator of the recycling center shall secure the name of the collector/hauler suspected of delivering such waste to the facility and related information surrounding the incident, if available, and shall make this information known to the Department's enforcement personnel. Such material may be returned to a known generator, provided that specific permission to do so is received by the owner/operator after contacting 1-877-927-6337. Otherwise, the owner/operator shall dispose of the unauthorized waste in accordance with instructions received from the Department. [N.J.A.C. 7:26A- 3.5(e)]



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**Subject Item: RCBG139162 - General Class B & Soil Conditions**

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71. All revisions to the site plan and the approved documents which may be required as a result of the above, shall be submitted to this office for modification to this Approval. [N.J.A.C. 7:26A-3.5(e)]
72. Pursuant to N.J.A.C. 7:26A-3.11(a), the holder of this general approval shall obtain prior approval from the Department for any increase in the design capacity of the facility. The facility shall submit a request to the Department, in writing, for the proposed increase and shall submit updated information pursuant to the requirements of N.J.A.C. 7:26A-3.2(a), 3.4, or 3.8, as applicable. The facility shall also provide written notice of the request to the solid waste or recycling coordinator of the applicable district. [N.J.A.C. 7:26A-3.5(e)]
73. The sampling plan, collection, preservation, and handling for the sampling and analysis of unprocessed contaminated soil as required in this Approval must be performed in accordance with the New Jersey Technical Requirements for Site Remediation at N.J.A.C. 7:26E and the latest edition of the New Jersey Department of Environmental Protection, Field Sampling Procedures Manual. All analysis must be performed by a New Jersey certified laboratory. [N.J.A.C. 7:26A- 3.5(e)]
74. Petroleum contaminated soils shall be sampled either at the point of generation or at the recycling center. Soils from different generation sites shall be segregated at the facility until the sampling results are received. The sampling and analysis shall be implemented as follows: [N.J.A.C. 7:26A-3.5(e)]
75. All soils must be tested using the most current approved test methodology in accordance with USEPA SW-846. [N.J.A.C. 7:26A-3.5(e)]
76. Every 100 cubic yards of contaminated soil from each site shall be sampled and analyzed for EPH in the following manner: a representative sample from every 20 cubic yards of contaminated soil shall be taken and these five samples shall be composited into one sample and analyzed. When the volume of soil is less than 100 cubic yards, a representative sample of every 20 cubic yards, or a fraction thereof, shall be taken and these samples shall be composited into one sample and analyzed. [N.J.A.C. 7:26A- 3.5(e)]
77. Every 800 cubic yards of contaminated soil shall be sampled and analyzed for total volatile organic compounds (VOC), in the following manner: a representative sample from every 100 cubic yards of contaminated soil shall be taken and these samples shall be composited into one sample and analyzed. When the volume of soil is less than 800 cubic yards, a representative sample of every 100 cubic yards, or fraction thereof, shall be taken and these samples shall be composited into one sample and analyzed. [N.J.A.C. 7:26A-3.5(e)]
78. The sampling results shall be used to determine the maximum contaminant feed rate or maximum contaminant concentration for the processing equipment in accordance with the Air Quality Permit and shall also demonstrate that the material is non-hazardous for the above contaminants in accordance with N.J.A.C. 7:26G-8.5. The processing equipment at the facility uses bioremediation to process petroleum contaminated soils and achieve acceptable contaminant levels for reuse. [N.J.A.C. 7:26A- 3.5(e)]



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79. Processed material end products, for uses other than as landfill cover material, Department approved Brownfields projects or road construction projects, shall be sampled and analyzed for extractable petroleum hydrocarbons (EPH), total volatile organic compounds (VOC), and all contaminants listed in the New Jersey Soil Remediation Standards (SRS). The sampling procedure shall be implemented as follows: Every 100 cubic yards of processed soil shall be sampled and analyzed for the above contaminants in the following manner: a representative sample from every 20 cubic yards of processed soil shall be taken and these five samples shall be composited into one sample and analyzed. [N.J.A.C. 7:26A- 3.5(e)]
80. Processed material end products to be used in road construction projects shall be sampled every 1,000 cubic yards for EPH and VOC in the following manner: a representative sample from every 100 cubic yards of processed soil shall be taken and the samples shall be composited into one sample and analyzed. [N.J.A.C. 7:26A- 3.5(e)]
81. Other levels of testing may be allowed on a case-by-case basis as determined by use criteria in accordance with Department guidance and regulations. Applications for case-specific testing requirements must be made to the Bureau of Recycling & Hazardous Waste Management. [N.J.A.C. 7:26A- 3.5(e)]
82. Only approved criteria shall be used to determine the allowable end use of the processed material and the maximum allowable contamination levels for use. [N.J.A.C. 7:26A-3.5(e)]
83. The maximum allowable contamination levels for unrestricted general use are 200 ppm EPH and all individual organic contaminants less than or equal to 50% and inorganic contaminants less than or equal to 75% of the most stringent Direct Contact Soil Remediation Standards (SRS). [N.J.A.C. 7:26A- 3.5(e)]
84. The analytical requirements of the individual landfills shall be complied with for soils being used as landfill cover material. For soils being used as fill material in Brownfields projects, the requirements (including sampling frequency and analytical parameters) shall be approved by the individual Site Remediation Program case manager on a case-by-case basis. [N.J.A.C. 7:26A- 3.5(e)]
85. Other levels of contamination may be allowed on a case-by-case basis as determined by use criteria and levels of contamination in accordance with Department guidance and regulations. Certificates of Authority to operate beneficial use projects pursuant to N.J.A.C. 7:26-1.7(g) must be obtained before any use of the processed material end products. [N.J.A.C. 7:26A-3.5(e)]
86. Any processed material end products that do not meet the above criteria must be reintroduced to the treatment process for further treatment. After treatment, the processed material end products must be reanalyzed in accordance with the above criteria. [N.J.A.C. 7:26A-3.5(e)]
87. All analysis records must be kept for a minimum of three years and made available for inspection by state and local officials upon request. [N.J.A.C. 7:26A-3.5(e)]



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**Subject Item: RCBG139339 - Street Sweepings Sampling**

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88. Every 800 cubic yards of street sweepings shall be sampled and analyzed for total volatile organic compounds (VOC), in the following manner: a representative sample from every 100 cubic yards shall be taken and these samples shall be composited into one sample and analyzed. When the volume is less than 800 cubic yards, a representative sample of every 100 cubic yards, or fraction thereof, shall be taken and these samples shall be composited into one sample and analyzed. [N.J.A.C. 7:26A-3]
89. The sampling results shall be used to determine the maximum contaminant feed rate or maximum contaminant concentration for the processing equipment in accordance with the Air Quality Permit and shall also demonstrate that the material is non-hazardous for the above contaminants in accordance with N.J.A.C. 7:26G-5. [N.J.A.C. 7:26A-3]
90. Unprocessed street sweepings shall be sampled either at the point of generation or at the recycling center. Street sweepings from different generation sites shall be segregated at the facility until the sampling results are received. [N.J.A.C. 7:26A- 3]
91. Every 100 cubic yards of street sweepings from each site shall be sampled and analyzed for EPH in the following manner: a representative sample from every 20 cubic yards shall be taken and these five samples shall be composited into one sample and analyzed. When the volume is less than 100 cubic yards, a representative sample of every 20 cubic yards, or a fraction thereof, shall be taken and these samples shall be composited into one sample and analyzed. [N.J.A.C. 7:26A- 3]

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**Subject Item: RCBG882032 - Final Phase Crushing Operations**

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92. The recycling center may receive no more than 2000 tons per day of source-separated asphalt, concrete, brick, block, rock, and stone. [N.J.A.C. 7:26A-3.5(e)]
93. Hours of operation for the receipt, processing and transferring source separated recyclable material can occur 24 hours per day, 7 days per week; the operation of the crusher shall be limited to: 7:00 a.m. to 7:00 p.m., Monday through Friday and Saturdays from 7:00 a.m. to 4:00 p.m. [N.J.A.C. 7:26A- 3.5(e)]
94. The following equipment or equivalent shall be available for site operations and shall be maintained in operable condition:
- Exttec C-12+ Crusher
  - Exttec Impact Crusher
  - Fintec 542 Screener
  - Sandvik QE440 Screener
  - Exttec Robotrac Screener (2 units)
  - Exttec S6000 Screener. [N.J.A.C. 7:26A- 3.5(e)]
95. The total amount of unprocessed asphalt, concrete, brick, block, rock, and stone stored on-site shall not exceed 36,580 cubic yards (8,800 cy in Area A & 27,780 cy in Area B). These unprocessed materials stored on-site shall be stored only in those areas designated for that purpose as indicated on the approved site plan drawing. [N.J.A.C. 7:26A- 3.5(e)]



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**Subject Item: RCBG882032 - Final Phase Crushing Operations**

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96. If at any time, the amount of unprocessed asphalt, concrete, brick, block, rock, and stone stored on-site exceeds 36,580 cubic yards (8,800 cy in Area A & 27,780 cy in Area B), the recycling center shall immediately cease receiving any unprocessed material until the amount of these unprocessed materials stored on-site falls below 36,580 cubic yards (8,800 cy in Area A & 27,780 cy in Area B). [N.J.A.C. 7:26A- 3.5(e)]
97. The total amount of processed asphalt, concrete, brick, block, rock, and stone stored on-site shall not exceed 74,812 cubic yards (30,901 cy in Area C & 43,911 cy in Area D). These processed materials stored on-site shall be stored only in those areas designated for that purpose as indicated on the approved site plan drawing. [N.J.A.C. 7:26A- 3.5(e)]
98. If at any time, the amount of processed asphalt, concrete, brick, block, rock, and stone stored on-site exceeds 74,812 cubic yards (30,901 cy in Area C & 43,911 cy in Area D), the recycling center shall immediately cease processing activities until the amount of these processed materials falls below 74,812 cubic yards. [N.J.A.C. 7:26A- 3.5(e)]
99. Horizontal and vertical control points for the unprocessed and processed materials stockpile areas shall be set and maintained on-site. Horizontal limitation markers shall be set at the corners of the stockpile areas as depicted on the approved site plan. Vertical limitation markers shall be set at locations in close proximity of the stockpile areas and shall clearly establish elevation height of 20 feet above the existing grade for the unprocessed stockpile area and 30 feet above the existing grade for the processed stockpile area. [N.J.A.C. 7:26A- 3.5(e)]
100. Metal pipe or metal rods or the equivalent as approved by the Department shall be used to establish these control points. [N.J.A.C. 7:26A- 3.5(e)]
101. Requisite recycling center operations shall not be delayed or neglected for lack of required equipment or for equipment down time. [N.J.A.C. 7:26A- 3.3(5)e3]



# Trucking Permits





**PART 364**  
**WASTE TRANSPORTER PERMIT NO. NJ-983**

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

**PERMIT ISSUED TO:**

SHIRLEY EXPRESS, LLC  
702 RAMSEY AVENUE  
HILLSIDE, NJ 07205

**PERMIT TYPE:**

- ☐ NEW  
☒ RENEWAL  
☐ MODIFICATION

CONTACT NAME: BRAYAN VELARDE  
COUNTY: OUT OF STATE  
TELEPHONE NO: (908)258-0597

EFFECTIVE DATE: 09/03/2017  
EXPIRATION DATE: 09/02/2018  
US EPA ID NUMBER:

**AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:**

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
BAYSHORE SOIL MANAGEMENT, LLC	KEASBEY , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
BELLMAWR WATERFRONT DEVELOPMENT	BELLMAWR , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
BETHLEHEM EARTH, LP	BETHLEHEM , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CAPITOL DEVELOPMENT	E. BANGOR , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CLEAN EARTH OF CARTERET	CARTERET , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CLEAN EARTH OF MARYLAND	HAGERSTOWN , MD	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CLEAN EARTH OF NEW CASTLE, INC.	NEW CASTLE , DE	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CLEAN EARTH OF NORTH JERSEY	KEARNY , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CLEAN EARTH OF PHILADELPHIA	PHILADELPHIA , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CLEAN EARTH OF SOUTHEAST PENNSYLVANIA	MORRISVILLE , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

**ADDRESS:**

New York State Department of Environmental Conservation  
Division of Materials Management - Waste Transporter Program  
625 Broadway, 9th Floor  
Albany, NY 12233-7251

AUTHORIZED SIGNATURE: \_\_\_\_\_

Date: 08.29.17

# NOTICE

This renewed permit is not valid until  
the effective date listed on the permit.



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

PART 364

WASTE TRANSPORTER PERMIT NO. NJ-983

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

SHIRLEY EXPRESS, LLC  
702 RAMSEY AVENUE  
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CONTACT NAME: BRAYAN VELARDE  
COUNTY: OUT OF STATE  
TELEPHONE NO: (908)258-0597

EFFECTIVE DATE: 09/03/2017  
EXPIRATION DATE: 09/02/2018  
US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
FORMER NJ ZINC WEST PLANT, PHASE III PALMERTON , PA		Non-Hazardous Industrial/Commercial	
HAZLETON CREEK PROPERTIES, LLC	HAZLETON , PA	Non-Hazardous Industrial/Commercial	
HENRY HARRIS SLF (ALHERN, INC.)	MULLICA HILL , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
JERC PARTNERS VII/LLC	EDISON , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
MALANKA (MALL) LANDFILL	SECAUCUS , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
P PARK NORTH LLC	PROSPECT PARK , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
SOIL SAFE, INC.	LOGAN TOWNSHIP , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
SOIL SAFE-METRO 12	CARTERET , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
TETERBORO LANDING	TETERBORO , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	





PART 364

WASTE TRANSPORTER PERMIT NO. NJ-1012

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

LOGITECH TRANSPORT, LLC  
470 HILLSIDE AVENUE  
HILLSIDE, NJ 07205

PERMIT TYPE:

☐ NEW  
☐ RENEWAL  
☒ MODIFICATION

CONTACT NAME: PABLO MANCHENO  
COUNTY: OUT OF STATE  
TELEPHONE NO: (908)686-7595

EFFECTIVE DATE: 04/27/2018  
EXPIRATION DATE: 02/19/2019  
US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY:

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
BAYSHORE SOIL MANAGEMENT, LLC	KEASBEY , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
BELLMAWR WATERFRONT DEVELOPMENT	BELLMAWR , NJ	Petroleum Contaminated Soil	
BETHLEHEM EARTH, LP	BETHLEHEM , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CAPITOL DEVELOPMENT	E. BANGOR , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
CLEAN EARTH OF CARTERET	CARTERET , NJ	Petroleum Contaminated Soil	
CLEAN EARTH OF MARYLAND	HAGERSTOWN , MD	Petroleum Contaminated Soil	
CLEAN EARTH OF NEW CASTLE, INC.	NEW CASTLE , DE	Petroleum Contaminated Soil	
CLEAN EARTH OF NORTH JERSEY	KEARNY , NJ	Petroleum Contaminated Soil	
CLEAN EARTH OF PHILADELPHIA	PHILADELPHIA , PA	Petroleum Contaminated Soil	
CLEAN EARTH OF SOUTHEAST PENNSYLVANIA	MORRISVILLE , PA	Petroleum Contaminated Soil	
COPLAY AGGREGATES	WHITEHALL , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
FORMER NJ ZINC WEST PLANT, PHASE III	PALMERTON , PA	Non-Hazardous Industrial/Commercial	
FREEMANSBURG RESTORATION FACILITY	FREEMANSBURG , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
GREENVIEW	STROUDSBURG , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	

\*\*\* AUTHORIZED WASTE TYPES BY DESTINATION FACILITY LISTING (continued on next page) \*\*\*

NOTE: By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the Environmental Conservation Law, all applicable regulations, and the General Conditions printed on the back of this page.

ADDRESS:

New York State Department of Environmental Conservation  
Division of Materials Management - Waste Transporter Program  
625 Broadway, 9th Floor  
Albany, NY 12233-7251

AUTHORIZED SIGNATURE: 

Date: 04/26/18



# WASTE TRANSPORTER PERMIT

## GENERAL CONDITIONS

The permittee must:

1. Carry a copy of this waste transporter permit in each vehicle to transport waste. Failure to produce a copy of the permit upon request is a violation of the permit.
2. Display the full name of the transporter on both sides of each vehicle and display the waste transporter permit number on both sides and rear of each vehicle containing waste. The displayed name and permit number must be in characters at least three inches high and of a color that contrasts sharply with the background.
3. Transport waste only in authorized vehicles. An authorized vehicle is one that is listed on this permit.
4. Submit to the Department a modification application for additions/deletions to the authorized fleet of vehicles. The permittee must wait for a modified permit before operating the vehicles identified in the modification application.
5. Submit to the Department a modification application to add a new waste category or a new destination facility, or to change the current waste or destination facility category. The permittee must wait for a modified permit before transporting new waste types or transporting to new destination facilities.
6. Submit to the Department a modification application for change of address or company name.
7. Comply with requirements for placarding and packaging as set forth in New York State Transportation Law as well as any applicable federal rules and regulations.
8. Contain all wastes in the vehicle so there is no leaking, blowing, or other discharge of waste.
9. Use vehicles to transport only materials not intended for human or animal consumption unless the vehicle is properly cleaned.
10. Comply with requirements for manifesting hazardous waste, regulated medical waste, or low-level radioactive waste as set forth in the New York State Environmental Conservation Law and the implementing regulations. Transporters who provide a pre-printed manifest to a generator/shipper/offeror of regulated waste shall ensure that all information is correct and clearly legible on all copies of the manifest.
11. Deliver waste only to transfer, storage, treatment and disposal facilities authorized to accept such waste. Permittee must demonstrate that facilities are so authorized if requested to do so.
12. Maintain liability insurance as required by New York State Environmental Conservation Law.
13. Maintain records of the amount of each waste type transported to each destination facility on a calendar-year basis. The transporter is obligated to provide a report of this information to the Department at the time of permit renewal, or to any law enforcement officer, if requested to do so.
14. Pay regulatory fees on an annual basis. Non-payment may be cause for revocation or suspension of permit.
15. This permit is not transferrable. A change of ownership will invalidate this permit.
16. This permit does not relieve the permittee from the obligation to obtain any other approvals or permits, or from complying with any other applicable federal, state, or local requirement.
17. **Renewal applications must be submitted no less than 30 days prior to the expiration date of the permit to:**

**New York State Department of Environmental Conservation  
Division of Materials Management, Waste Transporter Program  
625 Broadway, 9<sup>th</sup> Floor  
Albany, NY 12233-7251**



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

PART 364

WASTE TRANSPORTER PERMIT NO. NJ-1012

Pursuant to Article 27, Titles 3 and 15 of the Environmental Conservation Law and 6 NYCRR 364

PERMIT ISSUED TO:

LOGITECH TRANSPORT, LLC  
470 HILLSIDE AVENUE  
HILLSIDE, NJ 07205

PERMIT TYPE:

- ☐ NEW  
☐ RENEWAL  
☒ MODIFICATION

CONTACT NAME: PABLO MANCHENO  
COUNTY: OUT OF STATE  
TELEPHONE NO: (908)686-7595

EFFECTIVE DATE: 04/27/2018  
EXPIRATION DATE: 02/19/2019  
US EPA ID NUMBER:

AUTHORIZED WASTE TYPES BY DESTINATION FACILITY: (Continued)

The Permittee is Authorized to Transport the Following Waste Type(s) to the Destination Facility listed :

Destination Facility	Location	Waste Type(s)	Note
GROWS LANDFILL NORTH (PA DEP 101680)	MORRISVILLE , PA	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
HAZLETON CREEK PROPERTIES, LLC	HAZLETON , PA	Non-Hazardous Industrial/Commercial	
HENRY HARRIS SLF (ALHERN, INC.)	MULLICA HILL , NJ	Petroleum Contaminated Soil	
JERC PARTNERS VII/LLC	EDISON , NJ	Petroleum Contaminated Soil	
MALANKA (MALL) LANDFILL	SECAUCUS , NJ	Petroleum Contaminated Soil	
OVERPECK PARK LANDFILL AREA IV	PALISADES PARK , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
P PARK NORTH LLC	PROSPECT PARK , NJ	Petroleum Contaminated Soil	
PHILLIPSBURG COMMERCE PK URBAN RENEWAL ENTITY	PHILLIPSBURG , NJ	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	
SOIL SAFE, INC.	LOGAN TOWNSHIP , NJ	Petroleum Contaminated Soil	
SOIL SAFE-METRO 12	CARTERET , NJ	Petroleum Contaminated Soil	
TETERBORO LANDING	TETERBORO , NJ	Petroleum Contaminated Soil	
Vanbro Corporation	Staten Island , NY	Non-Hazardous Industrial/Commercial Petroleum Contaminated Soil	



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF MATERIALS MANAGEMENT

PART 364

WASTE TRANSPORTER PERMIT NO. NJ-1012

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LOGITECH TRANSPORT, LLC  
470 HILLSIDE AVENUE  
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PERMIT TYPE:

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CONTACT NAME: PABLO MANCHENO  
COUNTY: OUT OF STATE  
TELEPHONE NO: (908)686-7595

EFFECTIVE DATE: 04/27/2018  
EXPIRATION DATE: 02/19/2019  
US EPA ID NUMBER:

AUTHORIZED VEHICLES:

The Permittee is Authorized to Operate the Following Vehicles to Transport Waste:

(Vehicles enclosed in <>'s are authorized to haul Residential Raw Sewage and/or Septage only)

17 (Seventeen) Permitted Vehicle(s)

NJ AS368X  
NJ AS369X  
NJ AT579Z  
NJ AT580Z  
NJ AT835X  
NJ AT955Z  
NJ AT956Z  
NJ AU222A  
NJ AU223A  
NJ AU224A  
NJ AU249D  
NJ AU420C  
NJ AU421C  
NJ AU607F  
NJ AU692C  
NJ AU716F  
NJ AU976A  
End of List



**ATTACHMENT H**  
**NYSDEC Permission to Reuse Soil Onsite**



From: Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>  
To: Paul Matli  
Cc:  
Subject: RE: C241159\_1128 31 Dr - Proposal to reuse of on-site soil

Sent: Fri 12/15/2017 10:04 AM

Yes, it may be used.

**Sondra Martinkat**

Environmental Engineer 2, Environmental Remediation

New York State Department of Environmental Conservation  
47-40 21<sup>st</sup> St, Long Island City, NY 11101  
P: 718-482-4891 | F: 718-482-6358 | [sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)  
[www.dec.ny.gov](http://www.dec.ny.gov) |  

From: Paul Matli [mailto:[pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)]  
Sent: Friday, December 15, 2017 9:57 AM  
To: Martinkat, Sondra (DEC) <[sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)>  
Cc: [ariel@amc-engineering.com](mailto:ariel@amc-engineering.com)  
Subject: RE: C241159\_1128 31 Dr - Proposal to reuse of on-site soil

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Sondra – based on the most recent email transaction on the above referenced matter, can you please advise if the excavated soil in elevator pit area can be reused in the rear yard without any additional characterization ?



From: Paul Matli [mailto:pmatli@hydrotechenvironmental.com]  
Sent: Thursday, December 14, 2017 5:07 PM  
To: ariel@amc-engineering.com; Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>  
Subject: RE: C241159\_1128 31 Dr - Proposal to reuse of on-site soil

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Small correction :

Waste characterization was performed prior to site excavation and did not show exceedance of UUSCO. At the early stage of site excavation, all bad fill material was removed to the native soil layer at 3 feet bgs. All excavated soil in elevator pit that will be reused on-site is actually a native soil as pictures in daily report shows.

Regards,

Paul I. Matli, Ph.D., P.G.  
Vice President of Technical Services



**Hydro Tech Environmental**  
Engineering and Geology, LLC

15 Ocean Avenue  
Brooklyn, NY 11225  
Cell: 631-241-7165  
Tel: 718-636-0800  
Fax: 718-636-0900

Email: [pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)  
Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)

Please consider the environment before printing this email



**From:** Ariel [mailto:[ariel@amc-engineering.com](mailto:ariel@amc-engineering.com)]

**Sent:** Thursday, December 14, 2017 5:01 PM

**To:** Paul Matti <[pmat@hydrotechenvironmental.com](mailto:pmat@hydrotechenvironmental.com)>; 'Martinkat, Sondra (DEC)' <[sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)>

**Subject:** RE: C241159\_1128 31 Dr - Proposal to reuse of on-site soil

Paul, Sondra,

Since all the fill material was removed, what is left is only native soil which I find it acceptable to be reused onsite, as it meets UUSCO, based on data from soil characterization conducted after excavation was complete.

Thanks

Ariel

**From:** Paul Matti [mailto:[pmat@hydrotechenvironmental.com](mailto:pmat@hydrotechenvironmental.com)]

**Sent:** Thursday, December 14, 2017 4:37 PM

**To:** Martinkat, Sondra (DEC)

**Cc:** [ariel@amc-engineering.com](mailto:ariel@amc-engineering.com)

**Subject:** RE: C241159\_1128 31 Dr - Proposal to reuse of on-site soil

Sondra – we still need NYSDEC directions if sampling of the stockpiled can be waived based on the RI data that support the fact the all soil on-site meets the Track 2 SCG.

Regards,

Paul I. Matti, Ph.D., P.G.

Vice President of Technical Services



**Hydro Tech Environmental**  
Engineering and Geology, LLC

15 Ocean Avenue

Brooklyn, NY 11225

Cell: 631-241-7165

Tel: 718-636-0800

Fax: 718-636-0900

Email: [pmat@hydrotechenvironmental.com](mailto:pmat@hydrotechenvironmental.com)

Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)

Please consider the environment before printing this email



**From:** Paul Matli  
**Sent:** Thursday, December 14, 2017 2:54 PM  
**To:** 'Martinkat, Sondra (DEC)' <[sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)>  
**Cc:** [ariel@amc-engineering.com](mailto:ariel@amc-engineering.com)  
**Subject:** RE: C241159\_ 1128 31 Dr - Proposal to reuse of on-site soil

I did initially resort to KI data that shows all site soil meets track 2 SCG and GWP SCG. This stockpiled soil will be reused as backfill under a concrete composite cover in rear yard that will be subject to SMP and ICs.

The stockpiled soil is around 27 cu yds

Regards,

**Paul I. Matli, Ph.D., P.G.**  
**Vice President of Technical Services**



15 Ocean Avenue  
Brooklyn, NY 11225  
Cell: 531-241-7165  
Tel: 718-636-0800  
Fax: 718-636-0900  
Email: [pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)  
Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)  
Please consider the environment before printing this email



**From:** Martinkat, Sondra (DEC) [<mailto:sondra.martinkat@dec.ny.gov>]

**Sent:** Thursday, December 14, 2017 2:39 PM

**To:** Paul Matli <[pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)>

**Cc:** [arief@amc-engineering.com](mailto:arief@amc-engineering.com)

**Subject:** RE: C241159\_ 1128 31 Dr - Proposal to reuse of on-site soil

I think you can rely on samples that were collected during the RI. What amount of soil do you need to use?

**Sondra Martinkat**

Environmental Engineer 2, Environmental Remediation

New York State Department of Environmental Conservation

47-40 21<sup>st</sup> St, Long Island City, NY 11101

P: 718-482-4891 | F: 718-482-6358 | [sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)



[www.dec.ny.gov](http://www.dec.ny.gov)



**From:** Paul Matti [mailto:pmatti@hydrotechenvironmental.com]  
**Sent:** Thursday, December 14, 2017 2:25 PM  
**To:** Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>  
**Cc:** arie@amc-engineering.com  
**Subject:** RE: C241159\_1128 31 Dr - Proposal to reuse of on-site soil

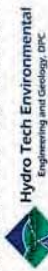
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Sondra - I did confer with Ariel so that we are all on same page.

We will collect a sample per Table 4.51(e)10 from the stockpiled material and analyze it for the full TCL and compare results to UUSCO and GWP SCO to make sure this soil can be reused without any restrictions or at least meets the applicable site use per table 4.51(e)4

Regards,

Paul I. Matti, Ph.D., P.G.  
Vice President of Technical Services



15 Ocean Avenue  
Brooklyn, NY 11225  
Cell: 631-241-7165  
Tel: 718-636-0800  
Fax: 718-636-0900  
Email: pmatti@hydrotechenvironmental.com  
Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)  
Please consider the environment before printing this email



**From:** Martinkat, Sondra (DEC) [mailto:[sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)]

**Sent:** Thursday, December 14, 2017 1:50 PM

**To:** Paul Matil' <[pmatil@hydrotechenvironmental.com](mailto:pmatil@hydrotechenvironmental.com)>

**Subject:** FW: C241159\_1128 31 Dr - Proposal to reuse of on-site soil

Did this answer your question.



**Sondra Martinkat**

Environmental Engineer 2, Environmental Remediation

New York State Department of Environmental Conservation

47-40 21<sup>st</sup> St, Long Island City, NY 11101

P: 718-482-4891 | F: 718-482-6358 | [sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)

[www.dec.ny.gov](http://www.dec.ny.gov) |  

**From:** Martinkat, Sondra (DEC)

**Sent:** Wednesday, December 13, 2017 12:31 PM

**To:** 'Paul Matil' <[pmatil@hydrotechenvironmental.com](mailto:pmatil@hydrotechenvironmental.com)>

**Cc:** Kuehner, Wendy S (HEALTH) <[wendy.kuehner@health.ny.gov](mailto:wendy.kuehner@health.ny.gov)>; arie (@amc-engineering.com); O'Connell, Jane H (DEC) <[jane.oconnell@dec.ny.gov](mailto:jane.oconnell@dec.ny.gov)>; Jenny J. Shulman ([schulmanindustries@gmail.com](mailto:schulmanindustries@gmail.com)) <[schulmanindustries@gmail.com](mailto:schulmanindustries@gmail.com)>

**Subject:** RE: C241159\_1128 31 Dr-- Proposal to reuse of on-site soil

As per DER-10, soil may be reused on the Site without restrictions if the soil on the site meets unrestricted soil SCGs. Please refer to Table 5.4(e)4 for guidance and confirm soil results for the site before proceeding.

**Sondra Martinkat**

Environmental Engineer 2, Environmental Remediation

New York State Department of Environmental Conservation

47-40 21<sup>st</sup> St, Long Island City, NY 11101

P: 718-482-4891 | F: 718-482-6358 | [sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)

[www.dec.ny.gov](http://www.dec.ny.gov) |  



From: Paul Matli [mailto:pmatli@hydrotechenvironmental.com]  
Sent: Wednesday, December 13, 2017 12:08 PM  
To: Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>  
Cc: Kuehner, Wendy S (HEALTH) <wendy.kuehner@health.ny.gov>; ariel@amc-engineering.com; Jenny J. Shulman [mailto:jshulmanindustries@gmail.com] <jshulmanindustries@gmail.com>  
Subject: C241159\_ 1128 31 Dr - Proposal to reuse of on-site soil

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Sondra -

The developer at above site would like to reuse of the soil excavated in elevator pit today to backfill the rear yard area, that will remain undeveloped. In the RAWP we stated that no soil/fill will be reused on-site.

Please advise if you have any comments about this proposed action, and whether you have any specific requirements to comply with in this regard.

I appreciate your expedited response.

Regards,

Paul I. Matli, Ph.D., P.G.  
Vice President of Technical Services



15 Ocean Avenue  
Brooklyn, NY 11225  
Cell: 631-241-7165  
Tel: 718-636-0800  
Fax: 718-636-0900

Email: [pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)  
Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)

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# **ATTACHMENT I**

## **Imported Bluestone Documentation**



# North Church Certification and Sieve Analysis





### **Material Certification**

Please be advised that both of our aggregate production facilities listed manufacture construction materials, and fill materials, are from the virgin properties as described herein;

**North Church Sand & Gravel-** Sand products, Crushed stone products and environmental fill materials are produced from virgin rock, and property, located in Sussex County Franklin, NJ .

Approved source: NJDOT & Port Authority of NY & NJ.

<http://www.state.nj.us/transportation/eng/materials/qualified/WPLDB.shtm>.

**J&P Crushing Materials-** Sand materials are produced from a virgin source and produced in Sussex County, Sparta, NJ.

Approved source: NJDOT & Port Authority of NY & NJ

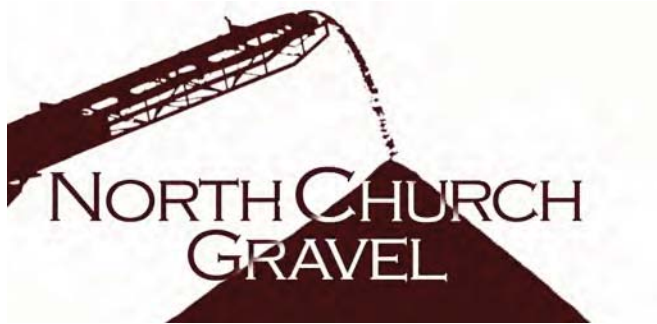
To the best of our knowledge, these materials are not contaminated with any hazardous substances while on our properties as listed above.

If you require additional information please don't hesitate to contact me.

Sincerely,

Jesus Martinez  
VP of Business Development





Location: North Church Sand & Gravel Stockpile

Supplier: North Church Sand & Gravel Franklin, NJ

Material: ¾ Crushed #57 Date 07/10/17 Time: 8:30am

Specification ASTM #57

Wet: Lbs 29.7 Dry: Lbs 29.5 Wash Dry: 29.5

Moisture: 0.7 % Loss: 0 Loss% 1.0

Sieve size	Wgt Retained	Wgt Retained Cumulative	% Retained Cumulative	% Passing	Spec.
1 1/2"	0	0	0.0	100.0	100
1"	0.5	0.5	1.7	98.3	95-100
3/4"	6.4	6.9	23.4	76.6	
1/2"	9.5	16.4	55.6	44.4	25-60
3/8"	6.3	22.7	76.9	23.1	
#4	5.4	28.1	95.3	4.7	0-10
#8	0.9	29	98.3	1.7	0-5
Pan	0.5	29.5	100.0	0.0	
Total:	29.5		Loss:	0.0	%

Gradation done by: John O'Neil



# NYSDEC Approval of Blue Stone From North Church



## Paul Matli

---

**From:** Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>  
**Sent:** Monday, November 06, 2017 4:31 PM  
**To:** Paul Matli  
**Cc:** Jenny J. Shulman (schulmanindustries@gmail.com); Kuehner, Wendy S (HEALTH); George Man (genmail@mcnyinc.com); ariel@amc-engineering.com  
**Subject:** RE: 11-28 31 Drive - Submission of 3/4 inch Bleu stone info

Thank you Paul. No comments.

## Sondra Martinkat

Environmental Engineer 2, Environmental Remediation

### New York State Department of Environmental Conservation

47-40 21<sup>st</sup> St, Long Island City, NY 11101

P: 718-482-4891 | F: 718-482-6358 | [sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)

[www.dec.ny.gov](http://www.dec.ny.gov) |  | 

---

**From:** Paul Matli [mailto:pmatli@hydrotechenvironmental.com]  
**Sent:** Monday, November 06, 2017 4:26 PM  
**To:** Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>  
**Cc:** Jenny J. Shulman (schulmanindustries@gmail.com) <schulmanindustries@gmail.com>; Kuehner, Wendy S (HEALTH) <wendy.kuehner@health.ny.gov>; George Man (genmail@mcnyinc.com) <genmail@mcnyinc.com>; ariel@amc-engineering.com  
**Subject:** RE: 11-28 31 Drive - Submission of 3/4 inch Bleu stone info

*ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.*

Sondra - We still have not received your comments on the attached submission for blue stone for use as backfill under slab and also for SSDS.

Could you please expedite your response.

Regards,

Paul I. Matli, Ph.D., P.G.  
Vice President of Technical Services



15 Ocean Avenue  
Brooklyn, NY 11225  
Cell: 631-241-7165  
Tel: 718-636-0800  
Fax: 718-636-0900



Email: [pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)

Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)

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---

**From:** Paul Matli

**Sent:** Wednesday, October 25, 2017 3:28 PM

**To:** 'Martinkat, Sondra (DEC)' <[sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)>

**Cc:** Jenny J. Shulman ([schulmanindustries@gmail.com](mailto:schulmanindustries@gmail.com)) <[schulmanindustries@gmail.com](mailto:schulmanindustries@gmail.com)>; Kuehner, Wendy S (HEALTH) <[wendy.kuehner@health.ny.gov](mailto:wendy.kuehner@health.ny.gov)>; George Man ([genmail@mcnyinc.com](mailto:genmail@mcnyinc.com)) <[genmail@mcnyinc.com](mailto:genmail@mcnyinc.com)>; [ariel@amc-engineering.com](mailto:ariel@amc-engineering.com)

**Subject:** 11-28 31 Drive - Submission of 3/4 inch Bleu stone info

Sondra – please find the transmittal of ¾ inch blue stone that will be brought to above site for use under footings and also for the SSDS.

Please advise if you have any comments.

Regards,

Paul I. Matli, Ph.D., P.G.

**HYDRO TECH ENVIRONMENTAL**

**Engineering and Geology, DPC**

15 Ocean Avenue, 2nd Floor (Suite B), Brooklyn, NY 11225

Cell: (631)-241-7165 Tel: (718) 636-0800 Fax: (718) 636-0900

[pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)

---



# Impact Materials Certification and Sieve Analysis



# Impact Recovery and Reuse Center Crushed Stone Report

Laboratory Testing on Material Stockpiled at Impact Recovery and Reuse Center

*Submitted by:*  
Impact Materials  
1000 Page Ave,  
Lyndhurst, NJ



**IMPACT MATERIALS** | 1000 Page Ave | Lyndhurst | New Jersey | 07030 | 201.268.5686





January 17, 2018

Paul Moscatello

**PT Consultants, Inc.**

330 West 38th Street, Suite 403

New York, NY 10018

RE: Impact Recovery and Reuse Center

1000 Page Avenue, Lyndhurst, NJ

Blue Stone Product at IRRC Intended for 11-28 31st Dr, Long Island City, NY

Mr. Moscatello:

This letter was prepared to report the environmental and geotechnical quality of the 1 ½" clean bluestone product manufactured at the Impact Reuse and Recovery Center ("IRRC"), a permitted Class B Recycling Facility located at 1000 Page Avenue in Lyndhurst, New Jersey. The product is proposed as backfill 11-28 31st Dr, Long Island City, NY.

IRRC uses a thorough process to ensure the quality of the products it manufactures. This includes vetting sources used to manufacture our products and performing requisite certified third party analytical testing on representative samples.

This specific product was made by crushing and screening the crushed stone to 1 ½" clean product and inspected for quality control. Geotechnical analysis was conducted periodically. Post processing, it was stored in surge piles for additional quality control analysis. Grab samples were secured from random locations within the stockpile. Samples were secured for volatile organic analysis using Encore © sampling kits. The balance of the discreet sample was secured into glass jars for semivolatile, metal, PCB, pesticide, herbicide and total extractable petroleum hydrocarbon analysis. Once analytical results were received and verified to New York Codes, Rules and Regulations ("NYCRR") Part 375 Residential Use and Protection of Groundwater Soil Cleanup Objectives, the product was combined into a larger finished stockpile.

The results of the finished stockpile sampling are presented below in Table 1. All results are below NYCRR Part 375 Residential Use and Protection of Groundwater Soil Cleanup Objectives. For a more in depth examination of the sampling results, please see the attached summary table, field notes, and Laboratory Report complete with a signed Chain of Custody for the most recent sampling.

Sincerely,

**IMPACT ENVIRONMENTAL**

Jeff Bogioan

IRRC QA/QC Engineer



Table 1:

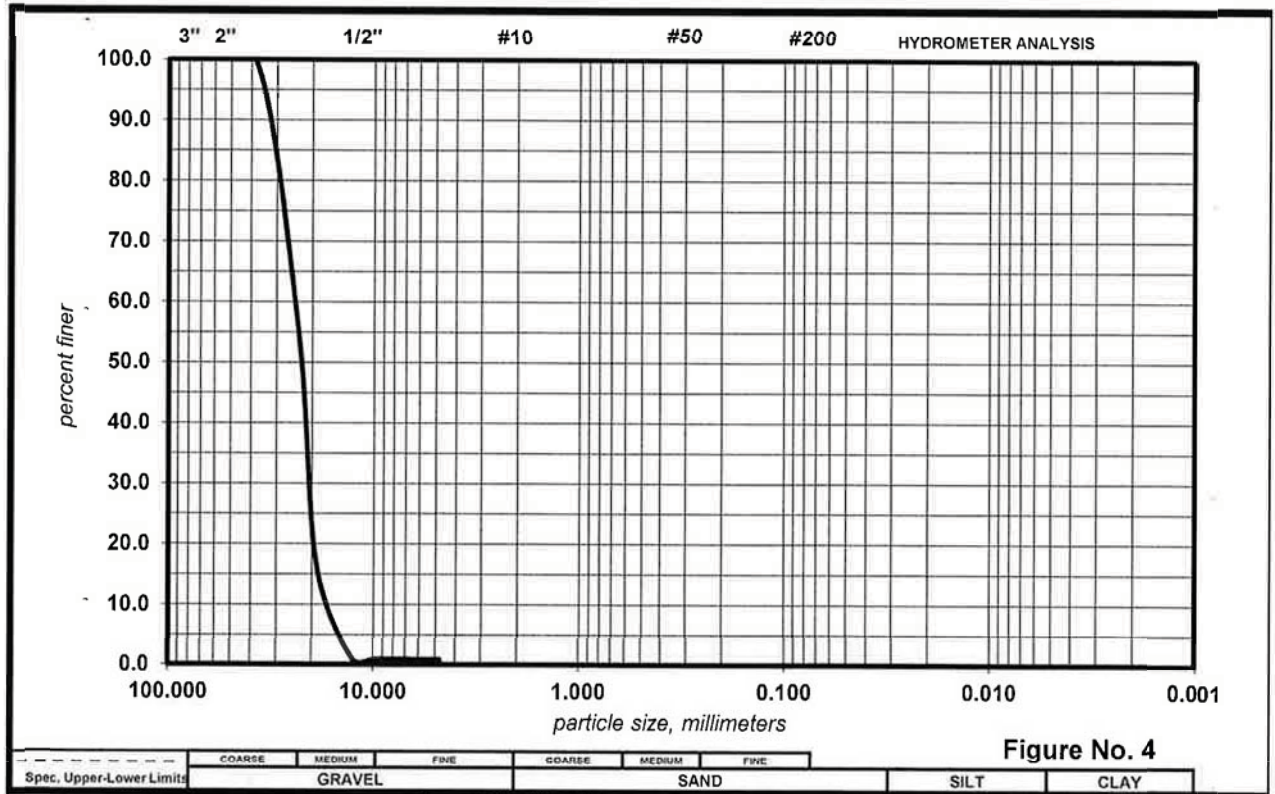


# SOR TESTING LABORATORIES, INC.

98 Sand Park Road - Cedar Grove, NJ 07009

Tel.: (973) 239-6001 Fax: (973) 239-8380 http://www.sorlabs.com

## PARTICLE SIZE DISTRIBUTION TEST REPORT



### Specification\*

Sieve Size	% Finer	Min.(%)	Max.(%)	Sample Identification				
3" (75 mm)				Sample No.:	1.5" Clean			
2 1/2" (63 mm)				Lab No.:	A17-081-03			
2" (50 mm)				Source/Location:	IRRC			
1 1/2" (38.1 mm)	100.0			Description:	1.5" Aggregate			
1" (25 mm)	55.5			sample description in accordance with Burmister System				
3/4" (19 mm)	16.8							
5/8" (16 mm)				LL :	PL :	PI :		
1/2" (12.5 mm)	1.1			As received Moisture Content: %				
3/8" (9.5 mm)	0.9							
5/16" (8 mm)				Classification:				
1/4" (6.3 mm)								
#4 (4.75 mm)	0.8			USCS:	[GP]			
#6 (3.35 mm)				AASHTO:				
#8 (2.36 mm)				Remarks:				
#10 (2 mm)								
#14 (1.4 mm)				Client: Impact Materials				
#16 (1.18 mm)								
#20 (850 µm)				Project:	IRRC			
#30 (600 µm)				Location:				
#40 (425 µm)				Date:	22-May-17			
#50 (300 µm)				Job No.:	17-01	Report No.: 17-527		
#60 (250 µm)								
#100 (150 µm)								
#200 (75 µm)								
*-								

\* -



## Bluestone Analysis

Location: 1000 Page Ave, Lyndhurst, NJ

[illegible]



Bluestone Analysis  
Location: 1000 Page Ave, Lynhurst, NJ

CAS Number	Parameter Name	Parameter ID	NYCR 375 Residential	NYCR 375 Protection of Groundwater	IRBC NORTH 9-20-17	IRBC SOUTH 9-20-17	IRBC EAST 9-20-17	IRBC WEST 9-20-17	RL	Q	MDL	RL	Q	MDL
	Sample ID													
	Date													
	Unit													
954-52-1	1,6-Dinitro-2-methylphenol	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
95-50-7	4-Chloro-2-methylphenol	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
100-01-8	4-Chlorophenol	SVOC	10000	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
100-01-8	4-Nitrophenol	SVOC	10000	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
83-32-9	Acenaphthene	SVOC	100,000a	98,000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
208-96-8	Acenaphthylene	SVOC	100,000a	107,000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
98-86-2	Acenaphthylene	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
62-53-3	Anthracene	SVOC	48000	330	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
120-127-1	Benzo-a-Fluoranthene	SVOC	100,000a	1,000,000c	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
100-52-7	Benzo-b-Fluoranthene	SVOC	100,000a	1,000,000c	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
56-55-3	Benzo-a-Fluoranthene	SVOC	1,000f	1,000f	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
50-32-8	Benzo-a-Fluoranthene	SVOC	1,000f	1,000f	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
207-98-9	Benzo-b-Fluoranthene	SVOC	1,000	1,000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
193-24-2	Benzo-g,h-Fluoranthene	SVOC	100,000a	1,000,000c	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
100-51-6	Benzyl Alcohol	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
111-44-4	Bis(2-Chloroethyl)ether	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
108-60-1	Bis(2-Chloroisopropyl)ether	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
117-81-7	Bis(2-Ethylhexyl)phthalate	SVOC	50000	435000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
85-68-7	Butylbenzylphthalate	SVOC	100000	122000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
105-60-2	Carbazole	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
91-91-9	Carbazole	SVOC	1000f	1,000f	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
25-94-0	Dibutyltin	SVOC	NA	NA	< 86	< 86	< 86	< 86	u/g/kg		86	u	86	u/g/kg
132-64-9	Dibenzofuran	SVOC	14,000	6200	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
53-70-3	Dibenzofuran	SVOC	330a	1,000,000c	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
84-66-2	Dibenzofuran	SVOC	100000	7100	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
131-11-3	Dimethyl Phthalate	SVOC	100000	27000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
84-74-2	Diphenyl Phthalate	SVOC	100000	8100	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
208-44-0	Fluoranthene	SVOC	100,000a	1,000,000c	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
86-73-7	Fluorene	SVOC	100,000a	385,000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
118-74-1	Heachlorobenzene	SVOC	410	3,200	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
77-47-4	Heachlorobenzene	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
67-72-1	Heachlorobenzene	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
193-39-5	Indeno(1,2,3-cd)Pyrene	SVOC	500f	8,200	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
88-35-1	Isophenone	SVOC	10000	1,000	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
621-64-7	N-Nitrosodimethylamine	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
86-30-6	N-Nitrosodimethylamine	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
87-86-5	N-Nitrosodiphenylamine	SVOC	NA	NA	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
85-01-8	Phenanthrene	SVOC	100,000a	800e	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
120-70-7	Phenanthrene	SVOC	100,000a	220	< 240	< 240	< 240	< 240	u/g/kg		240	u	240	u/g/kg
83-76-5	2,4,5-T	PESTICIDE	100000	1,000,000c	< 86	< 86	< 86	< 86	u/g/kg		86	u	86	u/g/kg
94-75-7	2,4,5-T	PESTICIDE	3800	1900	< 86	< 86	< 86	< 86	u/g/kg		86	u	86	u/g/kg
72-54-8	4,4-DD	PESTICIDE	100000	500	< 170	< 170	< 170	< 170	u/g/kg		170	u	170	u/g/kg
72-54-8	4,4-DD	PESTICIDE	2,600	14,000	< 2.1	< 2.1	< 2.1	< 2.1	u/g/kg		2.1	u	2.1	u/g/kg
92-55-9	4,4-DD	PESTICIDE	1,800	17,000	< 2.1	< 2.1	< 2.1	< 2.1	u/g/kg		2.1	u	2.1	u/g/kg
92-55-9	4,4-DD	PESTICIDE	1,700	16,000	< 2.1	< 2.1	< 2.1	< 2.1	u/g/kg		2.1	u	2.1	u/g/kg
310-91-2	Agri-BHC	PESTICIDE	9	30	< 3.5	< 3.5	< 3.5	< 3.5	u/g/kg		3.5	u	3.5	u/g/kg
5103-71-9	Alpha Chlordane	PESTICIDE	910	2,900	6.1	3.5	3.5	3.5	u/g/kg		3.5	u	3.5	u/g/kg
1104-28-2	Aroclor 1016	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
1104-28-2	Aroclor 1221	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
11141-16-5	Aroclor 1242	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
11141-16-5	Aroclor 1242	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
1267-28-6	Aroclor 1248	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
11095-82-5	Aroclor 1260	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
11095-82-5	Aroclor 1262	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
73242-22-5	Aroclor 1268	PCB	NA	NA	< 69	< 69	< 69	< 69	u/g/kg		69	u	69	u/g/kg
319-85-7	Beta-BHC	PESTICIDE	72	90	< 1.7	< 1.7	< 1.7	< 1.7	u/g/kg		1.7	u	1.7	u/g/kg
319-85-8	Chlordane	PESTICIDE	910	2,900	39	35	35	35	u/g/kg		35	u	35	u/g/kg
319-85-8	Chlordane	PESTICIDE	100,000a	250	< 6.9	< 6.9	< 6.9	< 6.9	u/g/kg		6.9	u	6.9	u/g/kg
100-100-9	Dumosa	PESTICIDE	NA	NA	< 86	< 86	< 86	< 86	u/g/kg		86	u	86	u/g/kg
1152-39-7	Endosulfan	PESTICIDE	NA	NA	ND	ND	ND	ND	u/g/kg		ND	u	ND	u/g/kg
959-98-8	Endosulfan I	PESTICIDE	4,800	102,000	< 6.9	< 6.9	< 6.9	< 6.9	u/g/kg		6.9	u	6.9	u/g/kg
33213-65-9	Endosulfan II	PESTICIDE	4,800	102,000	< 6.9	< 6.9	< 6.9	< 6.9	u/g/kg		6.9	u	6.9	u/g/kg
1031-07-8	Endosulfan Sulfate	PESTICIDE	4,800	1,000,000c	< 6.9	< 6.9	< 6.9	< 6.9	u/g/kg		6.9	u	6.9	u/g/kg
72-20-8	Endrin	PESTICIDE	2,200	60	< 6.9	< 6.9	< 6.9	< 6.9	u/g/kg		6.9	u	6.9	u/g/kg
58-89-9	Gamma-BHC	PESTICIDE	280	100	< 1.4	< 1.4	< 1.4	< 1.4	u/g/kg		1.4	u	1.4	u/g/kg



Location: 1000 Page Ave, Lyndhurst, NJ

CAS Number	Parameter Name	Parameter ID	NYCRR 375 Residential	NYCRR 375 Protection of Groundwater	IRRC BLUESTONE NORTH 9-20-17	IRRC BLUESTONE SOUTH 9-20-17	IRRC BLUESTONE EAST 9-20-17	IRRC BLUESTONE WEST 9-20-17	RL	Q	MDL	RL	Q	MDL	RL	Q	MDL
	Sample ID	Ure															
5103-24-2	Gamma chlorobenzene	PESTICIDE	540	14000	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg
76-44-8	Heptachlor	PESTICIDE	420	380	<6.9	6.9	<6.8	6.8	6.8	<6.9	6.9	<6.7	6.7	6.7	<6.7	6.7	6.7
1024-57-3	Heptachlor Epoxide	PESTICIDE	77	20	<6.9	6.9	<6.8	6.8	6.8	<6.9	6.9	<6.7	6.7	6.7	<6.7	6.7	6.7
72-43-5	Methoxychlor	PESTICIDE	100000	900000	<35	35	<34	34	34	<34	34	<34	34	34	<34	34	34
56-38-2	Permethrin	PESTICIDE	100000	1200	<340	340	<340	340	340	<340	340	<340	340	340	<330	330	130
1336-36-3	Polychlorinated Biphenyls	PESTICIDE	1,000	3,200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8001-35-2	Toxaphene	PESTICIDE	NA	NA	<140	140	<140	140	<140	140	<140	140	<140	140	<130	130	130
7429-90-5	Aluminum, Al	METAL	NA	NA	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
7440-36-0	Aluminum, Sb	METAL	NA	NA	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg	uq/kg
7440-38-2	Antimony, Sb	METAL	168	168	2.55	0.63	0.63	0.64	0.64	0.64	0.64	0.66	0.66	0.68	0.68	0.68	0.68
7440-39-3	Barium, Ba	METAL	3500	820	132	0.6	0.32	158	0.6	0.32	119	0.7	0.33	110	0.7	0.34	110
7440-41-7	Beryllium, Be	METAL	14	47	0.34	0.25	0.13	0.36	0.25	0.13	0.3	0.26	0.13	0.3	0.27	0.14	0.34
7440-43-9	Cadmium, Cd	METAL	2.51	7.5	<0.31	0.31	0.32	0.32	0.32	0.33	0.33	<0.34	0.34	0.34	<0.34	0.34	0.34
7440-47-3	Chromium, Cr	METAL	NA	29.2	29.2	0.31	0.31	32.7	0.32	0.32	30.9	0.33	0.33	25.2	0.34	0.34	0.34
18540-29-9	Chromium, hexavalent	METAL	22	19	<0.41	0.41	<0.41	0.41	0.41	<0.42	0.42	<0.42	0.42	<0.40	0.40	0.40	0.40
16085-85-1	Chromium, trivalent	METAL	36	NA	29.2	0.31	0.31	32.7	0.32	0.32	30.9	0.33	0.33	25.2	0.34	0.34	0.34
7440-48-4	Cobalt, Co	METAL	30000	NA	13	0.31	0.31	15.9	0.32	0.32	13.3	0.33	0.33	12.7	0.34	0.34	0.34
7440-58-8	Copper, Cu	METAL	170	170	46	0.52	0.52	46	0.52	0.52	46	0.52	0.52	46	0.52	0.52	0.52
5712-5-5	Iron, Fe	METAL	27	27	<0.52	0.52	<0.52	0.52	0.52	<0.52	0.52	<0.52	0.52	<0.51	0.51	<0.51	0.51
7439-89-6	Iron, Fe	METAL	200000	NA	25600	31	31	25600	32	32	24900	33	33	22000	34	34	34
7439-92-1	Lead, Pb	METAL	400	450	12.2	0.6	0.31	15.8	0.6	0.32	12.4	0.7	0.33	11.2	0.7	0.34	0.34
7439-96-5	Manganese, Mn	METAL	2,000	2,000	268	3.1	3.1	300	3.2	3.2	236	3.3	3.3	264	3.4	3.4	3.4
7439-97-6	Mercury, Hg	METAL	0.811	0.73	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.02	0.03	0.02
7440-02-0	Nickel, Ni	METAL	140	130	21.7	0.31	28.8	0.32	0.32	25.3	0.33	0.33	22.5	0.34	0.33	22.5	0.34
7440-66-6	Zinc, Zn	METAL	2,400	2,480	68.7	0.6	0.31	68.4	0.6	0.32	68.4	0.7	0.33	65.8	0.7	0.34	0.34

Notes: Shaded values indicate an exceedance of NYCRR Part 375 Residential and Protection of Groundwater SCD's.





Environmental Laboratories, Inc.  
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Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

September 27, 2017

FOR: Attn: Mr. Jeff Bogioian  
Impact Materials  
170 Keyland Court  
Bohemia NY 11716

## Sample Information

Matrix: SOIL  
Location Code: IMPACT-IM  
Rush Request: 24 Hour  
P.O.#:

## Custody Information

Collected by: JB  
Received by: SW  
Analyzed by: see "By" below

## Date

09/20/17  
09/20/17

## Time

13:00  
17:12

## Laboratory Data

SDG ID: GBZ05362  
Phoenix ID: BZ05362

Project ID: IRRCL BLUESTONE  
Client ID: IRRCL BLUESTONE NORTH 9-20-17

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.31	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Aluminum	17500	31	6.3	mg/Kg	10	09/22/17	MA	SW6010C
Arsenic	2.55	0.63	0.63	mg/Kg	1	09/22/17	MA	SW6010C
Barium	132	0.6	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Beryllium	0.34	0.25	0.13	mg/Kg	1	09/22/17	MA	SW6010C
Calcium	7180	31	29	mg/Kg	10	09/22/17	MA	SW6010C
Cadmium	ND	0.31	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Cobalt	13.0	0.31	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Chromium	29.2	0.31	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Copper	46.1	0.31	0.31	mg/kg	1	09/22/17	MA	SW6010C
Iron	25600	31	31	mg/Kg	10	09/22/17	MA	SW6010C
Mercury	0.03	0.03	0.02	mg/Kg	1	09/22/17	RS	SW7471B
Potassium	7160	63	24	mg/Kg	10	09/22/17	MA	SW6010C
Magnesium	8950	31	31	mg/Kg	10	09/22/17	MA	SW6010C
Manganese	268	3.1	3.1	mg/Kg	10	09/22/17	MA	SW6010C
Sodium	1200	6	2.7	mg/Kg	1	09/22/17	MA	SW6010C
Nickel	21.7	0.31	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Lead	12.2	0.6	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Antimony	ND	1.6	1.6	mg/Kg	1	09/22/17	MA	SW6010C
Selenium	ND	1.3	1.1	mg/Kg	1	09/22/17	MA	SW6010C
Thallium	ND	1.3	1.3	mg/Kg	1	09/22/17	MA	SW6010C
Trivalent Chromium	29.2	0.31	0.31	mg/kg	1			CALC 6010-7196
Vanadium	63.3	0.31	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Zinc	68.7	0.6	0.31	mg/Kg	1	09/22/17	MA	SW6010C
Percent Solid	96			%		09/20/17	Q	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	ND	0.41	0.41	mg/Kg	1	09/22/17	KDB	SW7196A
pH at 25C - Soil	10.0	1.00	1.00	pH Units	1	09/20/17 20:24	O	SW9045
Redox Potential	18.4			mV	1	09/20/17	O	SM2580B-09



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide (SW9010C Distill.)	ND	0.52	0.260	mg/Kg	1	09/22/17	O/GD	SW9012B
Soil Extraction for PCB	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for Pest	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for SVOA	Completed					09/21/17	JJ/CKV	SW3545A
Mercury Digestion	Completed					09/21/17	W/W	SW7471B
NJ EPH Extraction	Completed					09/21/17	AA/CK	NJDEP 10-08 R3
Soil Extraction for Herbicide	Completed					09/21/17	S/D	SW8151A
SPLP Extraction for Organics	Completed					09/25/17	W	SW1312
SPLP Pesticides Ext. (2 L to 1ml)	Completed					09/26/17	T	SW3510C
Total Metals Digest	Completed					09/20/17	L/AG/BF	SW3050B

## **NJ EPH Category 2**

Total EPH (C9-C40)	ND	52	52	mg/kg	1	09/22/17	AW	NJEPH 10-08 R3	1
<b><u>QA/QC Surrogates</u></b>									
% COD (surr)	65			%	1	09/22/17	AW	NJEPH 10-08 R3	
% Terphenyl (surr)	81			%	1	09/22/17	AW	NJEPH 10-08 R3	

## **Chlorinated Herbicides**

2,4,5-T	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
2,4,5-TP (Silvex)	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
2,4-D	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
2,4-DB	ND	1700	1700	ug/Kg	10	09/22/17	CW	SW8151A
Dalapon	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
Dicamba	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
Dichloroprop	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
Dinoseb	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A

## **QA/QC Surrogates**

% DCAA	51			%	10	09/22/17	CW	30 - 150 %
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## **Polychlorinated Biphenyls**

PCB-1016	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1221	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1232	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1242	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1248	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1254	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1260	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1262	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1268	ND	69	69	ug/Kg	2	09/23/17	AW	SW8082A

## **QA/QC Surrogates**

% DCBP	67			%	2	09/23/17	AW	30 - 150 %
% TCMX	60			%	2	09/23/17	AW	30 - 150 %

## **Pesticides - Soil**

4,4' -DDD	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
a-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
a-Chlordane	6.1	3.5	3.5	ug/Kg	2	09/22/17	CW	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	09/22/17	CW	SW8081B



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
b-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Chlordane	39	35	35	ug/Kg	2	09/22/17	CW	SW8081B
d-BHC	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Dieldrin	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan I	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan II	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan sulfate	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endrin	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endrin aldehyde	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endrin ketone	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	09/22/17	CW	SW8081B
g-Chlordane	5.1	3.5	3.5	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor epoxide	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	09/22/17	CW	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	09/22/17	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	69			%	2	09/22/17	CW	30 - 150 %
% TCMX	60			%	2	09/22/17	CW	30 - 150 %

SPLP Chlordane	ND	0.050	0.050	ug/L	1	09/27/17	CW	SW8081B
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**Volatiles**

1,2,4-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Naphthalene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
n-Butylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
n-Propylbenzene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
p-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
sec-Butylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
tert-Butylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C

**QA/QC Surrogates**

% 1,2-dichlorobenzene-d4	98			%	1	09/23/17	JLI	SW8260C
% Bromofluorobenzene	101			%	1	09/23/17	JLI	SW8260C
% Dibromofluoromethane	90			%	1	09/23/17	JLI	SW8260C
% Toluene-d8	100			%	1	09/23/17	JLI	SW8260C

**1,4-dioxane**

1,4-dioxane	ND	79	42	ug/kg	1	09/23/17	JLI	SW8260C
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**Volatiles**

1,1,1,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,2-Dibromo-3-chloropropane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
2-Hexanone	ND	26	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
Acetone	ND	50	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
Acrolein	ND	26	2.6	ug/Kg	1	09/23/17	JLI	SW8260C
Acrylonitrile	ND	11	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Benzene	ND	5.0	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Bromochloromethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Bromoform	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Bromomethane	ND	5.3	2.1	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon Disulfide	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon tetrachloride	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Chlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroform	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Chloromethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Cyclohexane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Dichlorodifluoromethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Ethylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Isopropylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
m&p-Xylene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl ethyl ketone	ND	32	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl t-butyl ether (MTBE)	1.3	J 11	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methylacetate	ND	5.3	2.6	ug/Kg	1	09/23/17	JLI	SW8260C
Methylcyclohexane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methylene chloride	ND	5.3	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
o-Xylene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Styrene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
tert-butyl alcohol	ND	110	21	ug/Kg	1	09/23/17	JLI	SW8260C
Tetrachloroethene	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Toluene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Total Xylenes	ND	5.3	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Trichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorofluoromethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Vinyl chloride	ND	5.0	0.53	ug/Kg	1	09/23/17	JLI	SW8260C

**QA/QC Surrogates**



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	98			%	1	09/23/17	JLI	70 - 130 %
% Bromofluorobenzene	101			%	1	09/23/17	JLI	70 - 130 %
% Dibromofluoromethane	90			%	1	09/23/17	JLI	70 - 130 %
% Toluene-d8	100			%	1	09/23/17	JLI	70 - 130 %
Vinyl Acetate	ND	53	53	ug/Kg	1	09/23/17	JLI	SW8260C TIC 10

**Semivolatiles**

1,1-Biphenyl	ND	240	100	ug/Kg	1	09/21/17	PS	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	09/21/17	PS	SW8270D
1,2-Diphenylhydrazine	ND	340	340	ug/Kg	1	09/21/17	PS	SW8270D
2,3,4,6-tetrachlorophenol	ND	240	160	ug/Kg	1	09/21/17	PS	SW8270D
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	09/21/17	PS	SW8270D
2,4,6-Trichlorophenol	ND	140	110	ug/Kg	1	09/21/17	PS	SW8270D
2,4-Dichlorophenol	ND	140	120	ug/Kg	1	09/21/17	PS	SW8270D
2,4-Dimethylphenol	ND	240	84	ug/Kg	1	09/21/17	PS	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	09/21/17	PS	SW8270D
2,4-Dinitrotoluene	ND	140	130	ug/Kg	1	09/21/17	PS	SW8270D
2,6-Dinitrotoluene	ND	140	110	ug/Kg	1	09/21/17	PS	SW8270D
2-Chloronaphthalene	ND	240	96	ug/Kg	1	09/21/17	PS	SW8270D
2-Chlorophenol	ND	240	96	ug/Kg	1	09/21/17	PS	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	09/21/17	PS	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	09/21/17	PS	SW8270D
2-Nitroaniline	ND	300	240	ug/Kg	1	09/21/17	PS	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	09/21/17	PS	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	130	ug/Kg	1	09/21/17	PS	SW8270D 1
3,3'-Dichlorobenzidine	ND	140	140	ug/Kg	1	09/21/17	PS	SW8270D
3-Nitroaniline	ND	680	240	ug/Kg	1	09/21/17	PS	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	240	ug/Kg	1	09/21/17	PS	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	09/21/17	PS	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	09/21/17	PS	SW8270D
4-Chloroaniline	ND	680	160	ug/Kg	1	09/21/17	PS	SW8270D
4-Chlorophenyl phenyl ether	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
4-Nitroaniline	ND	340	110	ug/Kg	1	09/21/17	PS	SW8270D
4-Nitrophenol	ND	340	150	ug/Kg	1	09/21/17	PS	SW8270D
Acenaphthene	ND	240	100	ug/Kg	1	09/21/17	PS	SW8270D
Acenaphthylene	ND	140	95	ug/Kg	1	09/21/17	PS	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Anthracene	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Atrazine	ND	140	100	ug/Kg	1	09/21/17	PS	SW8270D
Benz(a)anthracene	120	J 240	110	ug/Kg	1	09/21/17	PS	SW8270D
Benzaldehyde	ND	240	100	ug/Kg	1	09/21/17	PS	SW8270D
Benzo(a)pyrene	ND	140	110	ug/Kg	1	09/21/17	PS	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	09/21/17	PS	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Benzyl Alcohol	ND	340	340	ug/Kg	1	09/21/17	PS	SW8270D
Benzyl butyl phthalate	ND	240	88	ug/Kg	1	09/21/17	PS	SW8270D
Bis(2-chloroethoxy)methane	ND	240	94	ug/Kg	1	09/21/17	PS	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	140	92	ug/Kg	1	09/21/17	PS	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	94	ug/Kg	1	09/21/17	PS	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	98	ug/Kg	1	09/21/17	PS	SW8270D
Caprolactam	ND	240	240	ug/Kg	1	09/21/17	PS	SW8270D
Carbazole	ND	170	140	ug/Kg	1	09/21/17	PS	SW8270D
Chrysene	120	J 240	110	ug/Kg	1	09/21/17	PS	SW8270D
Dibenz(a,h)anthracene	ND	140	110	ug/Kg	1	09/21/17	PS	SW8270D
Dibenzofuran	ND	240	99	ug/Kg	1	09/21/17	PS	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Di-n-butylphthalate	ND	240	90	ug/Kg	1	09/21/17	PS	SW8270D
Di-n-octylphthalate	ND	240	88	ug/Kg	1	09/21/17	PS	SW8270D
Fluoranthene	210	J 240	110	ug/Kg	1	09/21/17	PS	SW8270D
Fluorene	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Hexachlorobenzene	ND	140	99	ug/Kg	1	09/21/17	PS	SW8270D
Hexachlorobutadiene	ND	240	120	ug/Kg	1	09/21/17	PS	SW8270D
Hexachlorocyclopentadiene	ND	240	100	ug/Kg	1	09/21/17	PS	SW8270D
Hexachloroethane	ND	140	100	ug/Kg	1	09/21/17	PS	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Isophorone	ND	140	110	ug/Kg	1	09/21/17	PS	SW8270D
Naphthalene	260	240	98	ug/Kg	1	09/21/17	PS	SW8270D
Nitrobenzene	ND	140	120	ug/Kg	1	09/21/17	PS	SW8270D
N-Nitrosodimethylamine	ND	240	96	ug/Kg	1	09/21/17	PS	SW8270D
N-Nitrosodi-n-propylamine	ND	140	110	ug/Kg	1	09/21/17	PS	SW8270D
N-Nitrosodiphenylamine	ND	140	130	ug/Kg	1	09/21/17	PS	SW8270D
Pentachlorophenol	ND	240	130	ug/Kg	1	09/21/17	PS	SW8270D
Phenanthrene	220	140	97	ug/Kg	1	09/21/17	PS	SW8270D
Phenol	ND	240	110	ug/Kg	1	09/21/17	PS	SW8270D
Pyrene	240	240	120	ug/Kg	1	09/21/17	PS	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	81			%	1	09/21/17	PS	30 - 130 %
% 2-Fluorobiphenyl	74			%	1	09/21/17	PS	30 - 130 %
% 2-Fluorophenol	49			%	1	09/21/17	PS	30 - 130 %
% Nitrobenzene-d5	61			%	1	09/21/17	PS	30 - 130 %
% Phenol-d5	58			%	1	09/21/17	PS	30 - 130 %
% Terphenyl-d14	76			%	1	09/21/17	PS	30 - 130 %
Aniline	ND	340	340	ug/Kg	1	09/21/17	PS	SW8270D
Benzoic Acid	ND	340	240	ug/Kg	1	09/21/17	PS	SW8270D
Parathion	ND	340	140	ug/Kg	1	09/21/17	PS	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

10 = This parameter is not certified by NY NELAC for this matrix.

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium:

This sample is in a reducing state.

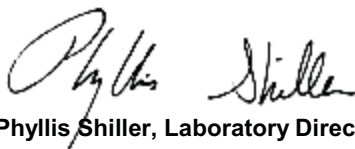
Semi-Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

This report must not be reproduced except in full as defined by the attached chain of custody.



**Phyllis Shiller, Laboratory Director**

**September 27, 2017**

**Official Report Release To Follow**





Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

September 27, 2017

FOR: Attn: Mr. Jeff Bogioian  
Impact Materials  
170 Keyland Court  
Bohemia NY 11716

### Sample Information

Matrix: SOIL  
Location Code: IMPACT-IM  
Rush Request: 24 Hour  
P.O.#:

### Custody Information

Collected by: JB  
Received by: SW  
Analyzed by: see "By" below

### Date

09/20/17  
09/20/17

### Time

13:05  
17:12

## Laboratory Data

SDG ID: GBZ05362  
Phoenix ID: BZ05363

Project ID: IRR BLUESTONE  
Client ID: IRR BLUESTONE SOUTH 9-20-17

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.32	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Aluminum	17700	32	6.4	mg/Kg	10	09/22/17	MA	SW6010C
Arsenic	1.08	0.64	0.64	mg/Kg	1	09/22/17	MA	SW6010C
Barium	158	0.6	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Beryllium	0.36	0.25	0.13	mg/Kg	1	09/22/17	MA	SW6010C
Calcium	7770	3.2	2.9	mg/Kg	1	09/22/17	MA	SW6010C
Cadmium	ND	0.32	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Cobalt	15.9	0.32	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Chromium	32.7	0.32	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Copper	85.3	0.32	0.32	mg/kg	1	09/22/17	MA	SW6010C
Iron	29600	32	32	mg/Kg	10	09/22/17	MA	SW6010C
Mercury	0.03	J 0.03	0.02	mg/Kg	1	09/22/17	RS	SW7471B
Potassium	9070	64	25	mg/Kg	10	09/22/17	MA	SW6010C
Magnesium	9330	32	32	mg/Kg	10	09/22/17	MA	SW6010C
Manganese	300	3.2	3.2	mg/Kg	10	09/22/17	MA	SW6010C
Sodium	733	6	2.7	mg/Kg	1	09/22/17	MA	SW6010C
Nickel	28.8	0.32	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Lead	15.8	0.6	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Antimony	ND	1.6	1.6	mg/Kg	1	09/22/17	MA	SW6010C
Selenium	ND	1.3	1.1	mg/Kg	1	09/22/17	MA	SW6010C
Thallium	ND	1.3	1.3	mg/Kg	1	09/22/17	MA	SW6010C
Trivalent Chromium	32.7	0.32	0.32	mg/kg	1			CALC 6010-7196
Vanadium	56.0	0.32	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Zinc	80.9	0.6	0.32	mg/Kg	1	09/22/17	MA	SW6010C
Percent Solid	97			%		09/20/17	Q	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	ND	0.41	0.41	mg/Kg	1	09/22/17	KDB	SW7196A
pH at 25C - Soil	10.6	1.00	1.00	pH Units	1	09/20/17 20:24	O	SW9045
Redox Potential	-11.0			mV	1	09/20/17	O	SM2580B-09



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide (SW9010C Distill.)	ND	0.52	0.258	mg/Kg	1	09/22/17	O/GD	SW9012B
Soil Extraction for PCB	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for Pest	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for SVOA	Completed					09/22/17	JJ/CKV	SW3545A
Mercury Digestion	Completed					09/21/17	W/W	SW7471B
NJ EPH Extraction	Completed					09/21/17	AA/CK	NJDEP 10-08 R3
Soil Extraction for Herbicide	Completed					09/21/17	S/D	SW8151A
SPLP Extraction for Organics	Completed					09/25/17	W	SW1312
SPLP Pesticides Ext. (2 L to 1ml)	Completed					09/26/17	T	SW3510C
Total Metals Digest	Completed					09/20/17	L/AG/BF	SW3050B

**NJ EPH Category 2**

Total EPH (C9-C40)	ND	50	50	mg/kg	1	09/22/17	AW	NJEPH 10-08 R3	1
<b><u>QA/QC Surrogates</u></b>									
% COD (surr)	66			%	1	09/22/17	AW	NJEPH 10-08 R3	
% Terphenyl (surr)	82			%	1	09/22/17	AW	NJEPH 10-08 R3	

**Chlorinated Herbicides**

2,4,5-T	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
2,4,5-TP (Silvex)	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
2,4-D	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
2,4-DB	ND	1700	1700	ug/Kg	10	09/22/17	CW	SW8151A
Dalapon	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
Dicamba	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
Dichloroprop	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
Dinoseb	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A

**QA/QC Surrogates**

% DCAA	51			%	10	09/22/17	CW	30 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1221	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1232	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1242	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1248	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1254	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1260	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1262	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1268	ND	68	68	ug/Kg	2	09/23/17	AW	SW8082A

**QA/QC Surrogates**

% DCBP	99			%	2	09/23/17	AW	30 - 150 %
% TCMX	82			%	2	09/23/17	AW	30 - 150 %

**Pesticides - Soil**

4,4' -DDD	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
a-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
a-Chlordane	4.9	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B
Aldrin	ND	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
b-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Chlordane	ND	34	34	ug/Kg	2	09/22/17	CW	SW8081B
d-BHC	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Dieldrin	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan I	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan II	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan sulfate	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Endrin	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Endrin aldehyde	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Endrin ketone	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	09/22/17	CW	SW8081B
g-Chlordane	3.6	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor epoxide	ND	6.8	6.8	ug/Kg	2	09/22/17	CW	SW8081B
Methoxychlor	ND	34	34	ug/Kg	2	09/22/17	CW	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	09/22/17	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	97			%	2	09/22/17	CW	30 - 150 %
% TCMX	77			%	2	09/22/17	CW	30 - 150 %
SPLP Chlordane	ND	0.050	0.050	ug/L	1	09/27/17	CW	SW8081B
<b><u>Volatiles</u></b>								
1,2,4-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Naphthalene	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
n-Butylbenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
n-Propylbenzene	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
p-Isopropyltoluene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
sec-Butylbenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
tert-Butylbenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	09/23/17	JLI	SW8260C
% Bromofluorobenzene	101			%	1	09/23/17	JLI	SW8260C
% Dibromofluoromethane	96			%	1	09/23/17	JLI	SW8260C
% Toluene-d8	101			%	1	09/23/17	JLI	SW8260C
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	82	44	ug/kg	1	09/23/17	JLI	SW8260C
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,2-Dibromo-3-chloropropane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
2-Hexanone	ND	27	5.5	ug/Kg	1	09/23/17	JLI	SW8260C
4-Methyl-2-pentanone	ND	27	5.5	ug/Kg	1	09/23/17	JLI	SW8260C
Acetone	ND	50	5.5	ug/Kg	1	09/23/17	JLI	SW8260C
Acrolein	ND	27	2.7	ug/Kg	1	09/23/17	JLI	SW8260C
Acrylonitrile	ND	11	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Benzene	ND	5.0	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Bromochloromethane	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Bromoform	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Bromomethane	ND	5.5	2.2	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon Disulfide	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon tetrachloride	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Chlorobenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroethane	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroform	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Chloromethane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Cyclohexane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Dichlorodifluoromethane	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Ethylbenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Isopropylbenzene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
m&p-Xylene	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl ethyl ketone	ND	33	5.5	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methylacetate	ND	5.5	2.7	ug/Kg	1	09/23/17	JLI	SW8260C
Methylcyclohexane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methylene chloride	ND	5.5	5.5	ug/Kg	1	09/23/17	JLI	SW8260C
o-Xylene	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Styrene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
tert-butyl alcohol	ND	110	22	ug/Kg	1	09/23/17	JLI	SW8260C
Tetrachloroethene	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Toluene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Total Xylenes	ND	5.5	5.5	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Trichloroethene	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorofluoromethane	ND	5.5	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.5	0.55	ug/Kg	1	09/23/17	JLI	SW8260C
Vinyl chloride	ND	5.0	0.55	ug/Kg	1	09/23/17	JLI	SW8260C

**QA/QC Surrogates**



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	100			%	1	09/23/17	JLI	70 - 130 %
% Bromofluorobenzene	101			%	1	09/23/17	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	09/23/17	JLI	70 - 130 %
% Toluene-d8	101			%	1	09/23/17	JLI	70 - 130 %
Vinyl Acetate	ND	55	55	ug/Kg	1	09/23/17	JLI	SW8260C TIC 10
<b><u>Semivolatiles</u></b>								
1,1-Biphenyl	ND	240	100	ug/Kg	1	09/23/17	DD	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	09/23/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	340	340	ug/Kg	1	09/23/17	DD	SW8270D
2,3,4,6-tetrachlorophenol	ND	240	160	ug/Kg	1	09/23/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	09/23/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	140	110	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dichlorophenol	ND	140	120	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dimethylphenol	ND	240	84	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dinitrotoluene	ND	140	130	ug/Kg	1	09/23/17	DD	SW8270D
2,6-Dinitrotoluene	ND	140	110	ug/Kg	1	09/23/17	DD	SW8270D
2-Chloronaphthalene	ND	240	96	ug/Kg	1	09/23/17	DD	SW8270D
2-Chlorophenol	ND	240	96	ug/Kg	1	09/23/17	DD	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	09/23/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	09/23/17	DD	SW8270D
2-Nitroaniline	ND	300	240	ug/Kg	1	09/23/17	DD	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	09/23/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	130	ug/Kg	1	09/23/17	DD	SW8270D 1
3,3'-Dichlorobenzidine	ND	140	140	ug/Kg	1	09/23/17	DD	SW8270D
3-Nitroaniline	ND	680	240	ug/Kg	1	09/23/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	240	ug/Kg	1	09/23/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	09/23/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	09/23/17	DD	SW8270D
4-Chloroaniline	ND	680	160	ug/Kg	1	09/23/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
4-Nitroaniline	ND	340	110	ug/Kg	1	09/23/17	DD	SW8270D
4-Nitrophenol	ND	340	150	ug/Kg	1	09/23/17	DD	SW8270D
Acenaphthene	ND	240	100	ug/Kg	1	09/23/17	DD	SW8270D
Acenaphthylene	ND	140	95	ug/Kg	1	09/23/17	DD	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Anthracene	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Atrazine	ND	140	100	ug/Kg	1	09/23/17	DD	SW8270D
Benz(a)anthracene	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzaldehyde	ND	240	100	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(a)pyrene	ND	140	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzyl Alcohol	ND	340	340	ug/Kg	1	09/23/17	DD	SW8270D
Benzyl butyl phthalate	ND	240	87	ug/Kg	1	09/23/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	240	94	ug/Kg	1	09/23/17	DD	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	140	92	ug/Kg	1	09/23/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	94	ug/Kg	1	09/23/17	DD	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	98	ug/Kg	1	09/23/17	DD	SW8270D
Caprolactam	ND	240	240	ug/Kg	1	09/23/17	DD	SW8270D
Carbazole	ND	170	140	ug/Kg	1	09/23/17	DD	SW8270D
Chrysene	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Dibenz(a,h)anthracene	ND	140	110	ug/Kg	1	09/23/17	DD	SW8270D
Dibenzofuran	ND	240	99	ug/Kg	1	09/23/17	DD	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Di-n-butylphthalate	ND	240	90	ug/Kg	1	09/23/17	DD	SW8270D
Di-n-octylphthalate	ND	240	87	ug/Kg	1	09/23/17	DD	SW8270D
Fluoranthene	120	J 240	110	ug/Kg	1	09/23/17	DD	SW8270D
Fluorene	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Hexachlorobenzene	ND	140	99	ug/Kg	1	09/23/17	DD	SW8270D
Hexachlorobutadiene	ND	240	120	ug/Kg	1	09/23/17	DD	SW8270D
Hexachlorocyclopentadiene	ND	240	100	ug/Kg	1	09/23/17	DD	SW8270D
Hexachloroethane	ND	140	100	ug/Kg	1	09/23/17	DD	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Isophorone	ND	140	95	ug/Kg	1	09/23/17	DD	SW8270D
Naphthalene	ND	240	98	ug/Kg	1	09/23/17	DD	SW8270D
Nitrobenzene	ND	140	120	ug/Kg	1	09/23/17	DD	SW8270D
N-Nitrosodimethylamine	ND	240	96	ug/Kg	1	09/23/17	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	140	110	ug/Kg	1	09/23/17	DD	SW8270D
N-Nitrosodiphenylamine	ND	140	130	ug/Kg	1	09/23/17	DD	SW8270D
Pentachlorophenol	ND	240	130	ug/Kg	1	09/23/17	DD	SW8270D
Phenanthrene	ND	140	97	ug/Kg	1	09/23/17	DD	SW8270D
Phenol	ND	240	110	ug/Kg	1	09/23/17	DD	SW8270D
Pyrene	ND	240	120	ug/Kg	1	09/23/17	DD	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	69			%	1	09/23/17	DD	30 - 130 %
% 2-Fluorobiphenyl	70			%	1	09/23/17	DD	30 - 130 %
% 2-Fluorophenol	46			%	1	09/23/17	DD	30 - 130 %
% Nitrobenzene-d5	58			%	1	09/23/17	DD	30 - 130 %
% Phenol-d5	56			%	1	09/23/17	DD	30 - 130 %
% Terphenyl-d14	70			%	1	09/23/17	DD	30 - 130 %
Aniline	ND	340	340	ug/Kg	1	09/23/17	DD	SW8270D
Benzoic Acid	ND	340	240	ug/Kg	1	09/23/17	DD	SW8270D
Parathion	ND	340	140	ug/Kg	1	09/23/17	DD	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

10 = This parameter is not certified by NY NELAC for this matrix.

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium:

This sample is in a reducing state.

Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

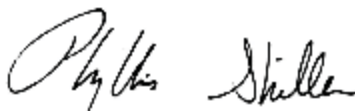
Semi-Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

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Phyllis Shiller, Laboratory Director

September 27, 2017

Official Report Release To Follow





Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

September 27, 2017

FOR: Attn: Mr. Jeff Bogioian  
Impact Materials  
170 Keyland Court  
Bohemia NY 11716

### Sample Information

Matrix: SOIL  
Location Code: IMPACT-IM  
Rush Request: 24 Hour  
P.O.#:

### Custody Information

Collected by: JB  
Received by: SW  
Analyzed by: see "By" below

### Date

09/20/17  
09/20/17

### Time

13:10  
17:12

## Laboratory Data

SDG ID: GBZ05362  
Phoenix ID: BZ05364

Project ID: IRRCL BLUESTONE  
Client ID: IRRCL BLUESTONE EAST 9-20-17

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.33	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Aluminum	14700	33	6.6	mg/Kg	10	09/22/17	MA	SW6010C
Arsenic	0.92	0.66	0.66	mg/Kg	1	09/22/17	MA	SW6010C
Barium	119	0.7	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Beryllium	0.30	0.26	0.13	mg/Kg	1	09/22/17	MA	SW6010C
Calcium	5810	3.3	3.0	mg/Kg	1	09/22/17	MA	SW6010C
Cadmium	ND	0.33	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Cobalt	13.3	0.33	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Chromium	30.9	0.33	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Copper	54.4	0.33	0.33	mg/kg	1	09/22/17	MA	SW6010C
Iron	24900	33	33	mg/Kg	10	09/22/17	MA	SW6010C
Mercury	0.03	J 0.03	0.02	mg/Kg	1	09/22/17	RS	SW7471B
Potassium	7240	66	26	mg/Kg	10	09/22/17	MA	SW6010C
Magnesium	7360	33	33	mg/Kg	10	09/22/17	MA	SW6010C
Manganese	236	3.3	3.3	mg/Kg	10	09/22/17	MA	SW6010C
Sodium	745	7	2.8	mg/Kg	1	09/22/17	MA	SW6010C
Nickel	25.3	0.33	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Lead	12.4	0.7	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Antimony	ND	1.6	1.6	mg/Kg	1	09/22/17	MA	SW6010C
Selenium	ND	1.3	1.1	mg/Kg	1	09/22/17	MA	SW6010C
Thallium	ND	1.3	1.3	mg/Kg	1	09/22/17	MA	SW6010C
Trivalent Chromium	30.9	0.33	0.33	mg/kg	1			CALC 6010-7196
Vanadium	51.8	0.33	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Zinc	68.4	0.7	0.33	mg/Kg	1	09/22/17	MA	SW6010C
Percent Solid	96			%		09/20/17	Q	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	ND	0.42	0.42	mg/Kg	1	09/22/17	KDB	SW7196A
pH at 25C - Soil	10.8	1.00	1.00	pH Units	1	09/20/17 20:24	O	SW9045
Redox Potential	-12.6			mV	1	09/20/17	O	SM2580B-09



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide (SW9010C Distill.)	ND	0.52	0.260	mg/Kg	1	09/22/17	O/GD	SW9012B
Soil Extraction for PCB	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for Pest	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for SVOA	Completed					09/21/17	JJ/CKV	SW3545A
Mercury Digestion	Completed					09/21/17	W/W	SW7471B
NJ EPH Extraction	Completed					09/21/17	AA/CK	NJDEP 10-08 R3
Soil Extraction for Herbicide	Completed					09/21/17	S/D	SW8151A
SPLP Extraction for Organics	Completed					09/25/17	W	SW1312
SPLP Pesticides Ext. (2 L to 1ml)	Completed					09/26/17	T	SW3510C
Total Metals Digest	Completed					09/20/17	L/AG/BF	SW3050B

**NJ EPH Category 2**

Total EPH (C9-C40)	ND	52	52	mg/kg	1	09/22/17	AW	NJEPH 10-08 R3	1
<b><u>QA/QC Surrogates</u></b>									
% COD (surr)	68			%	1	09/22/17	AW	NJEPH 10-08 R3	
% Terphenyl (surr)	82			%	1	09/22/17	AW	NJEPH 10-08 R3	

**Chlorinated Herbicides**

2,4,5-T	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
2,4,5-TP (Silvex)	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
2,4-D	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
2,4-DB	ND	1700	1700	ug/Kg	10	09/22/17	CW	SW8151A
Dalapon	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
Dicamba	ND	86	86	ug/Kg	10	09/22/17	CW	SW8151A
Dichloroprop	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
Dinoseb	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A

**QA/QC Surrogates**

% DCAA	54			%	10	09/22/17	CW	30 - 150 %
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**Polychlorinated Biphenyls**

PCB-1016	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1221	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1232	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1242	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1248	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1254	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1260	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1262	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A
PCB-1268	ND	69	69	ug/Kg	2	09/22/17	AW	SW8082A

**QA/QC Surrogates**

% DCBP	110			%	2	09/22/17	AW	30 - 150 %
% TCMX	88			%	2	09/22/17	AW	30 - 150 %

**Pesticides - Soil**

4,4' -DDD	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	09/22/17	CW	SW8081B
a-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
a-Chlordane	13	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B
Aldrin	ND	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
b-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Chlordane	98	34	34	ug/Kg	2	09/22/17	CW	SW8081B
d-BHC	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Dieldrin	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan I	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan II	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan sulfate	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endrin	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endrin aldehyde	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Endrin ketone	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	09/22/17	CW	SW8081B
g-Chlordane	12	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor epoxide	ND	6.9	6.9	ug/Kg	2	09/22/17	CW	SW8081B
Methoxychlor	ND	34	34	ug/Kg	2	09/22/17	CW	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	09/22/17	CW	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	88			%	2	09/22/17	CW	30 - 150 %
% TCMX	75			%	2	09/22/17	CW	30 - 150 %

SPLP Chlordane	0.081	0.051	0.051	ug/L	1	09/27/17	CW	SW8081B
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### **Volatiles**

1,2,4-Trimethylbenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Naphthalene	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
n-Butylbenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
n-Propylbenzene	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
p-Isopropyltoluene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
sec-Butylbenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
tert-Butylbenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C

### **QA/QC Surrogates**

% 1,2-dichlorobenzene-d4	99			%	1	09/23/17	JLI	SW8260C
% Bromofluorobenzene	99			%	1	09/23/17	JLI	SW8260C
% Dibromofluoromethane	96			%	1	09/23/17	JLI	SW8260C
% Toluene-d8	100			%	1	09/23/17	JLI	SW8260C

### **1,4-dioxane**

1,4-dioxane	ND	88	47	ug/kg	1	09/23/17	JLI	SW8260C
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### **Volatiles**

1,1,1,2-Tetrachloroethane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,2-Dibromo-3-chloropropane	ND	5.0	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dibromoethane	ND	5.0	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
2-Hexanone	ND	29	5.9	ug/Kg	1	09/23/17	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	5.9	ug/Kg	1	09/23/17	JLI	SW8260C
Acetone	ND	50	5.9	ug/Kg	1	09/23/17	JLI	SW8260C
Acrolein	ND	29	2.9	ug/Kg	1	09/23/17	JLI	SW8260C
Acrylonitrile	ND	12	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Benzene	ND	5.0	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Bromochloromethane	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Bromoform	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Bromomethane	ND	5.9	2.4	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon Disulfide	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon tetrachloride	ND	5.0	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Chlorobenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroethane	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroform	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Chloromethane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Cyclohexane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Dichlorodifluoromethane	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Ethylbenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Isopropylbenzene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
m&p-Xylene	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl ethyl ketone	ND	35	5.9	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Methylacetate	ND	5.9	2.9	ug/Kg	1	09/23/17	JLI	SW8260C
Methylcyclohexane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Methylene chloride	ND	5.9	5.9	ug/Kg	1	09/23/17	JLI	SW8260C
o-Xylene	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Styrene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
tert-butyl alcohol	ND	120	24	ug/Kg	1	09/23/17	JLI	SW8260C
Tetrachloroethene	ND	5.0	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Toluene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Total Xylenes	ND	5.9	5.9	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Trichloroethene	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorofluoromethane	ND	5.9	1.2	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.9	0.59	ug/Kg	1	09/23/17	JLI	SW8260C
Vinyl chloride	ND	5.0	0.59	ug/Kg	1	09/23/17	JLI	SW8260C

**QA/QC Surrogates**



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	99			%	1	09/23/17	JLI	70 - 130 %
% Bromofluorobenzene	99			%	1	09/23/17	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	09/23/17	JLI	70 - 130 %
% Toluene-d8	100			%	1	09/23/17	JLI	70 - 130 %
Vinyl Acetate	ND	59	59	ug/Kg	1	09/23/17	JLI	SW8260C TIC 10
<b>Semivolatiles</b>								
1,1-Biphenyl	ND	240	100	ug/Kg	1	09/21/17	DD	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	09/21/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	340	340	ug/Kg	1	09/21/17	DD	SW8270D
2,3,4,6-tetrachlorophenol	ND	240	160	ug/Kg	1	09/21/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	09/21/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	140	110	ug/Kg	1	09/21/17	DD	SW8270D
2,4-Dichlorophenol	ND	140	120	ug/Kg	1	09/21/17	DD	SW8270D
2,4-Dimethylphenol	ND	240	85	ug/Kg	1	09/21/17	DD	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	09/21/17	DD	SW8270D
2,4-Dinitrotoluene	ND	140	140	ug/Kg	1	09/21/17	DD	SW8270D
2,6-Dinitrotoluene	ND	140	110	ug/Kg	1	09/21/17	DD	SW8270D
2-Chloronaphthalene	ND	240	97	ug/Kg	1	09/21/17	DD	SW8270D
2-Chlorophenol	ND	240	97	ug/Kg	1	09/21/17	DD	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	09/21/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	09/21/17	DD	SW8270D
2-Nitroaniline	ND	300	240	ug/Kg	1	09/21/17	DD	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	09/21/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	140	ug/Kg	1	09/21/17	DD	SW8270D 1
3,3'-Dichlorobenzidine	ND	140	140	ug/Kg	1	09/21/17	DD	SW8270D
3-Nitroaniline	ND	690	240	ug/Kg	1	09/21/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	240	ug/Kg	1	09/21/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	09/21/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	09/21/17	DD	SW8270D
4-Chloroaniline	ND	690	160	ug/Kg	1	09/21/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	09/21/17	DD	SW8270D
4-Nitroaniline	ND	340	110	ug/Kg	1	09/21/17	DD	SW8270D
4-Nitrophenol	ND	340	150	ug/Kg	1	09/21/17	DD	SW8270D
Acenaphthene	ND	240	100	ug/Kg	1	09/21/17	DD	SW8270D
Acenaphthylene	ND	140	96	ug/Kg	1	09/21/17	DD	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Anthracene	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Atrazine	ND	140	100	ug/Kg	1	09/21/17	DD	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	09/21/17	DD	SW8270D
Benzaldehyde	ND	240	100	ug/Kg	1	09/21/17	DD	SW8270D
Benzo(a)pyrene	ND	140	110	ug/Kg	1	09/21/17	DD	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	09/21/17	DD	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Benzyl Alcohol	ND	340	340	ug/Kg	1	09/21/17	DD	SW8270D
Benzyl butyl phthalate	ND	240	88	ug/Kg	1	09/21/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	240	95	ug/Kg	1	09/21/17	DD	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	140	93	ug/Kg	1	09/21/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	95	ug/Kg	1	09/21/17	DD	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	99	ug/Kg	1	09/21/17	DD	SW8270D
Caprolactam	ND	240	240	ug/Kg	1	09/21/17	DD	SW8270D
Carbazole	ND	170	140	ug/Kg	1	09/21/17	DD	SW8270D
Chrysene	ND	240	120	ug/Kg	1	09/21/17	DD	SW8270D
Dibenz(a,h)anthracene	ND	140	110	ug/Kg	1	09/21/17	DD	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	09/21/17	DD	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Di-n-butylphthalate	ND	240	91	ug/Kg	1	09/21/17	DD	SW8270D
Di-n-octylphthalate	ND	240	88	ug/Kg	1	09/21/17	DD	SW8270D
Fluoranthene	150	J 240	110	ug/Kg	1	09/21/17	DD	SW8270D
Fluorene	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Hexachlorobenzene	ND	140	100	ug/Kg	1	09/21/17	DD	SW8270D
Hexachlorobutadiene	ND	240	120	ug/Kg	1	09/21/17	DD	SW8270D
Hexachlorocyclopentadiene	ND	240	100	ug/Kg	1	09/21/17	DD	SW8270D
Hexachloroethane	ND	140	100	ug/Kg	1	09/21/17	DD	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Isophorone	ND	170	170	ug/Kg	1	09/21/17	DD	SW8270D
Naphthalene	ND	240	99	ug/Kg	1	09/21/17	DD	SW8270D
Nitrobenzene	ND	140	120	ug/Kg	1	09/21/17	DD	SW8270D
N-Nitrosodimethylamine	ND	240	97	ug/Kg	1	09/21/17	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	140	110	ug/Kg	1	09/21/17	DD	SW8270D
N-Nitrosodiphenylamine	ND	140	130	ug/Kg	1	09/21/17	DD	SW8270D
Pentachlorophenol	ND	240	130	ug/Kg	1	09/21/17	DD	SW8270D
Phenanthrene	100	J 140	98	ug/Kg	1	09/21/17	DD	SW8270D
Phenol	ND	240	110	ug/Kg	1	09/21/17	DD	SW8270D
Pyrene	140	J 240	120	ug/Kg	1	09/21/17	DD	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	73			%	1	09/21/17	DD	30 - 130 %
% 2-Fluorobiphenyl	75			%	1	09/21/17	DD	30 - 130 %
% 2-Fluorophenol	54			%	1	09/21/17	DD	30 - 130 %
% Nitrobenzene-d5	68			%	1	09/21/17	DD	30 - 130 %
% Phenol-d5	64			%	1	09/21/17	DD	30 - 130 %
% Terphenyl-d14	73			%	1	09/21/17	DD	30 - 130 %
Aniline	ND	340	340	ug/Kg	1	09/21/17	DD	SW8270D
Benzoic Acid	ND	340	240	ug/Kg	1	09/21/17	DD	SW8270D
Parathion	ND	340	140	ug/Kg	1	09/21/17	DD	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

10 = This parameter is not certified by NY NELAC for this matrix.

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium:

This sample is in a reducing state.

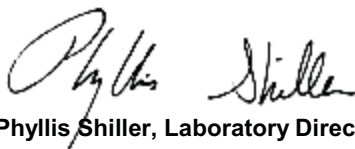
Semi-Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

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**Phyllis Shiller, Laboratory Director**

**September 27, 2017**

**Official Report Release To Follow**





Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

September 27, 2017

FOR: Attn: Mr. Jeff Bogioian  
Impact Materials  
170 Keyland Court  
Bohemia NY 11716

### Sample Information

Matrix: SOIL  
Location Code: IMPACT-IM  
Rush Request: 24 Hour  
P.O.#:

### Custody Information

Collected by: JB  
Received by: SW  
Analyzed by: see "By" below

### Date

09/20/17  
09/20/17

### Time

13:15  
17:12

## Laboratory Data

SDG ID: GBZ05362  
Phoenix ID: BZ05365

Project ID: IRR BLUESTONE  
Client ID: IRR BLUESTONE WEST 9-20-17

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	ND	0.34	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Aluminum	13300	34	6.8	mg/Kg	10	09/22/17	MA	SW6010C
Arsenic	0.69	0.68	0.68	mg/Kg	1	09/22/17	MA	SW6010C
Barium	110	0.7	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Beryllium	0.30	0.27	0.14	mg/Kg	1	09/22/17	MA	SW6010C
Calcium	8680	3.4	3.1	mg/Kg	1	09/22/17	MA	SW6010C
Cadmium	ND	0.34	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Cobalt	12.7	0.34	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Chromium	25.2	0.34	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Copper	31.3	0.34	0.34	mg/kg	1	09/22/17	MA	SW6010C
Iron	23200	34	34	mg/Kg	10	09/22/17	MA	SW6010C
Mercury	0.02	J 0.03	0.02	mg/Kg	1	09/22/17	RS	SW7471B
Potassium	7320	68	27	mg/Kg	10	09/22/17	MA	SW6010C
Magnesium	7600	34	34	mg/Kg	10	09/22/17	MA	SW6010C
Manganese	264	3.4	3.4	mg/Kg	10	09/22/17	MA	SW6010C
Sodium	501	7	2.9	mg/Kg	1	09/22/17	MA	SW6010C
Nickel	22.5	0.34	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Lead	11.2	0.7	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Antimony	ND	1.7	1.7	mg/Kg	1	09/22/17	MA	SW6010C
Selenium	ND	1.4	1.2	mg/Kg	1	09/22/17	MA	SW6010C
Thallium	ND	1.4	1.4	mg/Kg	1	09/22/17	MA	SW6010C
Trivalent Chromium	25.2	0.34	0.34	mg/kg	1			CALC 6010-7196
Vanadium	40.3	0.34	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Zinc	65.8	0.7	0.34	mg/Kg	1	09/22/17	MA	SW6010C
Percent Solid	98			%		09/20/17	Q	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	ND	0.40	0.40	mg/Kg	1	09/22/17	KDB	SW7196A
pH at 25C - Soil	10.3	1.00	1.00	pH Units	1	09/20/17 20:24	O	SW9045
Redox Potential	-22.1			mV	1	09/20/17	O	SM2580B-09



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Total Cyanide (SW9010C Distill.)	ND	0.51	0.255	mg/Kg	1	09/22/17	O/GD	SW9012B
Soil Extraction for PCB	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for Pest	Completed					09/21/17	AA/V	SW3545A
Soil Extraction for SVOA	Completed					09/22/17	JJ/CKV	SW3545A
Mercury Digestion	Completed					09/21/17	W/W	SW7471B
NJ EPH Extraction	Completed					09/21/17	AA/CK	NJDEP 10-08 R3
Soil Extraction for Herbicide	Completed					09/21/17	S/D	SW8151A
SPLP Extraction for Organics	Completed					09/25/17	W	SW1312
SPLP Pesticides Ext. (2 L to 1ml)	Completed					09/26/17	T	SW3510C
Total Metals Digest	Completed					09/20/17	L/AG/BF	SW3050B

## **NJ EPH Category 2**

Total EPH (C9-C40)	ND	51	51	mg/kg	1	09/22/17	AW	NJEPH 10-08 R3	1
<b><u>QA/QC Surrogates</u></b>									
% COD (surr)	72			%	1	09/22/17	AW	NJEPH 10-08 R3	
% Terphenyl (surr)	88			%	1	09/22/17	AW	NJEPH 10-08 R3	

## **Chlorinated Herbicides**

2,4,5-T	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
2,4,5-TP (Silvex)	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
2,4-D	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
2,4-DB	ND	1700	1700	ug/Kg	10	09/22/17	CW	SW8151A
Dalapon	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
Dicamba	ND	85	85	ug/Kg	10	09/22/17	CW	SW8151A
Dichloroprop	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A
Dinoseb	ND	170	170	ug/Kg	10	09/22/17	CW	SW8151A

## **QA/QC Surrogates**

% DCAA	54			%	10	09/22/17	CW	30 - 150 %
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## **Polychlorinated Biphenyls**

PCB-1016	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1221	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1232	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1242	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1248	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1254	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1260	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1262	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A
PCB-1268	ND	67	67	ug/Kg	2	09/23/17	AW	SW8082A

## **QA/QC Surrogates**

% DCBP	97			%	2	09/23/17	AW	30 - 150 %
% TCMX	85			%	2	09/23/17	AW	30 - 150 %

## **Pesticides - Soil**

4,4' -DDD	ND	2.0	2.0	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDE	ND	2.0	2.0	ug/Kg	2	09/22/17	CW	SW8081B
4,4' -DDT	ND	2.0	2.0	ug/Kg	2	09/22/17	CW	SW8081B
a-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
a-Chlordane	8.5	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B
Aldrin	ND	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
b-BHC	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Chlordane	64	34	34	ug/Kg	2	09/22/17	CW	SW8081B
d-BHC	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Dieldrin	ND	1.7	1.7	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan I	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan II	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Endosulfan sulfate	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Endrin	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Endrin aldehyde	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Endrin ketone	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
g-BHC	ND	1.3	1.3	ug/Kg	2	09/22/17	CW	SW8081B
g-Chlordane	8.0	3.4	3.4	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Heptachlor epoxide	ND	6.7	6.7	ug/Kg	2	09/22/17	CW	SW8081B
Methoxychlor	ND	34	34	ug/Kg	2	09/22/17	CW	SW8081B
Toxaphene	ND	130	130	ug/Kg	2	09/22/17	CW	SW8081B

**QA/QC Surrogates**

% DCBP	97			%	2	09/22/17	CW	30 - 150 %
% TCMX	81			%	2	09/22/17	CW	30 - 150 %
SPLP Chlordane	ND	0.050	0.050	ug/L	1	09/27/17	CW	SW8081B

**Volatiles**

1,2,4-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Naphthalene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
n-Butylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
n-Propylbenzene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
p-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
sec-Butylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
tert-Butylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C

**QA/QC Surrogates**

% 1,2-dichlorobenzene-d4	100			%	1	09/23/17	JLI	SW8260C
% Bromofluorobenzene	100			%	1	09/23/17	JLI	SW8260C
% Dibromofluoromethane	93			%	1	09/23/17	JLI	SW8260C
% Toluene-d8	100			%	1	09/23/17	JLI	SW8260C

**1,4-dioxane**

1,4-dioxane	ND	79	42	ug/kg	1	09/23/17	JLI	SW8260C
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**Volatiles**

1,1,1,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,1-Dichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
1,2-Dibromo-3-chloropropane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloroethane	ND	5.0	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,2-Dichloropropane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
2-Hexanone	ND	26	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
Acetone	ND	50	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
Acrolein	ND	26	2.6	ug/Kg	1	09/23/17	JLI	SW8260C
Acrylonitrile	ND	11	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Benzene	ND	5.0	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Bromochloromethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Bromodichloromethane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Bromoform	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Bromomethane	ND	5.3	2.1	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon Disulfide	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Carbon tetrachloride	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Chlorobenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Chloroform	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Chloromethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Cyclohexane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Dibromochloromethane	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Dichlorodifluoromethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Ethylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Isopropylbenzene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
m&p-Xylene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl ethyl ketone	ND	32	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methylacetate	ND	5.3	2.6	ug/Kg	1	09/23/17	JLI	SW8260C
Methylcyclohexane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Methylene chloride	ND	5.3	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
o-Xylene	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Styrene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
tert-butyl alcohol	ND	110	21	ug/Kg	1	09/23/17	JLI	SW8260C
Tetrachloroethene	ND	5.0	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Toluene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Total Xylenes	ND	5.3	5.3	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Trichloroethene	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorofluoromethane	ND	5.3	1.1	ug/Kg	1	09/23/17	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.3	0.53	ug/Kg	1	09/23/17	JLI	SW8260C
Vinyl chloride	ND	5.0	0.53	ug/Kg	1	09/23/17	JLI	SW8260C

**QA/QC Surrogates**



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 1,2-dichlorobenzene-d4	100			%	1	09/23/17	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	09/23/17	JLI	70 - 130 %
% Dibromofluoromethane	93			%	1	09/23/17	JLI	70 - 130 %
% Toluene-d8	100			%	1	09/23/17	JLI	70 - 130 %
Vinyl Acetate	ND	53	53	ug/Kg	1	09/23/17	JLI	SW8260C TIC 10

### Semivolatiles

1,1-Biphenyl	ND	230	100	ug/Kg	1	09/23/17	DD	SW8270D
1,2,4,5-Tetrachlorobenzene	ND	230	120	ug/Kg	1	09/23/17	DD	SW8270D
1,2-Diphenylhydrazine	ND	330	330	ug/Kg	1	09/23/17	DD	SW8270D
2,3,4,6-tetrachlorophenol	ND	230	150	ug/Kg	1	09/23/17	DD	SW8270D
2,4,5-Trichlorophenol	ND	230	180	ug/Kg	1	09/23/17	DD	SW8270D
2,4,6-Trichlorophenol	ND	130	110	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dichlorophenol	ND	130	120	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dimethylphenol	ND	230	82	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dinitrophenol	ND	230	230	ug/Kg	1	09/23/17	DD	SW8270D
2,4-Dinitrotoluene	ND	130	130	ug/Kg	1	09/23/17	DD	SW8270D
2,6-Dinitrotoluene	ND	130	100	ug/Kg	1	09/23/17	DD	SW8270D
2-Chloronaphthalene	ND	230	94	ug/Kg	1	09/23/17	DD	SW8270D
2-Chlorophenol	ND	230	94	ug/Kg	1	09/23/17	DD	SW8270D
2-Methylnaphthalene	ND	230	98	ug/Kg	1	09/23/17	DD	SW8270D
2-Methylphenol (o-cresol)	ND	230	160	ug/Kg	1	09/23/17	DD	SW8270D
2-Nitroaniline	ND	300	230	ug/Kg	1	09/23/17	DD	SW8270D
2-Nitrophenol	ND	230	210	ug/Kg	1	09/23/17	DD	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	230	130	ug/Kg	1	09/23/17	DD	SW8270D 1
3,3'-Dichlorobenzidine	ND	130	130	ug/Kg	1	09/23/17	DD	SW8270D
3-Nitroaniline	ND	660	230	ug/Kg	1	09/23/17	DD	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	230	ug/Kg	1	09/23/17	DD	SW8270D
4-Bromophenyl phenyl ether	ND	230	97	ug/Kg	1	09/23/17	DD	SW8270D
4-Chloro-3-methylphenol	ND	230	120	ug/Kg	1	09/23/17	DD	SW8270D
4-Chloroaniline	ND	660	150	ug/Kg	1	09/23/17	DD	SW8270D
4-Chlorophenyl phenyl ether	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
4-Nitroaniline	ND	330	110	ug/Kg	1	09/23/17	DD	SW8270D
4-Nitrophenol	ND	330	150	ug/Kg	1	09/23/17	DD	SW8270D
Acenaphthene	ND	230	100	ug/Kg	1	09/23/17	DD	SW8270D
Acenaphthylene	ND	130	93	ug/Kg	1	09/23/17	DD	SW8270D
Acetophenone	ND	230	100	ug/Kg	1	09/23/17	DD	SW8270D
Anthracene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Atrazine	ND	130	99	ug/Kg	1	09/23/17	DD	SW8270D
Benz(a)anthracene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzaldehyde	ND	230	98	ug/Kg	1	09/23/17	DD	SW8270D
Benidine	ND	230	130	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(a)pyrene	ND	130	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(b)fluoranthene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(ghi)perylene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzo(k)fluoranthene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Benzyl Alcohol	ND	330	330	ug/Kg	1	09/23/17	DD	SW8270D
Benzyl butyl phthalate	ND	230	85	ug/Kg	1	09/23/17	DD	SW8270D
Bis(2-chloroethoxy)methane	ND	230	91	ug/Kg	1	09/23/17	DD	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	130	89	ug/Kg	1	09/23/17	DD	SW8270D
Bis(2-chloroisopropyl)ether	ND	230	92	ug/Kg	1	09/23/17	DD	SW8270D
Bis(2-ethylhexyl)phthalate	ND	230	95	ug/Kg	1	09/23/17	DD	SW8270D
Caprolactam	ND	230	230	ug/Kg	1	09/23/17	DD	SW8270D
Carbazole	ND	170	130	ug/Kg	1	09/23/17	DD	SW8270D
Chrysene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Dibenz(a,h)anthracene	ND	130	110	ug/Kg	1	09/23/17	DD	SW8270D
Dibenzofuran	ND	230	96	ug/Kg	1	09/23/17	DD	SW8270D
Diethyl phthalate	ND	230	100	ug/Kg	1	09/23/17	DD	SW8270D
Dimethylphthalate	ND	230	100	ug/Kg	1	09/23/17	DD	SW8270D
Di-n-butylphthalate	ND	230	88	ug/Kg	1	09/23/17	DD	SW8270D
Di-n-octylphthalate	ND	230	85	ug/Kg	1	09/23/17	DD	SW8270D
Fluoranthene	190	J 230	110	ug/Kg	1	09/23/17	DD	SW8270D
Fluorene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Hexachlorobenzene	ND	130	96	ug/Kg	1	09/23/17	DD	SW8270D
Hexachlorobutadiene	ND	230	120	ug/Kg	1	09/23/17	DD	SW8270D
Hexachlorocyclopentadiene	ND	230	100	ug/Kg	1	09/23/17	DD	SW8270D
Hexachloroethane	ND	130	99	ug/Kg	1	09/23/17	DD	SW8270D
Indeno(1,2,3-cd)pyrene	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Isophorone	ND	130	93	ug/Kg	1	09/23/17	DD	SW8270D
Naphthalene	ND	230	95	ug/Kg	1	09/23/17	DD	SW8270D
Nitrobenzene	ND	130	120	ug/Kg	1	09/23/17	DD	SW8270D
N-Nitrosodimethylamine	ND	230	93	ug/Kg	1	09/23/17	DD	SW8270D
N-Nitrosodi-n-propylamine	ND	130	110	ug/Kg	1	09/23/17	DD	SW8270D
N-Nitrosodiphenylamine	ND	130	130	ug/Kg	1	09/23/17	DD	SW8270D
Pentachlorophenol	ND	230	120	ug/Kg	1	09/23/17	DD	SW8270D
Phenanthrene	180	130	95	ug/Kg	1	09/23/17	DD	SW8270D
Phenol	ND	230	110	ug/Kg	1	09/23/17	DD	SW8270D
Pyrene	180	J 230	110	ug/Kg	1	09/23/17	DD	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	81			%	1	09/23/17	DD	30 - 130 %
% 2-Fluorobiphenyl	79			%	1	09/23/17	DD	30 - 130 %
% 2-Fluorophenol	54			%	1	09/23/17	DD	30 - 130 %
% Nitrobenzene-d5	67			%	1	09/23/17	DD	30 - 130 %
% Phenol-d5	64			%	1	09/23/17	DD	30 - 130 %
% Terphenyl-d14	72			%	1	09/23/17	DD	30 - 130 %
Aniline	ND	330	330	ug/Kg	1	09/23/17	DD	SW8270D
Benzoic Acid	ND	330	230	ug/Kg	1	09/23/17	DD	SW8270D
Parathion	ND	330	130	ug/Kg	1	09/23/17	DD	SW8270D



Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

10 = This parameter is not certified by NY NELAC for this matrix.

B = Present in blank, no bias suspected.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Hexavalent Chromium:

This sample is in a reducing state.

Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

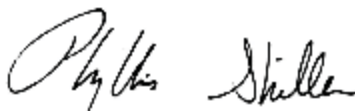
Semi-Volatile Comment:

Where the LOD justifies lowering the RL/PQL, the RL/PQL of some compounds are evaluated below the lowest calibration standard in order to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If there are any questions regarding this data, please call Phoenix Client Services.

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**Phyllis Shiller, Laboratory Director**

**September 27, 2017**

**Official Report Release To Follow**



Criteria: NJ: IGWSS, RC; NY: 375

State: NY

## Sample Criteria Exceedances Report

### GBZ05362 - IMPACT-IM

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL	Analysis Units
BZ05362	AL-SMDP	Aluminum	NJ / Impact To Ground Water / Soil Screen Levels	17500	31	6000	3900	mg/Kg
BZ05362	MN-SM	Manganese	NJ / Impact To Ground Water / Soil Screen Levels	268	3.1	65	42	mg/Kg
BZ05363	AL-SMDP	Aluminum	NJ / Impact To Ground Water / Soil Screen Levels	17700	32	6000	3900	mg/Kg
BZ05363	CR-SM	Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	32.7	0.32	30		mg/Kg
BZ05363	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	85.3	0.32	50	50	mg/kg
BZ05363	MN-SM	Manganese	NJ / Impact To Ground Water / Soil Screen Levels	300	3.2	65	42	mg/Kg
BZ05363	TRI-CRSM	Trivalent Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	32.7	0.32	30	30	mg/kg
BZ05364	\$PESTSM DPR	Chlordane	NJ / Impact To Ground Water / Soil Screen Levels	98	34	50	30	ug/Kg
BZ05364	AL-SMDP	Aluminum	NJ / Impact To Ground Water / Soil Screen Levels	14700	33	6000	3900	mg/Kg
BZ05364	CR-SM	Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	30.9	0.33	30		mg/Kg
BZ05364	CU-SM	Copper	NY / 375-6.8 Metals / Unrestricted Use Soil	54.4	0.33	50	50	mg/kg
BZ05364	MN-SM	Manganese	NJ / Impact To Ground Water / Soil Screen Levels	236	3.3	65	42	mg/Kg
BZ05364	TRI-CRSM	Trivalent Chromium	NY / 375-6.8 Metals / Unrestricted Use Soil	30.9	0.33	30	30	mg/kg
BZ05365	\$PESTSM DPR	Chlordane	NJ / Impact To Ground Water / Soil Screen Levels	64	34	50	30	ug/Kg
BZ05365	AL-SMDP	Aluminum	NJ / Impact To Ground Water / Soil Screen Levels	13300	34	6000	3900	mg/Kg
BZ05365	MN-SM	Manganese	NJ / Impact To Ground Water / Soil Screen Levels	264	3.4	65	42	mg/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedances. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedance information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



# CHAIN OF CUSTODY

IMPACT ENVIRONMENTAL

170 Keyland Court, Bohemia, New York 11716

(Tel.) 631-269-8800 (Fax) 631-269-1599

☐ ICL  
☐ ISW  
☐ IEC  
☐ SGC  
☒ IM



Page 1 of 1

LAB NAME: Phoenix  
 RECEIVED DATE: 9-20-17

Client Information				Project Information				Analytical Information				Matrix Codes			
Company Name Impact Environmental				Project Name 18RC Bluestone				Impact Analytical Package A*				Impact Analytical Package B**			
Address 170 Keyland Court				Street 1000 Pine Ave				VOC 8260 (Analyte List for NY Part 375 and NJ NRDC)				GP82 Analysis			
City Bohemia				City Lynchburg				VOCs 8260 (CP51 Analyte List)				EPA (G17)			
State NY				State VA											
Zip 11716				Zip 24502											
Project Contact				Project# FAC 8											
Phone # 631-269-8800				Sampler's Name J. Bogdan											
Fax # 631-269-1599				Sampler's Signature <i>[Signature]</i>											
E-mail															
Sample Information				Sample Collection				Sample Containers							
LAB SAMPLE #	Sample ID	IEC Project Code	Matrix Code	Sample Type	Sample Date	Time	Total # of bottles	None or Other	ICE	ML	Methanol (US EPA 5035)	Sodium Borate (EPA 5035)			
1	18RC Bluestone North 9-20-17	FAC 8	S	G	9-20-17	100	5		X				053602		
2	18RC Bluestone South 9-20-17		I	I	105		1						053603		
3	18RC Bluestone East 9-20-17		I	I	110		1						053604		
4	18RC Bluestone West 9-20-17		I	I	115		1						053605		
5															
6															
7															
8															
9															
10															
Turnaround Time (Business Days)				Data Deliverable Information				REFERENCES							
Standard Service				CLP Category A (Level-2)				Package A (proprietary) - Priority Pollutants Metals, SVOCs, PCB/Pest and Herbicides - to match all NJ DCERS & NY Part 375 parameters and detection limits. **Package B (proprietary) - Same as Package A, plus TCLP Metals & Category II EPH. ***Package C (proprietary) - Same as Package B plus RCRA characteristics and Full TCLP							
<input type="checkbox"/> Standard - 5 day				<input type="checkbox"/> Results Only (Level-1)				<input type="checkbox"/> CLP Category B (Level-4)							
<input type="checkbox"/> Standard - 4 day				<input type="checkbox"/> Results plus Misc. QC (Level-2)				<input type="checkbox"/> ASP QC Package (Level-4)							
<input checked="" type="checkbox"/> Standard - 3 day				<input type="checkbox"/> Results plus ALL QC (Level-3)				<input type="checkbox"/> Other							
Rush Service				PA QC Package				NOTES/COMMENTS:							
<input type="checkbox"/> 48 Hour RUSH				<input type="checkbox"/> NJ QC Package (Level 3NJ)											
<input type="checkbox"/> 24 Hour RUSH				(EPA Form 8260-10, 8260-11, 8260-12, 8260-13, 8260-14, 8260-15, 8260-16, 8260-17, 8260-18, 8260-19, 8260-20, 8260-21, 8260-22, 8260-23, 8260-24, 8260-25, 8260-26, 8260-27, 8260-28, 8260-29, 8260-30, 8260-31, 8260-32, 8260-33, 8260-34, 8260-35, 8260-36, 8260-37, 8260-38, 8260-39, 8260-40, 8260-41, 8260-42, 8260-43, 8260-44, 8260-45, 8260-46, 8260-47, 8260-48, 8260-49, 8260-50, 8260-51, 8260-52, 8260-53, 8260-54, 8260-55, 8260-56, 8260-57, 8260-58, 8260-59, 8260-60, 8260-61, 8260-62, 8260-63, 8260-64, 8260-65, 8260-66, 8260-67, 8260-68, 8260-69, 8260-70, 8260-71, 8260-72, 8260-73, 8260-74, 8260-75, 8260-76, 8260-77, 8260-78, 8260-79, 8260-80, 8260-81, 8260-82, 8260-83, 8260-84, 8260-85, 8260-86, 8260-87, 8260-88, 8260-89, 8260-90, 8260-91, 8260-92, 8260-93, 8260-94, 8260-95, 8260-96, 8260-97, 8260-98, 8260-99, 8260-100)											
Sample custody must be documented below, each time samples change possession, with a signature, date, and time.				Relinquished by:				Relinquished by:				Relinquished by:			
1 <i>[Signature]</i> 9/20/17 1:14P				1 <i>[Signature]</i> 9/20/17 1:12P				1 <i>[Signature]</i> 9/20/17 1:12P				1 <i>[Signature]</i> 9/20/17 1:12P			
3 <i>[Signature]</i>				3 <i>[Signature]</i>				3 <i>[Signature]</i>				3 <i>[Signature]</i>			
5 <i>[Signature]</i>				5 <i>[Signature]</i>				5 <i>[Signature]</i>				5 <i>[Signature]</i>			



## Deb Lawrie

---

**From:** Michael Lapman  
**Sent:** Monday, September 25, 2017 8:46 PM  
**To:** Deb Lawrie  
**Subject:** Fwd: GBZ05362

Deb:

Jeff just emailed me the below. Would you be able to add this for him? Please let me know. Thank you.

Regards,  
Michael Lapman

Sent from my iPhone

Begin forwarded message:

**From:** Jeff Bogoian <[bogoian@impactenvironmental.com](mailto:bogoian@impactenvironmental.com)>  
**Date:** September 25, 2017 at 8:40:18 PM EDT  
**To:** Michael Lapman <[michael@phoenixlabs.com](mailto:michael@phoenixlabs.com)>  
**Subject:** Re: GBZ05362

Please run all 4 for splp chlordane. 24 hr rush.

*Sent from my T-Mobile 4G LTE device*

----- Original message-----

**From:** Michael Lapman  
**Date:** Mon, Sep 25, 2017 3:59 PM  
**To:** Jeff Bogoian;  
**Cc:**  
**Subject:** FW: GBZ05362

Attached...

Regards,  
Michael Lapman  
Phoenix Environmental Laboratories, Inc.  
587 East Middle Turnpike  
Manchester, CT 06040  
Direct Line: 917.449.0850  
Laboratory: 860.812.0086  
[www.phoenixlabs.com](http://www.phoenixlabs.com)



This message, including any attachments hereto, may contain privileged or confidential information and is sent solely for the attention and use of the intended addressee(s). If you are not an intended addressee, you may neither use this message nor copy or deliver it to anyone. In such case, you should immediately destroy this message and kindly notify the sender by reply email. Thank you.



---

**From:** Loreen Fay <[loreen@phoenixlabs.com](mailto:loreen@phoenixlabs.com)>  
**Date:** Monday, September 25, 2017 at 3:43 PM  
**To:** Michael Lapman <[michael@phoenixlabs.com](mailto:michael@phoenixlabs.com)>  
**Subject:** GBZ05362



# NYSDEC Approval of Blue Stone From Impact



## Paul Matli

---

**From:** Martinkat, Sondra (DEC) <sondra.martinkat@dec.ny.gov>  
**Sent:** Monday, January 22, 2018 10:50 AM  
**To:** Paul Matli; 'Paul Matli'  
**Cc:** ariel@amc-engineering.com; Kuehner, Wendy S (HEALTH)  
**Subject:** RE: C241159\_ 1128 31 Dr - Info for proposed RCA Backfill

Looks good. Thanks.

### Sondra Martinkat

Environmental Engineer 2, Environmental Remediation

#### New York State Department of Environmental Conservation

47-40 21<sup>st</sup> St, Long Island City, NY 11101

P: 718-482-4891 | F: 718-482-6358 | [sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)

[www.dec.ny.gov](http://www.dec.ny.gov) |  | 

---

**From:** Paul Matli [mailto:pmatli@hydrotechenvironmental.com]  
**Sent:** Thursday, January 18, 2018 12:31 PM  
**To:** 'Paul Matli' <IMCEAEX-  
\_O=EXCHANGELABS\_OU=EXCHANGE+20ADMINISTRATIVE+20GROUP+20+28FYDIBOHF23SPDLT+29\_CN=RECIPIENTS\_CN  
=B797F877250C495AA7B5296181D240A1-PAUL+20MATLI@namprd15.prod.outlook.com>; Martinkat, Sondra (DEC)  
<sondra.martinkat@dec.ny.gov>  
**Cc:** ariel@amc-engineering.com; Kuehner, Wendy S (HEALTH) <wendy.kuehner@health.ny.gov>  
**Subject:** C241159\_ 1128 31 Dr - Info for proposed RCA Backfill

*ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.*

Sondra – The developer at above BCP site is planning to use 1.5-inch RCA to backfill excavation beneath the building footprint.

Please advise if you have any comments on this backfill.

I appreciate your expedited response, if possible

Regards,

Paul I. Matli, Ph.D., P.G.  
Vice President of Technical Services



15 Ocean Avenue  
Brooklyn, NY 11225  
Cell: 631-241-7165  
Tel: 718-636-0800



Fax: 718-636-0900

Email: [pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)

Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)

Please consider the environment before printing this email

---

**From:** Paul Matli

**Sent:** Tuesday, December 19, 2017 1:28 PM

**To:** Martinkat, Sondra (DEC) <[sondra.martinkat@dec.ny.gov](mailto:sondra.martinkat@dec.ny.gov)>

**Cc:** Ariel Czemerinski P. E. ([ariel@amc-engineering.com](mailto:ariel@amc-engineering.com)) <[ariel@amc-engineering.com](mailto:ariel@amc-engineering.com)>; Kuehner, Wendy S (HEALTH) <[wendy.kuehner@health.ny.gov](mailto:wendy.kuehner@health.ny.gov)>

**Subject:** C241159\_ 1128 31 Dr - Daily Report 12-18- 2017

Sondra – Attached please receive the daily report dated 12-18-2017

Regards,

Paul I. Matli, Ph.D., P.G.

Vice President of Technical Services



15 Ocean Avenue

Brooklyn, NY 11225

Cell: 631-241-7165

Tel: 718-636-0800

Fax: 718-636-0900

Email: [pmatli@hydrotechenvironmental.com](mailto:pmatli@hydrotechenvironmental.com)

Website: [www.hydrotechenvironmental.com](http://www.hydrotechenvironmental.com)

Please consider the environment before printing this email



## Import Tickets



NORTH CHURCH GRAVEL  
216 NORTH CHURCH RD  
FRANKLIN, NJ 07416  
973-827-6334

Merchant ID: 0502010060  
Term ID: 1967

## Phone Order

MCSTCARD

XXXXXXXXXXXX3295

Entry Method: Manual

Apprvd: Online Batch#: 000004

12/12/17 15:31:23

AVS Code: Y

Inv#: 00000002 Appr Code: 01219C

Total: \$ 92.25

Customer Copy

THANK YOU

PRODUCT

3/4" Crushed Gravel

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket

# H CHURCH GRAVEL, INC.

17-68 River Road • Fair Lawn, NJ 07410

le House: 216 North Church Road • Franklin, NJ 07416

973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

CUSTOMER NUMBER 030000

TICKET NUMBER 276004

TICKET DATE 12/12/2017

TIME 14:37

TERMS Net Upon Receipt

TRUCK X91

JOB FOB FOB FOB FOB

PO# FOB FOB FOB

TOTAL DELIVERED 1 6.64

LOADS SHIPPED

GROSS 42740

TARE 29460

NET 13280

U/M QUANTITY

6.64

PRICE

13.000

AMOUNT

86.32

TAX

Y

GROSS TOTAL

86.32

5.93

92.25

TICKET TOTAL





# NORTH CHURCH GRAVEL, INC.

17-68 River Road - Fair Lawn, NJ 07410

Scale House: 216 North Church Road - Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

*D&J Logistics*  
*AT 95AUL-NJ*

SOLD TO CASH

DELIVERY INSTRUCTIONS

CUSTOMER NUMBER 03000  
TICKET NUMBER 277570  
TICKET DATE 1/25/2014  
TIME 11:19  
TERMS Net Upon Receipt  
TRUCK X01  
JOB SCHULMAN

TOTAL DELIVERED 24.75  
LOADS SHIPPED 1

GROSS 79380  
TARE 29800  
NET 49580

PRODUCT  
3/4" Crushed

QTY QUANTITY PRICE AMOUNT IS TX  
IN 24.75 13.000 321.75

SUB TOTAL 321.75  
SALES TAX NJ 21.33

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket



# NORTH CHURCH GRAVEL, INC.

17-68 River Road • Fair Lawn, NJ 07410  
Scale House: 216 North Church Road • Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

SOLD TO CASH

DELIVERY INSTRUCTIONS

DATE: 11-9-90  
Truck # 1  
(887)

PRODUCT  
3/4" Crushed

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket

CUSTOMER NUMBER: 13000  
TICKET NUMBER: 277611  
TICKET DATE: 1/26/2019  
TIME: 9:15  
TERMS: Net Upon Receipt  
TRUCK: D&J  
JOB: SCHULMAN

TOTAL DELIVERED: 141.10  
LOADS SHIPPED: 7

GROSS: 74280  
TARE: 22380  
NET: 44900

QTY	QUANTITY	PRICE	AMOUNT	TAX
1	22.45	13.000	291.85	

SUB TOTAL: 291.85  
SALES TAX-NJ: 19.34  
TOTAL: 311.19





# NORTH CHURCH GRAVEL, INC.

17-68 River Road • Fair Lawn, NJ 07410  
Scale House: 218 North Church Road • Franklin, NJ 07418  
SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

WELD TO CURB

CONCRETE INSTRUCTIONS

TRUCK #1

PLATE # AT-149U

PRODUCT

3/4" CRUSHED

Sign Here

Please Print Name and Location of Recipient Side of Ticket

CUSTOMER NUMBER: 00000  
TICKET NUMBER: 1775000  
TICKET DATE: 1/20/2010  
TICKET TIME: 2:10 PM  
TICKET LOCATION: 218 North Church Road  
TICKET TYPE: GRADATION  
TICKET STATUS: OPEN

TOTAL DELIVERED: 10.50  
CUBS SHIPPED: 1

GRANITE: 0.00  
TANK: 0.00  
NET: 0.00



# NORTH CHURCH GRAVEL, INC.

17-68 River Road - Fair Lawn, NJ 07410

Scale House: 216 North Church Road - Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

CUSTOMER NUMBER 03000  
 TICKET NUMBER 27616  
 TICKET DATE 1/26/2018  
 TIME 9:40  
 TERMS Net Upon Receipt  
 TRUCK DRUBIO97 CAT555F  
 JOB SCHULMAN

TOTAL DELIVERED 183.01  
 LOADS SHIPPED 9

GROSS 72760  
 TARE 30000  
 NET 40560

UNIT QUANTITY PRICE AMOUNT  
 183.01 21.29 3898.54

SUB TOTAL 3898.54  
 SALES TAX-NJ 13.27  
 TOTAL 3911.81

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket

SOLD TO CASH

DELIVERY INSTRUCTIONS

TRUCK# 007  
 PLATE# AT-855F  
 (D.RUBIOS)

*John Galante*

PRODUCT

3/4" Crushed





# NORTH CHURCH GRAVEL, INC.

17-68 River Road • Fair Lawn, NJ 07410  
Scale House: 216 North Church Road • Franklin, NJ 07416  
SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

SOLD TO CASH

DELIVERY INSTRUCTIONS

PLATE# AT-330F  
TRUCK # 02

(78 J) *[Signature]*

PRODUCT  
3/4" Crushed

CUSTOMER NUMBER C3000  
TICKET NUMBER 277612  
TICKET DATE 1/26/2018  
TIME 9:18 AM  
TERMS Net Upon Receipt  
TRUCK DATE 3  
JOB SCHULMAN AT330F

TOTAL DELIVERED 162.73  
LOADS SHIPPED 8

GROSS 72600  
TARE 29420  
NET 43180

QTY 21.63  
PRICE 13.008  
AMOUNT \$281.19

SUB TOTAL \$281.19  
SALES TAX-NJ 18.63

Sign Here

*[Signature]*  
Please Read Terms and Disclaimers on Reverse Side of Ticket



# NORTH CHURCH GRAVEL, INC.

17-68 River Road - Fair Lawn, NJ 07410

Scale House: 216 North Church Road - Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

SOLD TO CASH

DELIVERY INSTRUCTIONS

Truck #1 (SLC)  
PLATE # R7805

PRODUCT

3/4" Crushed

CUSTOMER NUMBER 03000  
TICKET NUMBER 277602  
TICKET DATE 1/26/2018  
TIME 7:37  
TERMS Net Upon Receipt  
TRUCK SLJ1  
JOB SCHULMAN

TOTAL DELIVERED 112.65  
LOADS SHIPPED 6

GROSS 64580  
TARE 26600  
NET 37980

QUANTITY 17.05  
PRICE 13.000  
AMOUNT 5.11

GROSS TOTAL 259.48  
SALES TAX NJ 17.19

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket



SCARLE HOUSS | BILLYE 201-798-1550 FAX: 201-798-5553  
973-827-6334

[illegible]



# NORTH CHURCH GRAVEL, INC.

17-68 River Road - Fair Lawn, NJ 07410

Scale House: 216 North Church Road - Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

SOLD TO CASH

VERY INSTRUCTIONS

TRUCK #2

AT-233E

*[Signature]*

3/4" Crushed

CUSTOMER NUMBER: 63000  
 TICKET NUMBER: 277600  
 TICKET DATE: 1/26/2013  
 TIME: 7:53  
 TERMS: Net Upon Receipt  
 TRUCK: SL12  
 JOB: SCHULMAN

TOTAL DELIVERED: 75.60  
 LOADS SHIPPED: 4

GROSS: 67940  
 TARE: 28580  
 NET: 39360

ITEM	QUANTITY	PRICE	AMOUNT
3/4" CRUSHED	75.60	13.00	982.80

SUB TOTAL: 982.80  
 SALES TAX: 16.95  
 TOTAL: 1000.00

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket



**Scrabble House - North Church Road - Farnham - Surrey**

SCALL HOUSE 873-827-5334 1335-28-44  
BELLING 201-748-1558 1335-28-44  
501-748-1558

一、**中国革命的性质和任务**  
 二、**中国革命的领导力量**  
 三、**中国革命的动力**  
 四、**中国革命的对象**  
 五、**中国革命的道路**  
 六、**中国革命的前途**  
 七、**中国革命的统一战线**  
 八、**中国革命的武装斗争**  
 九、**中国革命的根据地**  
 十、**中国革命的党的建设**  
 十一、**中国革命的总结**  
 十二、**中国革命的展望**  
 十三、**中国革命的结论**  
 十四、**中国革命的附录**  
 十五、**中国革命的参考文献**  
 十六、**中国革命的注释**  
 十七、**中国革命的索引**  
 十八、**中国革命的目录**  
 十九、**中国革命的序言**  
 二十、**中国革命的结束语**  
 二十一、**中国革命的附录二**  
 二十二、**中国革命的参考文献二**  
 二十三、**中国革命的注释二**  
 二十四、**中国革命的索引二**  
 二十五、**中国革命的目录二**  
 二十六、**中国革命的序言二**  
 二十七、**中国革命的结束语二**  
 二十八、**中国革命的附录三**  
 二十九、**中国革命的参考文献三**  
 三十、**中国革命的注释三**  
 三十一、**中国革命的索引三**  
 三十二、**中国革命的目录三**  
 三十三、**中国革命的序言三**  
 三十四、**中国革命的结束语三**  
 三十五、**中国革命的附录四**  
 三十六、**中国革命的参考文献四**  
 三十七、**中国革命的注释四**  
 三十八、**中国革命的索引四**  
 三十九、**中国革命的目录四**  
 四十、**中国革命的序言四**  
 四十一、**中国革命的结束语四**  
 四十二、**中国革命的附录五**  
 四十三、**中国革命的参考文献五**  
 四十四、**中国革命的注释五**  
 四十五、**中国革命的索引五**  
 四十六、**中国革命的目录五**  
 四十七、**中国革命的序言五**  
 四十八、**中国革命的结束语五**  
 四十九、**中国革命的附录六**  
 五十、**中国革命的参考文献六**  
 五十一、**中国革命的注释六**  
 五十二、**中国革命的索引六**  
 五十三、**中国革命的目录六**  
 五十四、**中国革命的序言六**  
 五十五、**中国革命的结束语六**  
 五十六、**中国革命的附录七**  
 五十七、**中国革命的参考文献七**  
 五十八、**中国革命的注释七**  
 五十九、**中国革命的索引七**  
 六十、**中国革命的目录七**  
 六十一、**中国革命的序言七**  
 六十二、**中国革命的结束语七**  
 六十三、**中国革命的附录八**  
 六十四、**中国革命的参考文献八**  
 六十五、**中国革命的注释八**  
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FOR MR. CANTRELL  
PLATE # A U - 55013  
NOV 1952

1980

[illegible]

**Figure 6**

Figure 6 shows two bar charts comparing the percentage of respondents who answered "yes" or "no" to various questions related to their participation in the study. The x-axis lists the questions, and the y-axis shows the percentage of respondents.

The first chart displays the percentage of respondents who answered "yes" to the following questions:

- Did you participate in the study?
- Did you receive information about the study?
- Did you understand the purpose of the study?
- Did you agree to participate in the study?
- Did you provide informed consent?

The second chart displays the percentage of respondents who answered "no" to the same questions.

The data indicates that a high percentage of respondents (approximately 90-100%) answered "yes" to all five questions, indicating full participation and understanding of the study's purpose and procedures.

[illegible]





# NORTH CHURCH GRAVEL, INC.

17-68 River Road • Fair Lawn, NJ 07410  
Scale House: 216 North Church Road • Franklin, NJ 07416  
SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

PAID TO CASH

*Handwritten:* H 6 M  
12/10/06

*Handwritten:* TRUCK # 75  
PLATE # AT-6407

STANDARD INSTRUCTIONS

CUSTOMER NUMBER: 00000  
TICKET NUMBER: 277506  
TICKET DATE: 1/26/2010  
TIME: 7:10  
TAXES: Net Upon Receipt  
TOTAL: 000000  
TOTAL DUE: 000000

TOTAL DELIVERED: 20.10  
LOADS DELIVERED: 1

TOTAL DUE: 000000

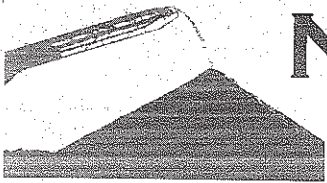
PAID BY

CASH

*Handwritten signature:* [Signature]  
Sign Here

Please Read Terms and Conditions of Purchase Side of Ticket





# NORTH CHURCH GRAVEL, INC.

17-68 River Road • Fair Lawn, NJ 07410

Scale House: 216 North Church Road • Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

*SLU  
PLATE AS-7805  
TRUCK L*

CUSTOMER NUMBER 130000  
TICKET NUMBER 277604  
TICKET DATE 1/26/2018  
TIME 14:13  
TERMS Net Upon Receipt  
TRUCK CLJ1 AS7805  
JOB SCHULMAN

TOTAL DELIVERED 243.75

LOADS SHIPPED 12

*[Signature]*

PRODUCT  
3/4" Crushed

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket

# NORTH CHURCH GRAVEL, INC.

17-68 River Road • Fair Lawn, NJ 07410

Scale House: 216 North Church Road • Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

CUSTOMER NUMBER 130000  
TICKET NUMBER 277652  
TICKET DATE 1/26/2018  
TIME 14:16  
TERMS Net Upon Receipt  
TRUCK LUCAS10 AS2344  
JOB SCHULMAN

TOTAL DELIVERED 202.89

LOADS SHIPPED 10

BASE 68620

TAX 50500

NET 195620

QUANTITY PRICE AMOUNT

12 16.30 195.60

SUB-TOTAL 195.60

SALES TAX 7.29

TOTAL 202.89

PRODUCT  
3/4" Crushed

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket



# NORTH CHURCH GRAVEL, INC.

17-68 River Road - Fair Lawn, NJ 07410

Scale House: 216 North Church Road - Franklin, NJ 07416

SCALE HOUSE: 973-827-6334 | BILLING: 201-796-1556 | FAX: 201-796-5553

CUSTOMER NUMBER C3000  
TICKET NUMBER 977655  
TICKET DATE 1/25/2015  
TIME 14:37  
TERMS Net Upon Receipt  
TRUCK SL72  
JOB SCHULMAN

TOTAL DELIVERED 213.53  
LOADS SHIPPED 11

PRICE 5000  
TAX 2500  
TOTAL 7500

DATE 1/25/2015  
TIME 14:37  
JOB SCHULMAN

Sign Here

Please Read Terms and Disclaimers on Reverse Side of Ticket

SOLD TO CASH

PIATEL  
TRUCK # AT-233E  
SL72

*Gutierrez*

PRODUCT

3/4" CRUSHED





**IMPACT ENVIRONMENTAL**  
**Class B Recycling Facility**

1000 Page Avenue  
Lyndhurst, New Jersey 07071  
631-269-8800

Manifest #:

Ticket #: **6-831**

welcome to solid ground....

Facility Registration #: 121888  
Permit: CBG070002

# SCALE TICKET

Part 1

## GENERATOR

Generator Name, Address and Telephone #:

LYNDHURST OUT  
IARC  
1000 Page Ave  
Lyndhurst NJ 07071

Project Site (Description and Address):

PT Consultants  
1128 31st Drive  
LC

Part 2

## MATERIAL CLASSIFICATION AND WEIGHT

Classification of Material:

1" Crn Blue Stone

NOTES:

WEIGHTS

GROSS/TARE/NET (lbs)

31520 lb  
27500 lb  
4120 lb

NET (tons):

32500 lb

Part 3

## WEIGHT CERTIFICATION

**Certification:** By issuing this ticket, I hereby certify that the above named material has been accepted by this facility, and that the weights stated above are accurate. The weights were calculated in accordance with New Jersey's Weights and Measures Program.

Where applicable, I hereby certify that the Transportation Security Seal referenced in the **Scale Operator Notes** section of this ticket was intact upon entrance to this facility, and that I removed the seal upon the removal of the bed cover on the truck.

Name of Scale Operator:

Date and Time In and Out:

Amanda T. WALKER

Scale Operator Notes:

7/20/19 1:20 pm 1:33 pm

Part 4

## TRANSPORTER DATA AND CERTIFICATION

Transporter Name, Address and Permit #:

Driver Name and Signature (conditional):

MARCELO #12

Truck Plate:

AU-6840

By signing this ticket the transport vehicle driver accepts sole responsibility and therefore assumes all liabilities for the gross weight of this divisible load of material scaled and accepted at Impact Environmental Class B Recycling Facility. The driver acknowledges that he or she is solely responsible for compliance with all traffic safety rules and regulations for the operation and maintenance of the vehicle when transporting to, driving in and leaving from Impact Environmental Class B Recycling Facility. Further, the driver represents that he or she will immediately report any incidents of overloading or vehicle equipment failure/hazards associated with the vehicle to the owner of the vehicle, and in doing so will relieve Impact Environmental, its owners, employees and/or all of its affiliated companies to serve any form of notice to the truck owner. Furthermore, driver accepts that he or she will abide by all posted safety procedures at Impact Environmental Class B Recycling Facility and as directed by company staff.

OFFICE COPY





**IMPACT ENVIRONMENTAL**  
**Class B Recycling Facility**

1000 Page Avenue  
Lyndhurst, New Jersey 07071  
631-269-8800

Manifest #:

Ticket #:

60827

welcome to solid ground....

Facility Registration #: 121888  
Permit: CBG070002

# SCALE TICKET

Part 1

## GENERATOR

Generator Name, Address and Telephone #:

LYNDHURST-OUT  
IRRC  
1000 Page Ave  
Lyndhurst, NJ 07071

Project Site (Description and Address):

PT Consultants  
11-28 31st Drive  
LAP

Part 2

## MATERIAL CLASSIFICATION AND WEIGHT

Classification of Material:

3" Clean Blue Stone

NOTES:

WEIGHTS

GROSS/TARE/NET (lbs)

95940 lb  
30500 lb  
65440 lb

NET (tons):

32.720 tn

Part 3

## WEIGHT CERTIFICATION

**Certification:** By issuing this ticket, I hereby certify that the above named material has been accepted by this facility, and that the weights stated above are accurate. The weights were calculated in accordance with New Jersey's Weights and Measures Program.

Where applicable, I hereby certify that the Transportation Security Seal referenced in the **Scale Operator Notes** section of this ticket was intact upon entrance to this facility, and that I removed the seal upon the removal of the bed cover on the truck.

Name of Scale Operator:

Date and Time In and Out:

Arrived 7 - 01/25/04

Scale Operator Notes:

1/25/04 1:14 pm 1:15 pm

Part 4

## TRANSPORTER DATA AND CERTIFICATION

Transporter Name, Address and Permit #:

Driver Name and Signature (conditional):

Jorge #29

Truck Plate:

By signing this ticket the transport vehicle driver accepts sole responsibility and therefore assumes all liabilities for the gross weight of this divisible load of material scaled and accepted at Impact Environmental Class B Recycling Facility. The driver acknowledges that he or she is solely responsible for compliance with all traffic safety rules and regulations for the operation and maintenance of the vehicle when transporting to, driving in and leaving from Impact Environmental Class B Recycling Facility. Further, the driver represents that he or she will immediately report any incidents of overloading or vehicle equipment failure/hazards associated with the vehicle to the owner of the vehicle, and in doing so will relieve Impact Environmental, its owners, employees and/or all of its affiliated companies to serve any form of notice to the truck owner. Furthermore, driver accepts that he or she will abide by all posted safety procedures at Impact Environmental Class B Recycling Facility and as directed by company staff.

OFFICE COPY



# **ATTACHMENT J**

## **Liquid Waste Disposal Documentation**





## Advanced Waste Water Treatment, Corp

208 Route 109, Farmingdale, NY 11735

Tel: (631) 249-3774 DEC# 1-47 10-00204/0000

### NON-HAZARDOUS WASTE CERTIFICATION

Generator: Hydro Tech. Environmental Date 10-16-17

Address: 77 Arkay Dr.  
Hauppauge, NY 11788

Manifest No.: SEE BELOW Waste Code: N018

Shipping Description: Vacuum Tank (NY DEC Permit # 1A-1030)

Generating Process: Diesel Tanks ☐  
Gasoline Tanks ☐  
Fuel Oil Tanks ☐  
Jet A Tanks ☐  
Containments ☐  
Other (Specify) ☐

I, the undersigned, hereby certify that the material removed by Vacuum Tank  
listed on manifests ED199

Does not contain PCBs, pesticides, herbicides, spent or adulterated solvents and/or any other  
substances and/or constituents that would render it a hazardous material and/or waste pursuant to all  
Federal, State and local agencies and guidelines to the best of my knowledge. I certify that I inspected  
the AWWT drop filter prior to offloading, and verify that sludge collected from this drop came from  
my truck.

RECOVERED SOLIDS: 5 Gals.     , 10 Gals.     , 15 Gals.     , 20+ Gals. \*25 gallons of solid waste

Based upon my position as Operator of Hydro Tech. Environmental  
I have personal knowledge of the information and the authority to sign this statement  
on behalf of Hydro Tech. Environmental

Authorized Signature: \_\_\_\_\_

Print Name: Javier G, Title: Driver

Gallons - 100

AWWT Authorized signature-----



Please print or type  
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CESA6	Manifest Document No.	2. Page 1 of ED 199		
3. Generator's Name and Mailing Address GEORGE MAN 11-28 31 <sup>st</sup> STREET, LIC, NY 11106				11-28-31 <sup>st</sup> DRIVE LONG ISLAND CITY		
4. Generator's Phone (212) 625-0820		6. US EPA ID Number NY A986928299		A. Transporter's Phone		
5. Transporter 1 Company Name HYDROTECH ENVIRONMENTAL		8. US EPA ID Number		B. Transporter's Phone		
7. Transporter 2 Company Name		10. US EPA ID Number		C. Facility's Phone		
9. Designated Facility Name and Site Address ADVANCE WASTE AND WATER TREATMENT CORP 208 ROUTE 109 FARMINGDALE NY NY00218677						
11. Waste Shipping Name and Description				12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZ WASTE REGULATED LIQUIDS				11	100	
b.						
c.						
d.						
D. Additional Descriptions for Materials Listed Above				E. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information						
16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Printed/Typed Name RODOLFO				Signature 		Month Day Year 11 01 1997
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name				Signature		Month Day Year
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name				Signature		Month Day Year
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name Chris Brown				Signature 		Month Day Year 11 01 1997

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL-RETURN TO GENERATOR

12-BLS-C5 Rev. 1/97

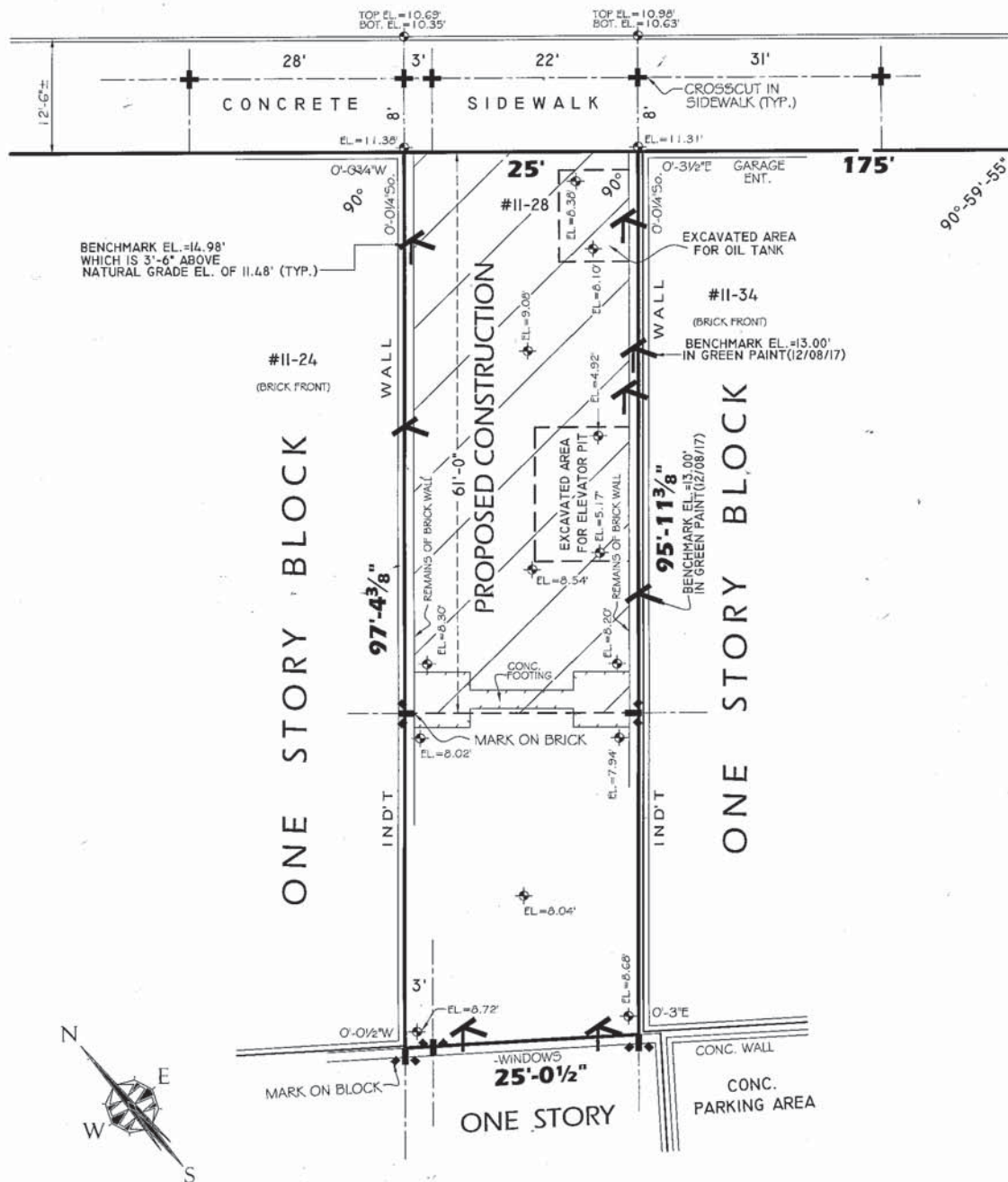


# **ATTACHMENT K** **Cut and Fill Survey**



31<sup>ST</sup>(50' WIDE)  
CAMELIA STREET

DRIVE



NOTE: ALL MARKS IN GREEN PAINT EXCEPT FOR BENCHMARK ELEVATIONS IN YELLOW PAINT

NOTE: TO PROVIDE CLARITY, CERTAIN DIMENSIONS, FEATURES AND/OR LOCATIONS ARE NOT DRAWN TO SCALE.

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY. GUARANTEES OR CERTIFICATIONS INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES OR CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

BLOCK: 502  
LOT: 22  
SECTION: 4  
COUNTY: QUEENS  
DWG BY: PLATO SMITH  
CHK'D BY:

SURVEYED

OCTOBER 19, 2017

INFO ADDED: 12/08/2017

STAKEOUT SURVEY

ALL ELEVATIONS  
REFER TO NAVD 88

VINCENT J. DICCE L.S., P.C.



**BORO LAND SURVEYING, P.C.**  
353 COURT STREET  
BROOKLYN, N.Y. 11231  
TEL. (718) 624-BORO (2676)



# **ATTACHMENT L** **Non-Agency Permits**



# NYC

## Buildings



# Work Permit Department of Buildings

Permit Number: 420605964-01-EQ-FN

Issued: 01/18/2018

Expires: 01/18/2019

Address: QUEENS

11-28 31 DRIVE

Issued to: GEORGE MAN

Business: MORGAN CONSTRUCTION NY IN

Contractor No: GC-28678

### Description of Work:

ALTERATION TYPE 1 - CONSTRUCTION EQUIPMENT, FENCE, PROPOSED VERTICAL ENLARGEMENT OF EXISTING 1-STORY BRICK BLDG TO 6 STORIES W/ ELEV PIT & STAIR/ELEV BULKHEAD. CONVERT EXISTING MACHINE SHOP ON 1ST FLR TO RES. LOBBY, 1 RES. UNIT, SPRK/GAS RM, ELEC RM. PROPOSED 10 RES. UNITS FOR FLRS 2 TO 6. TOTAL 11 DU FOR BLDG. DEMOLITION, PLUMBING, BOILER, MECH, & GENERAL CONSTR WORKS AS PER PLAN. OBTAIN NEW C/O.



Review is requested under Building Code: 2014

SITE FILL: ON-SITE

To see a Zoning Diagram (ZD-1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at [www.nyc.gov/buildings](http://www.nyc.gov/buildings).

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment of both



# NYC

## Buildings



# Work Permit Department of Buildings

Permit Number: 420605964-01-FO-EA

Issued: 05/03/2018

Expires: 05/02/2019

Address: QUEENS

11-28 31 DRIVE

Issued to: GEORGE MAN

Business: MORGAN CONSTRUCTION NY IN

Contractor No: GC-28678

### Description of Work:

ALTERATION TYPE 1 - EARTHWORK PROPOSED VERTICAL ENLARGEMENT OF EXISTING 1-STORY BRICK BLDG TO 6 STORIES W/ ELEV PIT & STAIR/ELEV BULKHEAD. CONVERT EXISTING MACHINE SHOP ON 1ST FLR TO RES. LOBBY, 1 RES. UNIT, SPRK/GAS RM & ELEC RM. PROPOSED 10 RES. UNITS FOR FLRS 2 TO 6. TOTAL 11 DU FOR BLDG. DEMOLITION, PLUMBING, BOILER, MECH, & GENERAL CONSTR WORKS AS PER PLAN. OBTAIN NEW C/O.



Review is requested under Building Code: 2014

SITE FILL: ON-SITE

To see a Zoning Diagram (ZD-1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at [www.nyc.gov/buildings](http://www.nyc.gov/buildings).

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment of both



# NYC

## Buildings



# Work Permit Department of Buildings

Permit Number: 420605964-01-FO

Issued: 05/03/2018

Expires: 05/02/2019

Address: COLEENS

11-28 31 DRIVE

Issued to: GEORGE MAN

Business: MORGAN CONSTRUCTION NY INC

Contractor No: GC-28678

### Description of Work:

ALTERATION TYPE 1 - FOUNDATION/EARTHWORK PROPOSED VERTICAL ENLARGEMENT OF EXISTING 1-STORY BRICK BLDG TO 6 STORIES W/ ELEV PIT & STAIR/ELEV. BOILERHEAD. CONVERT EXISTING MACHINE SHOP ON 1ST FLR TO RES. LOBBY, 1 RES. UNIT, SPRK/GAS RM & ELEC RM. PROPOSED 10 RES. UNITS FOR FLRS 2 TO 6. TOTAL 11 DU FOR BLDG. DEMOLITION, PLUMBING, BOILER MECH & GENERAL CONSTR WORKS AS PER PLAN. OBTAIN NEW C/O.



Review is requested under Building Code: 2014

SITE FILL: ON-SITE

To see a Zoning Diagram (ZD1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at [www.nyc.gov/buildings](http://www.nyc.gov/buildings).

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment or both.



# NYC

## Buildings



# Work Permit Department of Buildings

Permit Number: 420605964-01-AL

Issued: 05/03/2018

Expires: 05/02/2019

Address: QUEENS

11-28 31 DRIVE

Issued to: GEORGE MAN

Business: MORGAN CONSTRUCTION NY IN

Contractor No: GC-28678

### Description of Work:

Alteration Type 1 required to meet New Building requirements (28-101.4.5)  
PROPOSED VERTICAL ENLARGEMENT OF EXISTING 1-STORY BRICK BLDG TO 6 STORIES W/ ELEV PIT &  
STAIR/ELEV BULKHEAD. CONVERT EXISTING MACHINE SHOP ON 1ST FLR TO RES. LOBBY, 1 RES. UNIT,  
SPRKR/GAS RM & ELEC RM. PROPOSED 10 RES. UNITS FOR FLRS 2 TO 6. TOTAL 11 DU FOR BLDG. DEMOLITION,  
PLUMBING, BOILER, MECH, & GENERAL CONSTR-WORKS AS PER PLAN. OBTAIN NEW C/O.



Review is requested under Building Code: 2014

SITE FILL: ON-SITE

To see a Zoning Diagram (ZD1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at [www.nyc.gov/buildings](http://www.nyc.gov/buildings).

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment of both **03/08/2018**



# NYC

## Buildings



# Work Permit Department of Buildings

Permit Number: 420605964-01-PL

Issued: 02/21/2018

Expires: 02/21/2019

Address: QUEENS

11-28 31 DRIVE

Issued to: LI KONG MA

Business: MPS PLUMBING & HEATING IN

License No: MP-2039

### Description of Work:

PLUMBING - ALTERATION TYPE 1 PROPOSED VERTICAL ENLARGEMENT OF EXISTING 1-STORY BRICK BLDG TO 6 STORIES W/ ELEV PIT & STAIR/ELEV BULKHEAD. CONVERT EXISTING MACHINE SHOP ON 1ST FLR TO RES. LOBBY, 1 RES. UNIT, SPRK/GAS RM & ELEC RM. PROPOSED 10 RES. UNITS FOR FLRS 2 TO 6. TOTAL 11 DU FOR BLDG. DEMOLITION, PLUMBING, BOILER, MECH & GENERAL CONSTR WORKS AS PER PLAN. OBTAIN NEW C/O.



Review is requested under Building Code: 2014

SITE FILL: ON-SITE

To see a Zoning Diagram (ZD4) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at [www.nyc.gov/buildings](http://www.nyc.gov/buildings).

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment or both.



# NYC

## Buildings



# Work Permit Department of Buildings

Permit Number: 421546580-01-EQ-SH

Issued: 08/07/2018

Expires: 08/07/2019

Address: QUEENS

11-28 31 DRIVE

Issued to: WILLIAM LAFFEY

Business: SPRING SCAFFOLDING LLC

Contractor No: GC-607447

### Description of Work:

ALTERATION TYPE 3 - CONSTRUCTION EQUIPMENTS - SIDEWALK-SHED PROPOSED INSTALLATION OF HEAVY DUTY SIDEWALK SHED AS PER PLANS. NO CHANGE IN USE, EGRESS, OR OCCUPANCY.



Number of dwelling units occupied during construction: 0011

Review is requested under Building Code: 2014

Electrical Application Number for Shed Lighting: A365975

To see a Zoning Diagram (ZD-1) or to challenge a zoning approval filed as part of a New Building application or Alteration application filed after 7/13/2009, please use "My Community" on the Buildings Department web site at [www.nyc.gov/buildings](http://www.nyc.gov/buildings).

Emergency Telephone Day or Night: 311

Borough Commissioner:

Commissioner of Buildings:

Tampering with or knowingly making a false entry in or falsely altering this permit is a crime that is punishable by a fine, imprisonment of both





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT

PERMIT#: Q02-2018221-B52 PREVIOUS#: Q02-2018135-A11



ISSUED DATE: 8/9/2018 PERMIT VALID FROM: 8/11/2018 TO: 11/8/2018  
BOROUGH: QUEENS PERMIT TYPE: 0204 - PLACE EQUIPMENT OTHER THAN CRANE OR SHOVL  
FEES (NON-REFUNDABLE): ROADWAY TYPE: ASPHALT  
SIDEWALK TYPE: CONCRETE  
ADMINISTRATIVE FEE: \$50.00  
TOTAL: \$50.00 PAID

#### PERMISSION HEREBY GRANTED TO:

NAME: MORGAN CONSTRUCTION NY INC. LICENSE #: None  
CONTACT NAME: MAN, GEORGE CONTRACT #: None  
PHONE: 2126250920 SPONSORING AGENCY: None  
ADDRESS: 57 ALLEN STREET NEW YORK NY 10002-3344

#### TO OCCUPY THE ROADWAY AND/OR SIDEWALK AT:

HOUSE#: 11-28  
ON STREET: 31 DRIVE  
FROM STREET: 12 STREET  
TO STREET: VERNON BOULEVARD  
LOCATION DETAILS:  
FOR PURPOSE OF:  
RELATED AGENCY #: 420605964 (DOB)  
EQUIPMENT TYPE: Maintain Fence  
INSPECT DIST:  
RECORDED: None  
TRACKING #: 2018090700726657

COMM. BOARD: 01  
SEQUENCE #: 0004

Note: If House Number is not provided Permittee shall use "Location Details" box to indicate a specific location of the work area within a block (for all non-Contract work, i.e. Contract #: None).

PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LAWS, RULES AND SPECIFICATIONS OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION AND WITH THE TERMS AND CONDITIONS OF THE PERMIT. FAILURE TO COMPLY MAY RESULT IN REVOCATION OF THE PERMIT BY THE COMMISSIONER.

TAMPERING WITH OR KNOWINGLY MAKING A FALSE ENTRY IN OR FALSELY ALTERING THIS PERMIT MAY RESULT IN A RESTRICTION IN OBTAINING FUTURE NYCDOT PERMITS.

NYS LAW





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT



PERMIT#: Q02-2018221-B52 PREVIOUS#: Q02-2018135-A11

CALL NEW YORK 811, INC. AT 1-800-272-4480 OR 811 BEFORE STREET OPENING EXCAVATIONS. NEW YORK STATE INDUSTRIAL CODE RULE 753 MANDATES 2-10 BUSINESS DAYS NOTICE PRIOR TO DIGGING.

#### PERMITTEE SHALL COMPLY WITH ALL OF THE FOLLOWING STIPULATIONS

SPECIFIC STIPULATION	
	SP MUST COORDINATE WITH THE ONGOING CONSTRUCTION PRIOR TO MOBILIZING.
013	MAINTAIN A MINIMUM 5 FOOT CLEAR PEDESTRIAN WALK ON THE SIDEWALK
038	ALL TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, FENCING AND MARKINGS SHALL BE PROVIDED, INSTALLED, MAINTAINED AND REMOVED BY THE PERMITTEE IN ACCORDANCE WITH THE MOST RECENT VERSION OF PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). OBTAIN THE MUTCD AT <a href="http://mutcd.fhwa.dot.gov">HTTP://MUTCD.FHWA.DOT.GOV</a>
048	OCCUPY 8 FOOT WIDTH OF ROADWAY ADJACENT TO SOUTH CURBLINE
066	DO NOT PLACE MATERIALS, TRAILERS, CRANES, CONTAINERS, OR EQUIPMENT IN FRONT OF DRIVEWAYS, BUS STOPS, WITHIN FIFTEEN FEET OF A FIRE HYDRANT, IN AUTHORIZED PARKING ZONES OR BLOCKING ACCESS TO DEEP WATER TESTING BOXES. IF WORK IS DIRECTLY IN ABOVE AREAS, MAY BE IN VICINITY DURING STIPULATED WORK HOURS BUT NOT WHEN SITE IS UNATTENDED.
091	THIS PERMIT ACTIVITY MAY NOT START UNTIL THE PERMITTEE COORDINATES ALL WORK WITH ANY ONGOING CONSTRUCTION AND WITH THE PROJECT/RESIDENT ENGINEER FOR ANY ONGOING CAPITAL PROJECTS.
103	PARKING OF NON-COMMERCIAL VEHICLES ON THE STREET (ROADWAY AND SIDEWALK) WITHIN WORK ZONES IS PROHIBITED.
107	LOADING AND UNLOADING, STANDING OR PARKING IN A LANE ADJACENT TO THE WORK ZONE IN THE ROADWAY IS PROHIBITED. THIS APPLIES TO PERMITTEES AND ALL OF THEIR SUBCONTRACTORS.
NOISE1	BY SUBMITTING THIS APPLICATION AND/OR RENEWAL REQUEST, THE PERMITTEE CERTIFIES ITS COMPLIANCE WITH ALL APPLICABLE CITYWIDE CONSTRUCTION NOISE MITIGATION REQUIREMENTS INCLUDING BUT NOT LIMITED TO THE DEVELOPMENT OF A COMPLIANT NOISE MITIGATION OR ALTERNATIVE NOISE MITIGATION PLAN. PLEASE CONTACT THE NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION ( <a href="http://WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML">WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML</a> ) FOR FURTHER INFORMATION.
SCHOOL	NO WORK TO BE PERFORMED WITHIN BLOCK FRONTING SCHOOL INCLUDING INTERSECTIONS FOR ONE HOUR PRIOR TO SCHOOL START TIME THROUGH ONE HOUR AFTER END OF SCHOOL TIME. PERMITTEE MUST NOTIFY SCHOOL PRINCIPAL IN WRITING 48 HOURS PRIOR TO BEGINNING ANY WORK. THIS STIP VOIDS ANY/ ALL OTHER CONFLICTING STIPS ON THIS PERMIT UNLESS ACCOMPANIED WITH VARIANCE STIP VAR001.
TMC001	CONTRACTORS WHO AT ANY TIME DURING THEIR PERMITTED WORK ENCOUNTER TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIP. OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD-WIRED) ON ANY NYCDOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DWGS, SHALL IMMEDIATELY NOTIFY NYCDOT TRAFFIC MANAGEMENT AT <a href="mailto:TMC@DOT.NYC.GOV">TMC@DOT.NYC.GOV</a> & 718-438-3390/40 AND AWAIT DIRECTION PRIOR TO CONTINUING WORK





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT

PERMIT#: Q02-2018221-850 PREVIOUS#: Q02-2018135-A09



ISSUED DATE: 8/9/2018 PERMIT VALID FROM: 8/11/2018 TO: 11/8/2018  
BOROUGH: QUEENS PERMIT TYPE: 0211 - OCCUPANCY OF ROADWAY AS STIPULATED  
FEES (NON-REFUNDABLE): ROADWAY TYPE: ASPHALT  
ADMINISTR \$50.00 SIDEWALK TYPE: CONCRETE  
ATION FEE  
TOTAL : \$50.00 PAID

#### PERMISSION HEREBY GRANTED TO:

NAME: MORGAN CONSTRUCTION NY INC. LICENSE #: None  
CONTACT NAME: MAN, GEORGE CONTRACT #: None  
PHONE: 2126250820 SPONSORING AGENCY: None  
ADDRESS: 57 ALLEN STREET, NEW YORK, NY, 10002

#### TO OCCUPY THE ROADWAY AND/OR SIDEWALK AT:

HOUSE#: 11-28  
ON STREET: 31 DRIVE  
FROM STREET: 12 STREET  
TO STREET: VERNON BOULEVARD  
LOCATION DETAILS:  
FOR PURPOSE OF:  
RELATED AGENCY #: 420605964 (DOB)  
INSPECT DIST:  
RECORDED: None  
TRACKING #: 2018090700726657

COMM. BOARD: 01  
SEQUENCE #: 0002

Note: If House Number is not provided Permittee shall use "Location Details" box to indicate a specific location of the work area within a block (for all non-Contract work, i.e. Contract #: None).

PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LAWS, RULES AND SPECIFICATIONS OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION AND WITH THE TERMS AND CONDITIONS OF THE PERMIT. FAILURE TO COMPLY MAY RESULT IN REVOCATION OF THE PERMIT BY THE COMMISSIONER.

TAMPERING WITH OR KNOWINGLY MAKING A FALSE ENTRY IN OR FALSELY ALTERING THIS PERMIT MAY RESULT IN A RESTRICTION IN OBTAINING FUTURE NYCDOT PERMITS.

#### NYS LAW

CALL NEW YORK 811, INC. AT 1-800-272-4480 OR 811 BEFORE STREET OPENING EXCAVATIONS. NEW YORK STATE INDUSTRIAL CODE RULE 753 MANDATES 2-10 BUSINESS DAYS NOTICE PRIOR TO DIGGING.





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT



PERMIT#: Q02-2018221-B50 PREVIOUS#: Q02-2018135-A09

#### PERMITTEE SHALL COMPLY WITH ALL OF THE FOLLOWING STIPULATIONS

SPECIFIC STIPULATION	
	SP MUST COORDINATE WITH THE ONGOING CONSTRUCTION PRIOR TO MOBILIZING.
038	ALL TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, FENCING AND MARKINGS SHALL BE PROVIDED, INSTALLED, MAINTAINED AND REMOVED BY THE PERMITTEE IN ACCORDANCE WITH THE MOST RECENT VERSION OF PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). OBTAIN THE MUTCD AT: <a href="http://mutcd.fhwa.dot.gov">HTTP://MUTCD.FHWA.DOT.GOV</a>
048	OCCUPY 8 FOOT WIDTH OF ROADWAY ADJACENT TO SOUTH CURBLINE
066	DO NOT PLACE MATERIALS, TRAILERS, CRANES, CONTAINERS, OR EQUIPMENT IN FRONT OF DRIVEWAYS, BUS STOPS, WITHIN FIFTEEN FEET OF A FIRE HYDRANT, IN AUTHORIZED PARKING ZONES OR BLOCKING ACCESS TO DEEP WATER TESTING BOXES. IF WORK IS DIRECTLY IN ABOVE AREAS, MAY BE IN VICINITY DURING STIPULATED WORK HOURS BUT NOT WHEN SITE IS UNATTENDED.
091	THIS PERMIT ACTIVITY MAY NOT START UNTIL THE PERMITTEE COORDINATES ALL WORK WITH ANY ONGOING CONSTRUCTION AND WITH THE PROJECT/RESIDENT ENGINEER FOR ANY ONGOING CAPITAL PROJECTS.
103	PARKING OF NON-COMMERCIAL VEHICLES ON THE STREET (ROADWAY AND SIDEWALK) WITHIN WORK ZONES IS PROHIBITED.
107	LOADING AND UNLOADING, STANDING OR PARKING IN A LANE ADJACENT TO THE WORK ZONE IN THE ROADWAY IS PROHIBITED. THIS APPLIES TO PERMITTEES AND ALL OF THEIR SUBCONTRACTORS.
HIQA01	THIS PERMIT ONLY ALLOWS FOR THE CLOSURE OF A ROADWAY OR SIDEWALK AS STIPULATED. ANY STORAGE OF MATERIAL OR STORAGE OF EQUIPMENT REQUIRES A SEPARATE PERMIT.
NOISE1	BY SUBMITTING THIS APPLICATION AND/OR RENEWAL REQUEST, THE PERMITTEE CERTIFIES ITS COMPLIANCE WITH ALL APPLICABLE CITY-WIDE CONSTRUCTION NOISE MITIGATION REQUIREMENTS INCLUDING, BUT NOT LIMITED TO THE DEVELOPMENT OF A COMPLIANT NOISE MITIGATION OR ALTERNATIVE NOISE MITIGATION PLAN. PLEASE CONTACT THE NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION ( <a href="http://WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML">WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML</a> ) FOR FURTHER INFORMATION.
SCHOOL	NO WORK TO BE PERFORMED WITHIN BLOCK FRONTING SCHOOL INCLUDING INTERSECTIONS FOR ONE HOUR PRIOR TO SCHOOL START TIME THROUGH ONE HOUR AFTER END OF SCHOOL TIME. PERMITTEE MUST NOTIFY SCHOOL PRINCIPAL IN WRITING 48 HOURS PRIOR TO BEGINNING ANY WORK. THIS STIP VOIDS ANY/ALL OTHER CONFLICTING STIPS ON THIS PERMIT UNLESS ACCOMPANIED WITH VARIANCE STIP VAR001.
TMC001	CONTRACTORS WHO AT ANY TIME DURING THEIR PERMITTED WORK ENCOUNTER TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIP OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD WIRED) ON ANY NYCDOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DWGS, SHALL IMMEDIATELY NOTIFY NYCDOT TRAFFIC MANAGEMENT AT <a href="mailto:TMC@DOT.NYC.GOV">TMC@DOT.NYC.GOV</a> & 718-433-3390/40 AND AWAIT DIRECTION PRIOR TO CONTINUING WORK





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT

PERMIT#: Q02-2018221-B51 PREVIOUS#: Q02-2018135-A10



ISSUED DATE: 8/9/2018 PERMIT VALID FROM: 8/11/2018 TO: 11/8/2018  
BOROUGH: QUEENS PERMIT TYPE: 0215 - OCCUPANCY OF SIDEWALK AS STIPULATED  
FEES (NON-REFUNDABLE): ROADWAY TYPE: ASPHALT  
ADMINISTR \$50.00 SIDEWALK TYPE: CONCRETE  
ATION FEE  
TOTAL: \$50.00 PAID

#### PERMISSION HEREBY GRANTED TO:

NAME: MORGAN CONSTRUCTION NY INC. LICENSE #: None  
CONTACT NAME: MAN, GEORGE CONTRACT #: None  
PHONE: 2126250820 SPONSORING AGENCY: None  
ADDRESS: 57 ALLEN STREET, NEW YORK, NY 10002

#### TO OCCUPY THE ROADWAY AND/OR SIDEWALK AT:

HOUSE#: 11-28  
ON STREET: 131 DRIVE  
FROM STREET: 12 STREET  
TO STREET: VERNON BOULEVARD  
LOCATION DETAILS:  
FOR PURPOSE OF:  
RELATED AGENCY #: 420605964 (DOB)  
INSPECT DIST: 1  
RECORDED: None  
TRACKING #: 2018080700728657

COMM. BOARD: 01  
SEQUENCE #: 0003

Note: If House Number is not provided Permittee shall use "Location Details" box to indicate a specific location of the work area within a block (for all non-Contract work, i.e. Contract #: None).

PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LAWS, RULES AND SPECIFICATIONS OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION AND WITH THE TERMS AND CONDITIONS OF THE PERMIT. FAILURE TO COMPLY MAY RESULT IN REVOCATION OF THE PERMIT BY THE COMMISSIONER.

TAMPERING WITH OR KNOWINGLY MAKING A FALSE ENTRY IN OR FALSELY ALTERING THIS PERMIT MAY RESULT IN A RESTRICTION IN OBTAINING FUTURE NYCDOT PERMITS.

#### NYS LAW

CALL NEW YORK 811, INC. AT 1-800-272-4480 OR 811 BEFORE STREET OPENING EXCAVATIONS. NEW YORK STATE INDUSTRIAL CODE RULE 753 MANDATES 2-10 BUSINESS DAYS NOTICE PRIOR TO DIGGING.





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT



PERMIT#: Q02-2018221-B51 PREVIOUS#: Q02-2018135-A10

#### PERMITTEE SHALL COMPLY WITH ALL OF THE FOLLOWING STIPULATIONS

SPECIFIC STIPULATION	
	SP MUST COORDINATE WITH THE ONGOING CONSTRUCTION PRIOR TO MOBILIZING.
013	MAINTAIN A MINIMUM 5 FOOT CLEAR PEDESTRIAN WALK ON THE SIDEWALK
038	ALL TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, FENCING AND MARKINGS SHALL BE PROVIDED, INSTALLED, MAINTAINED AND REMOVED BY THE PERMITTEE IN ACCORDANCE WITH THE MOST RECENT VERSION OF PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). OBTAIN THE MUTCD AT <a href="http://mutcd.fhwa.dot.gov">HTTP://MUTCD.FHWA.DOT.GOV</a> .
066	DO NOT PLACE MATERIALS, TRAILERS, CRANES, CONTAINERS, OR EQUIPMENT IN FRONT OF DRIVEWAYS, BUS STOPS, WITHIN FIFTEEN FEET OF A FIRE HYDRANT, IN AUTHORIZED PARKING ZONES OR BLOCKING ACCESS TO DEP WATER TESTING BOXES. IF WORK IS DIRECTLY IN ABOVE AREAS, MAY BE IN VICINITY DURING STIPULATED WORK HOURS BUT NOT WHEN SITE IS UNATTENDED.
091	THIS PERMIT ACTIVITY MAY NOT START UNTIL THE PERMITTEE COORDINATES ALL WORK WITH ANY ONGOING CONSTRUCTION AND WITH THE PROJECT/RESIDENT ENGINEER FOR ANY ONGOING CAPITAL PROJECTS.
103	PARKING OF NON-COMMERCIAL VEHICLES ON THE STREET (ROADWAY AND SIDEWALK) WITHIN WORK ZONES IS PROHIBITED.
HQA01	THIS PERMIT ONLY ALLOWS FOR THE CLOSURE OF A ROADWAY OR SIDEWALK AS STIPULATED. ANY STORAGE OF MATERIAL OR STORAGE OF EQUIPMENT REQUIRES A SEPARATE PERMIT.
NOISE1	BY SUBMITTING THIS APPLICATION AND/OR RENEWAL REQUEST, THE PERMITTEE CERTIFIES ITS COMPLIANCE WITH ALL APPLICABLE CITYWIDE CONSTRUCTION NOISE MITIGATION REQUIREMENTS INCLUDING, BUT NOT LIMITED TO THE DEVELOPMENT OF A COMPLIANT NOISE MITIGATION OR ALTERNATIVE NOISE MITIGATION PLAN. PLEASE CONTACT THE NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION ( <a href="http://WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML">WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML</a> ) FOR FURTHER INFORMATION.
SCHOOL	NO WORK TO BE PERFORMED WITHIN BLOCK FRONTING SCHOOL INCLUDING INTERSECTIONS FOR ONE HOUR PRIOR TO SCHOOL START TIME THROUGH ONE HOUR AFTER END OF SCHOOL TIME. PERMITTEE MUST NOTIFY SCHOOL PRINCIPAL IN WRITING 48 HOURS PRIOR TO BEGINNING ANY WORK. THIS STIP VOIDS ANY/ALL OTHER CONFLICTING STIPS ON THIS PERMIT UNLESS ACCOMPANIED WITH VARIANCE STIP VAR001.
TMC001	CONTRACTORS WHO AT ANY TIME DURING THEIR PERMITTED WORK ENCOUNTER TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIP OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD WIRED) ON ANY NYCDOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DWGS, SHALL IMMEDIATELY NOTIFY NYCDOT TRAFFIC MANAGEMENT AT <a href="mailto:TMC@DOT.NYC.GOV">TMC@DOT.NYC.GOV</a> & 718-433-3390/40 AND AWAIT DIRECTION PRIOR TO CONTINUING WORK.





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT

PERMIT#: Q02-2018221-B49 PREVIOUS#: Q02-2018135-A08



ISSUED DATE: 8/9/2018 PERMIT VALID FROM: 8/11/2018 TO: 11/8/2018  
BOROUGH: QUEENS PERMIT TYPE: 0202 - CROSSING SIDEWALK  
FEES (NON-REFUNDABLE): ROADWAY TYPE: ASPHALT  
ADMINISTR \$50.00 SIDEWALK TYPE: CONCRETE  
ATION FEE  
TOTAL : \$50.00 PAID

#### PERMISSION HEREBY GRANTED TO:

NAME: MORGAN CONSTRUCTION NY INC. LICENSE #: None  
CONTACT NAME: MAN, GEORGE CONTRACT #: None  
PHONE: 2126250820 SPONSORING AGENCY: None  
ADDRESS: 57 ALLEN STREET NEW YORK NY 10002

#### TO OCCUPY THE ROADWAY AND/OR SIDEWALK AT:

HOUSE#: 11-28  
ON STREET: 31 DRIVE  
FROM STREET: 12 STREET  
TO STREET: VERNON BOULEVARD  
LOCATION DETAILS:  
FOR PURPOSE OF:  
RELATED AGENCY #: 420605964 (DOB)  
INSPECT DIST:  
RECORDED: None  
TRACKING #: 2018080700726657

COMM BOARD: 01  
SEQUENCE #: 0001

Note: If House Number is not provided Permittee shall use "Location Details" box to indicate a specific location of the work area within a block (for all non-Contract work, i.e. Contract #: None).

PERMITTEE SHALL COMPLY WITH ALL APPLICABLE LAWS, RULES AND SPECIFICATIONS OF THE NEW YORK CITY DEPARTMENT OF TRANSPORTATION AND WITH THE TERMS AND CONDITIONS OF THE PERMIT. FAILURE TO COMPLY MAY RESULT IN REVOCATION OF THE PERMIT BY THE COMMISSIONER.

TAMPERING WITH OR KNOWINGLY MAKING A FALSE ENTRY IN OR FALSELY ALTERING THIS PERMIT MAY RESULT IN A RESTRICTION IN OBTAINING FUTURE NYCDOT PERMITS.

#### NYS LAW

CALL NEW YORK 811, INC. AT 1-800-272-4480 OR 811 BEFORE STREET OPENING EXCAVATIONS. NEW YORK STATE INDUSTRIAL CODE RULE 753 MANDATES 2-10 BUSINESS DAYS NOTICE PRIOR TO DIGGING.





# NYC Department of Transportation

## Office of Permit Management

### BUILDING OPERATION PERMIT

PERMIT#: Q02-2018221-B49 PREVIOUS#: Q02-2018135-A08



#### PERMITTEE SHALL COMPLY WITH ALL OF THE FOLLOWING STIPULATIONS

SPECIFIC STIPULATION	
	SP MUST COORDINATE WITH THE ONGOING CONSTRUCTION PRIOR TO MOBILIZING.
012	FLAG PERSON MUST BE PROVIDED TO STOP PEDESTRIAN AND/OR VEHICLE TRAFFIC WHILE LIFTING MATERIALS OVERHEAD AND ALSO WHEN CROSSING SIDEWALK IN CONJUNCTION WITH CROSSING SIDEWALK PERMITS.
013	MAINTAIN A MINIMUM 5 FOOT CLEAR PEDESTRIAN WALK ON THE SIDEWALK
019	WORK 7AM - 6PM, MONDAY THROUGH FRIDAY
038	ALL TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING BUT NOT LIMITED TO SIGNS, CHANNELIZING DEVICES, FENCING AND MARKINGS SHALL BE PROVIDED, INSTALLED, MAINTAINED AND REMOVED BY THE PERMITTEE IN ACCORDANCE WITH THE MOST RECENT VERSION OF PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD). OBTAIN THE MUTCD AT <a href="http://mutcd.fhwa.dot.gov">HTTP://MUTCD.FHWA.DOT.GOV</a> .
066	DO NOT PLACE MATERIALS, TRAILERS, CRANES, CONTAINERS, OR EQUIPMENT IN FRONT OF DRIVEWAYS, BUS STOPS, WITHIN FIFTEEN FEET OF A FIRE HYDRANT, IN AUTHORIZED PARKING ZONES OR BLOCKING ACCESS TO DEEP WATER TESTING BOXES. IF WORK IS DIRECTLY IN ABOVE AREAS, MAY BE IN VICINITY DURING STIPULATED WORK HOURS BUT NOT WHEN SITE IS UNATTENDED.
091	THIS PERMIT ACTIVITY MAY NOT START UNTIL THE PERMITTEE COORDINATES ALL WORK WITH ANY ONGOING CONSTRUCTION AND WITH THE PROJECT/RESIDENT ENGINEER FOR ANY ONGOING CAPITAL PROJECTS.
103	PARKING OF NON-COMMERCIAL VEHICLES ON THE STREET (ROADWAY AND SIDEWALK) WITHIN WORK ZONES IS PROHIBITED.
NOISE1	BY SUBMITTING THIS APPLICATION AND/OR RENEWAL REQUEST, THE PERMITTEE CERTIFIES ITS COMPLIANCE WITH ALL APPLICABLE CITYWIDE CONSTRUCTION NOISE MITIGATION REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO THE DEVELOPMENT OF A COMPLIANT NOISE MITIGATION OR ALTERNATIVE NOISE MITIGATION PLAN. PLEASE CONTACT THE NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION ( <a href="http://WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML">WWW.NYC.GOV/HTML/DEP/HTML/NOISE/CONSTRUCTION_NOISE.SHTML</a> ) FOR FURTHER INFORMATION.
SCHOOL	NO WORK TO BE PERFORMED WITHIN BLOCK FRONTING SCHOOL INCLUDING INTERSECTIONS FOR ONE HOUR PRIOR TO SCHOOL START TIME THROUGH ONE HOUR AFTER END OF SCHOOL TIME. PERMITTEE MUST NOTIFY SCHOOL PRINCIPAL IN WRITING 48 HOURS PRIOR TO BEGINNING ANY WORK. THIS STIP VOIDS ANY/ ALL OTHER CONFLICTING STIPS ON THIS PERMIT UNLESS ACCOMPANIED WITH VARIANCE STIP VAR001.
TMC001	CONTRACTORS WHO AT ANY TIME DURING THEIR PERMITTED WORK ENCOUNTER TRAFFIC SURVEILLANCE CAMERAS, DETECTION EQUIP OR ANY TYPE OF COMMUNICATION EQUIPMENT (WIRELESS OR HARD WIRED) ON ANY NYCDOT FACILITY, THAT IS NOT INCLUDED ON THE DESIGN/BUILD DWGS, SHALL IMMEDIATELY NOTIFY NYCDOT TRAFFIC MANAGEMENT AT <a href="mailto:TMC@DOT.NYC.GOV">TMC@DOT.NYC.GOV</a> & 718-433-3390/40 AND AWAIT DIRECTION PRIOR TO CONTINUING WORK



**ATTACHMENT M**  
**RI and Supplemental RI Lab Reports**



# 2013 Groundwater and Soil Lab Report





# Technical Report

prepared for:

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 05/09/2013

**Client Project ID: #130030 11-28 31st Drive Queens NY**

York Project (SDG) No.: 13D1004

Revision No. 1.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440



**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

---

**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 26, 2013 and listed below. The project was identified as your project: **#130030 11-28 31st Drive Queens NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
13D1004-01	SP-1 0-2 ft	Soil	04/24/2013	04/26/2013
13D1004-02	SP-1 8-9 ft	Soil	04/24/2013	04/26/2013
13D1004-03	SP-2 0-2 ft	Soil	04/24/2013	04/26/2013
13D1004-04	SP-2 8-9 ft	Soil	04/24/2013	04/26/2013
13D1004-05	SP-2 8-9 ft (Duplicate)	Soil	04/24/2013	04/26/2013
13D1004-06	SP-3 0-2 ft	Soil	04/24/2013	04/26/2013
13D1004-07	SP-3 8-9 ft	Soil	04/24/2013	04/26/2013
13D1004-08	Filed Blank	Water	04/24/2013	04/26/2013
13D1004-09	MW-1	Water	04/25/2013	04/26/2013
13D1004-10	MW-2	Water	04/25/2013	04/26/2013
13D1004-11	MW-3	Water	04/25/2013	04/26/2013
13D1004-12	MW-3 (Duplicate)	Water	04/25/2013	04/26/2013
13D1004-13	Field Blank	Water	04/25/2013	04/26/2013
13D1004-14	Trip Blank	Water	04/25/2013	04/26/2013



## **General Notes for York Project (SDG) No.: 13D1004**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 05/09/2013

**YORK**





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	56	110	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
67-64-1	Acetone	ND		ug/kg dry	2.8	11	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
71-43-2	Benzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
108-86-1	Bromobenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-25-2	Bromoform	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
67-66-3	Chloroform	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-09-2	Methylene chloride	9.9	J, B	ug/kg dry	2.8	11	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.8	11	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.6	11	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
100-42-5	Styrene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
108-88-3	Toluene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.4	17	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
108-05-4	Vinyl acetate	ND		ug/kg dry	2.8	5.6	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 13:27	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %		73-130							
460-00-4	Surrogate: p-Bromofluorobenzene	113 %		72-127							
2037-26-5	Surrogate: Toluene-d8	105 %		84-117							

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	101	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	134	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
62-53-3	Aniline	ND		ug/kg dry	160	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
120-12-7	Anthracene	184	J	ug/kg dry	153	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
56-55-3	Benzo(a)anthracene	608		ug/kg dry	105	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
50-32-8	Benzo(a)pyrene	508		ug/kg dry	111	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
205-99-2	Benzo(b)fluoranthene	486		ug/kg dry	234	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
191-24-2	Benzo(g,h,i)perylene	194	J	ug/kg dry	92.9	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	280	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
207-08-9	Benzo(k)fluoranthene	598		ug/kg dry	280	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	154	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	135	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	189	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	72.7	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	96.2	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	143	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	98.5	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	193	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	151	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	92.3	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	164	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
218-01-9	Chrysene	635		ug/kg dry	129	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	112	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	130	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	114	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	183	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	172	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	88.4	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	147	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	228	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	176	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	196	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	125	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	244	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	353	560	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	235	560	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	144	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	124	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	280	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
206-44-0	Fluoranthene	1090		ug/kg dry	164	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
86-73-7	Fluorene	ND		ug/kg dry	134	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	165	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	94.6	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	208	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	80.0	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
193-39-5	Indeno(1,2,3-cd)pyrene	219	J	ug/kg dry	128	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
78-59-1	Isophorone	ND		ug/kg dry	96.2	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	215	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	106	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	121	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
91-20-3	Naphthalene	ND		ug/kg dry	68.8	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	278	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	116	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	82.3	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	105	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	76.1	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	93.4	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	115	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	126	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	211	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
85-01-8	Phenanthrene	806		ug/kg dry	146	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
108-95-2	Phenol	ND		ug/kg dry	121	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
129-00-0	Pyrene	998		ug/kg dry	114	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
110-86-1	Pyridine	ND		ug/kg dry	196	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	101	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	217	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	142	280	1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
	Dioxin Screen	0.00		ug/kg dry			1	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 20:33	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
5175-83-7	Surrogate: 2,4,6-Tribromophenol	49.0 %	15-110								
321-60-8	Surrogate: 2-Fluorobiphenyl	59.8 %	30-130								
367-12-4	Surrogate: 2-Fluorophenol	33.7 %	15-110								
4165-60-0	Surrogate: Nitrobenzene-d5	42.2 %	30-130								
4165-62-2	Surrogate: Phenol-d5	54.5 %	15-110								
1718-51-0	Surrogate: Terphenyl-d14	60.1 %	30-130								

### Pesticides, 8081 target list

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
309-00-2	Aldrin	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-20-8	Endrin	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.23	9.23	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.85	1.85	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
8001-35-2	Toxaphene	ND		ug/kg dry	93.4	93.4	5	EPA SW 846-8081B	04/30/2013 07:39	05/01/2013 11:02	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
2051-24-3	Surrogate: Decachlorobiphenyl	83.7 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	104 %		30-150							

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
1336-36-3	Total PCBs	ND		mg/kg dry	0.0190	0.0190	1	EPA SW 846-8082A	04/30/2013 07:39	05/01/2013 09:05	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	79.5 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	77.1 %		30-150							

### Metals, Target Analyte

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	<b>7630</b>		mg/kg dry	1.14	2.24	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-36-0	Antimony	<b>0.586</b>		mg/kg dry	0.246	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-38-2	Arsenic	<b>7.14</b>		mg/kg dry	0.380	1.12	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-39-3	Barium	<b>63.9</b>		mg/kg dry	0.145	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-41-7	Beryllium	ND		mg/kg dry	0.112	0.112	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.112	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-70-2	Calcium	26900		mg/kg dry	0.045	5.60	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-47-3	Chromium	12.9		mg/kg dry	0.134	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-48-4	Cobalt	5.55		mg/kg dry	0.090	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-50-8	Copper	49.6		mg/kg dry	0.134	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7439-89-6	Iron	13400		mg/kg dry	0.727	2.24	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7439-92-1	Lead	191		mg/kg dry	0.190	0.336	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7439-95-4	Magnesium	8280		mg/kg dry	0.504	5.60	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7439-96-5	Manganese	237		mg/kg dry	0.123	1.12	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-02-0	Nickel	10.3		mg/kg dry	0.145	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-09-7	Potassium	1820		mg/kg dry	3.78	11.2	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7782-49-2	Selenium	2.65		mg/kg dry	0.560	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-22-4	Silver	0.708		mg/kg dry	0.112	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-23-5	Sodium	321		mg/kg dry	5.90	11.2	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-28-0	Thallium	ND		mg/kg dry	0.358	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-62-2	Vanadium	17.1		mg/kg dry	0.123	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW
7440-66-6	Zinc	111		mg/kg dry	0.101	0.560	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:36	MW

### Mercury by 7470/7471

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0369	0.0369	1	EPA SW846-7471	04/30/2013 09:06	04/30/2013 17:17	AA

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.4		%	0.100	0.100	1	SM 2540G	04/30/2013 11:28	04/30/2013 11:28	AMC





## Sample Information

**Client Sample ID:** SP-1 0-2 ft

**York Sample ID:** 13D1004-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.392	0.560	1	SW846-7196A	04/30/2013 14:38	04/30/2013 14:38	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	12.9		mg/kg	0.250	0.500	1	CALCULATION	04/30/2013 14:31	05/01/2013 10:16	AMC

## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS





## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	31	61	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
78-93-3	2-Butanone	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
67-64-1	Acetone	ND		ug/kg dry	1.5	6.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
71-43-2	Benzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
108-86-1	Bromobenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-25-2	Bromoform	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
74-83-9	Bromomethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-00-3	Chloroethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
67-66-3	Chloroform	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
74-87-3	Chloromethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
74-95-3	Dibromomethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-09-2	Methylene chloride	2.4	J, B	ug/kg dry	1.5	6.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
91-20-3	Naphthalene	ND		ug/kg dry	1.5	6.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS





## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
103-65-1	n-Propylbenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
95-47-6	o-Xylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	3.1	6.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
100-42-5	Styrene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
108-88-3	Toluene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	4.6	9.2	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
108-05-4	Vinyl acetate	ND		ug/kg dry	1.5	3.1	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:02	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %		73-130							
460-00-4	Surrogate: p-Bromofluorobenzene	101 %		72-127							
2037-26-5	Surrogate: Toluene-d8	99.5 %		84-117							

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	104	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	138	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
62-53-3	Aniline	ND		ug/kg dry	164	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
120-12-7	Anthracene	ND		ug/kg dry	157	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	107	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	114	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	241	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	95.4	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	287	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	287	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR





## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	159	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	138	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	194	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	74.7	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	98.8	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	146	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	101	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	198	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	155	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	94.8	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	168	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
218-01-9	Chrysene	ND		ug/kg dry	132	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	115	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	134	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	117	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	188	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	177	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	90.8	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	151	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	234	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	180	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	201	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	128	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	250	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	362	574	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	241	574	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	148	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	127	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	287	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
206-44-0	Fluoranthene	ND		ug/kg dry	168	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
86-73-7	Fluorene	ND		ug/kg dry	138	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	169	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR





## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	97.1	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	214	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	82.1	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	131	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
78-59-1	Isophorone	ND		ug/kg dry	98.8	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	221	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	109	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	125	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
91-20-3	Naphthalene	ND		ug/kg dry	70.7	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	285	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	119	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	84.4	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	108	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	78.1	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	95.9	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	118	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	130	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	217	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
85-01-8	Phenanthrene	ND		ug/kg dry	150	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
108-95-2	Phenol	ND		ug/kg dry	124	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
129-00-0	Pyrene	ND		ug/kg dry	117	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
110-86-1	Pyridine	ND		ug/kg dry	202	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	104	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	223	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	146	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
	Dioxin Screen	0.00		ug/kg dry			1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:09	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
5175-83-7	Surrogate: 2,4,6-Tribromophenol	88.2 %	15-110								
321-60-8	Surrogate: 2-Fluorobiphenyl	84.3 %	30-130								
367-12-4	Surrogate: 2-Fluorophenol	79.1 %	15-110								
4165-60-0	Surrogate: Nitrobenzene-d5	68.8 %	30-130								
4165-62-2	Surrogate: Phenol-d5	80.5 %	15-110								
1718-51-0	Surrogate: Terphenyl-d14	104 %	30-130								





## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
309-00-2	Aldrin	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
72-20-8	Endrin	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.48	9.48	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.90	1.90	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
8001-35-2	Toxaphene	ND		ug/kg dry	95.9	95.9	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 13:46	JW
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
2051-24-3	Surrogate: Decachlorobiphenyl	125 %	30-150								
877-09-8	Surrogate: Tetrachloro-m-xylene	140 %	30-150								

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW





## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW
1336-36-3	Total PCBs	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:03	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	112 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	89.6 %		30-150							

### Metals, Target Analyte

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	11000		mg/kg dry	1.17	2.30	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-36-0	Antimony	ND		mg/kg dry	0.253	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-38-2	Arsenic	4.94		mg/kg dry	0.391	1.15	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-39-3	Barium	36.5		mg/kg dry	0.149	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.115	0.115	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.115	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-70-2	Calcium	1040		mg/kg dry	0.046	5.74	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-47-3	Chromium	13.7		mg/kg dry	0.138	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-48-4	Cobalt	11.6		mg/kg dry	0.092	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-50-8	Copper	17.3		mg/kg dry	0.138	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7439-89-6	Iron	18900		mg/kg dry	0.747	2.30	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7439-92-1	Lead	19.3		mg/kg dry	0.195	0.345	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7439-95-4	Magnesium	3230		mg/kg dry	0.517	5.74	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7439-96-5	Manganese	876		mg/kg dry	0.126	1.15	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-02-0	Nickel	10.6		mg/kg dry	0.149	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-09-7	Potassium	1180		mg/kg dry	3.88	11.5	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7782-49-2	Selenium	2.77		mg/kg dry	0.574	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-22-4	Silver	ND		mg/kg dry	0.115	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-23-5	Sodium	160		mg/kg dry	6.05	11.5	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-28-0	Thallium	ND		mg/kg dry	0.368	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-62-2	Vanadium	19.4		mg/kg dry	0.126	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW
7440-66-6	Zinc	56.0		mg/kg dry	0.103	0.574	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:40	MW





## Sample Information

**Client Sample ID:** SP-1 8-9 ft

**York Sample ID:** 13D1004-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0379	0.0379	1	EPA SW846-7471	04/30/2013 09:06	04/30/2013 17:17	AA

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.0		%	0.100	0.100	1	SM 2540G	04/30/2013 11:28	04/30/2013 11:28	AMC

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.402	0.574	1	SW846-7196A	04/30/2013 14:38	04/30/2013 14:38	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	13.7		mg/kg	0.250	0.500	1	CALCULATION	04/30/2013 14:31	05/01/2013 10:16	AMC

## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
76-13-1	1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS





## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	60	120	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
78-93-3	2-Butanone	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
67-64-1	Acetone	ND		ug/kg dry	3.0	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
71-43-2	Benzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
108-86-1	Bromobenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-25-2	Bromoform	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
74-83-9	Bromomethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-00-3	Chloroethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
67-66-3	Chloroform	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
74-87-3	Chloromethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
74-95-3	Dibromomethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS





## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-09-2	Methylene chloride	5.2	J, B	ug/kg dry	3.0	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
91-20-3	Naphthalene	ND		ug/kg dry	3.0	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
95-47-6	o-Xylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	6.0	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
100-42-5	Styrene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
108-88-3	Toluene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	9.0	18	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
108-05-4	Vinyl acetate	ND		ug/kg dry	3.0	6.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 14:37	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %	73-130								
460-00-4	Surrogate: p-Bromofluorobenzene	100 %	72-127								
2037-26-5	Surrogate: Toluene-d8	106 %	84-117								





## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	104	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	138	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
62-53-3	Aniline	ND		ug/kg dry	164	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
120-12-7	Anthracene	ND		ug/kg dry	156	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
56-55-3	Benzo(a)anthracene	195	J	ug/kg dry	107	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
50-32-8	Benzo(a)pyrene	126	J	ug/kg dry	114	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	240	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	95.2	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	287	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	287	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	158	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	138	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	193	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	74.5	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	98.6	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	146	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	101	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	198	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	155	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	94.6	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	168	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
218-01-9	Chrysene	211	J	ug/kg dry	132	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	115	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	134	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	116	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	187	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	177	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	90.6	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	150	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	234	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	180	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	201	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR





## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
131-11-3	Dimethyl phthalate	ND		ug/kg dry	128	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	250	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	361	573	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	241	573	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	147	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	127	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	287	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
206-44-0	Fluoranthene	340		ug/kg dry	168	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
86-73-7	Fluorene	ND		ug/kg dry	138	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	169	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	96.9	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	213	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	82.0	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	131	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
78-59-1	Isophorone	ND		ug/kg dry	98.6	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	220	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	109	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	124	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
91-20-3	Naphthalene	ND		ug/kg dry	70.5	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	285	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	119	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	84.3	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	108	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	78.0	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	95.7	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	118	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	130	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	216	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
85-01-8	Phenanthrene	352		ug/kg dry	150	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
108-95-2	Phenol	ND		ug/kg dry	124	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
129-00-0	Pyrene	476		ug/kg dry	117	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
110-86-1	Pyridine	ND		ug/kg dry	201	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR





## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

**York Project (SDG) No.**

13D1004

**Client Project ID**

#130030 11-28 31st Drive Queens NY

**Matrix**

Soil

**Collection Date/Time**

April 24, 2013 3:00 pm

**Date Received**

04/26/2013

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	104	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	222	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	146	287	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
	Dioxin Screen	0.00		ug/kg dry			1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 17:41	SR
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
5175-83-7	Surrogate: 2,4,6-Tribromophenol	42.3 %		15-110							
321-60-8	Surrogate: 2-Fluorobiphenyl	82.2 %		30-130							
367-12-4	Surrogate: 2-Fluorophenol	73.6 %		15-110							
4165-60-0	Surrogate: Nitrobenzene-d5	73.4 %		30-130							
4165-62-2	Surrogate: Phenol-d5	82.6 %		15-110							
1718-51-0	Surrogate: Terphenyl-d14	98.2 %		30-130							

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
309-00-2	Aldrin	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
72-20-8	Endrin	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.46	9.46	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW





## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.89	1.89	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
8001-35-2	Toxaphene	ND		ug/kg dry	95.7	95.7	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:01	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
2051-24-3	Surrogate: Decachlorobiphenyl	100 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	135 %		30-150							

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
1336-36-3	Total PCBs	ND		mg/kg dry	0.0195	0.0195	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 15:32	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	114 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	94.5 %		30-150							

### Metals, Target Analyte

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	9370		mg/kg dry	1.17	2.29	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-36-0	Antimony	2.64		mg/kg dry	0.252	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-38-2	Arsenic	4.04		mg/kg dry	0.390	1.15	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-39-3	Barium	57.6		mg/kg dry	0.149	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.115	0.115	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.115	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-70-2	Calcium	49300		mg/kg dry	0.046	5.73	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-47-3	Chromium	38.7		mg/kg dry	0.138	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-48-4	Cobalt	5.89		mg/kg dry	0.092	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-50-8	Copper	25.9		mg/kg dry	0.138	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7439-89-6	Iron	13900		mg/kg dry	0.745	2.29	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7439-92-1	Lead	42.3		mg/kg dry	0.195	0.344	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW





## Sample Information

**Client Sample ID:** SP-2 0-2 ft

**York Sample ID:** 13D1004-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	11800		mg/kg dry	0.516	5.73	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7439-96-5	Manganese	235		mg/kg dry	0.126	1.15	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-02-0	Nickel	26.3		mg/kg dry	0.149	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-09-7	Potassium	964		mg/kg dry	3.88	11.5	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7782-49-2	Selenium	0.953		mg/kg dry	0.573	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-22-4	Silver	ND		mg/kg dry	0.115	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-23-5	Sodium	226		mg/kg dry	6.04	11.5	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-28-0	Thallium	ND		mg/kg dry	0.367	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-62-2	Vanadium	21.4		mg/kg dry	0.126	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW
7440-66-6	Zinc	60.0		mg/kg dry	0.103	0.573	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:45	MW

### Mercury by 7470/7471

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0378	0.0378	1	EPA SW846-7471	04/30/2013 09:06	04/30/2013 17:17	AA

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.2		%	0.100	0.100	1	SM 2540G	04/30/2013 11:28	04/30/2013 11:28	AMC

### Chromium, Hexavalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	1.47		mg/kg dry	0.401	0.573	1	SW846-7196A	04/30/2013 14:38	04/30/2013 14:38	AMC

### Chromium, Trivalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	37.2		mg/kg	0.250	0.500	1	CALCULATION	04/30/2013 14:31	05/01/2013 10:16	AMC

## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
76-13-1	1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	34	67	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
78-93-3	2-Butanone	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
67-64-1	Acetone	ND		ug/kg dry	1.7	6.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
71-43-2	Benzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
108-86-1	Bromobenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-25-2	Bromoform	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
74-83-9	Bromomethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-00-3	Chloroethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
67-66-3	Chloroform	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
74-87-3	Chloromethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
74-95-3	Dibromomethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-09-2	Methylene chloride	3.6	J, B	ug/kg dry	1.7	6.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
91-20-3	Naphthalene	ND		ug/kg dry	1.7	6.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
95-47-6	o-Xylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	3.4	6.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
100-42-5	Styrene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
108-88-3	Toluene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	5.0	10	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-05-4	Vinyl acetate	ND		ug/kg dry	1.7	3.4	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:13	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	105 %		73-130							
460-00-4	Surrogate: p-Bromofluorobenzene	101 %		72-127							
2037-26-5	Surrogate: Toluene-d8	102 %		84-117							

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	107	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	142	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
62-53-3	Aniline	ND		ug/kg dry	170	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
120-12-7	Anthracene	ND		ug/kg dry	162	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	111	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	118	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	249	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	98.5	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	297	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	297	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	164	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	143	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	200	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	77.2	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	102	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	151	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	104	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	205	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	160	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	97.9	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	174	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
218-01-9	Chrysene	ND		ug/kg dry	137	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	119	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	138	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	121	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	194	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	183	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	93.8	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	156	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	242	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	186	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	208	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	132	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	259	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	374	594	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	249	594	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	153	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	131	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	297	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
206-44-0	Fluoranthene	ND		ug/kg dry	174	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
86-73-7	Fluorene	ND		ug/kg dry	142	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	175	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	100	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	221	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	84.9	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	135	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
78-59-1	Isophorone	ND		ug/kg dry	102	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	228	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	113	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	129	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
91-20-3	Naphthalene	ND		ug/kg dry	73.0	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	295	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	123	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	87.3	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	112	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	80.7	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	99.1	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	122	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	134	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	224	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
85-01-8	Phenanthrene	ND		ug/kg dry	155	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
108-95-2	Phenol	ND		ug/kg dry	128	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
129-00-0	Pyrene	ND		ug/kg dry	121	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
110-86-1	Pyridine	ND		ug/kg dry	208	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	107	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	230	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	151	297	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
	Dioxin Screen	0.00		ug/kg dry			1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:12	SR
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
5175-83-7	Surrogate: 2,4,6-Tribromophenol	93.4 %		15-110							
321-60-8	Surrogate: 2-Fluorobiphenyl	78.3 %		30-130							
367-12-4	Surrogate: 2-Fluorophenol	83.0 %		15-110							
4165-60-0	Surrogate: Nitrobenzene-d5	75.6 %		30-130							
4165-62-2	Surrogate: Phenol-d5	82.9 %		15-110							
1718-51-0	Surrogate: Terphenyl-d14	107 %		30-130							

### Pesticides, 8081 target list

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
309-00-2	Aldrin	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-20-8	Endrin	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.79	9.79	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.96	1.96	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
8001-35-2	Toxaphene	ND		ug/kg dry	99.1	99.1	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:16	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
2051-24-3	Surrogate: Decachlorobiphenyl	116 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	132 %		30-150							

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
1336-36-3	Total PCBs	ND		mg/kg dry	0.0202	0.0202	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:02	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	110 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	88.6 %		30-150							

### Metals, Target Analyte

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	11500		mg/kg dry	1.21	2.37	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-36-0	Antimony	ND		mg/kg dry	0.261	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-38-2	Arsenic	6.70		mg/kg dry	0.404	1.19	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-39-3	Barium	25.2		mg/kg dry	0.154	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-41-7	Beryllium	ND		mg/kg dry	0.119	0.119	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.119	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-70-2	Calcium	955		mg/kg dry	0.047	5.94	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-47-3	Chromium	17.1		mg/kg dry	0.142	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-48-4	Cobalt	8.75		mg/kg dry	0.095	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-50-8	Copper	16.0		mg/kg dry	0.142	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7439-89-6	Iron	23700		mg/kg dry	0.772	2.37	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7439-92-1	Lead	7.52		mg/kg dry	0.202	0.356	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7439-95-4	Magnesium	3010		mg/kg dry	0.534	5.94	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7439-96-5	Manganese	261		mg/kg dry	0.131	1.19	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-02-0	Nickel	11.0		mg/kg dry	0.154	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-09-7	Potassium	1210		mg/kg dry	4.01	11.9	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7782-49-2	Selenium	3.23		mg/kg dry	0.594	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-22-4	Silver	ND		mg/kg dry	0.119	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-23-5	Sodium	127		mg/kg dry	6.26	11.9	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-28-0	Thallium	ND		mg/kg dry	0.380	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-62-2	Vanadium	23.5		mg/kg dry	0.131	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW
7440-66-6	Zinc	44.8		mg/kg dry	0.107	0.594	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:50	MW

### Mercury by 7470/7471

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0392	0.0392	1	EPA SW846-7471	04/30/2013 09:06	04/30/2013 17:17	AA

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.2		%	0.100	0.100	1	SM 2540G	04/30/2013 11:28	04/30/2013 11:28	AMC





## Sample Information

**Client Sample ID:** SP-2 8-9 ft

**York Sample ID:** 13D1004-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.416	0.594	1	SW846-7196A	04/30/2013 14:38	04/30/2013 14:38	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	17.1		mg/kg	0.250	0.500	1	CALCULATION	04/30/2013 14:31	05/01/2013 10:16	AMC

## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS





## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	59	120	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
67-64-1	Acetone	ND		ug/kg dry	2.9	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
71-43-2	Benzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
108-86-1	Bromobenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-25-2	Bromoform	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
67-66-3	Chloroform	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-09-2	Methylene chloride	ND		ug/kg dry	2.9	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.9	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS





## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.9	12	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
100-42-5	Styrene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
108-88-3	Toluene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.8	18	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
108-05-4	Vinyl acetate	ND		ug/kg dry	2.9	5.9	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 15:48	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %		73-130							
460-00-4	Surrogate: p-Bromofluorobenzene	106 %		72-127							
2037-26-5	Surrogate: Toluene-d8	101 %		84-117							

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	106	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	140	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
62-53-3	Aniline	ND		ug/kg dry	167	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
120-12-7	Anthracene	ND		ug/kg dry	160	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	109	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	116	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	245	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	97.2	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	293	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	293	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR





## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	162	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	141	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	197	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	76.1	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	101	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	149	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	103	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	202	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	158	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	96.6	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	172	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
218-01-9	Chrysene	ND		ug/kg dry	135	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	118	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	136	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	119	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	191	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	180	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	92.5	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	153	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	239	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	184	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	205	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	131	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	255	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	369	585	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	246	585	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	150	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	129	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	293	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
206-44-0	Fluoranthene	ND		ug/kg dry	172	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
86-73-7	Fluorene	ND		ug/kg dry	140	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	173	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR





## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	98.9	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	218	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	83.7	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	133	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
78-59-1	Isophorone	ND		ug/kg dry	101	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
91-57-6	2-Methylnaphthalene	386		ug/kg dry	225	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	111	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	127	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
91-20-3	Naphthalene	ND		ug/kg dry	72.0	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	291	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	121	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	86.0	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	110	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	79.6	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	97.8	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	120	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	132	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	221	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
85-01-8	Phenanthrene	ND		ug/kg dry	153	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
108-95-2	Phenol	ND		ug/kg dry	126	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
129-00-0	Pyrene	ND		ug/kg dry	119	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
110-86-1	Pyridine	ND		ug/kg dry	205	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	106	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	227	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	149	293	1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
	Dioxin Screen	0.00		ug/kg dry			1	EPA SW-846 8270C	04/30/2013 14:34	04/30/2013 18:44	SR
	<b>Surrogate Recoveries</b>	<b>Result</b>		<b>Acceptance Range</b>							
5175-83-7	Surrogate: 2,4,6-Tribromophenol	88.8 %		15-110							
321-60-8	Surrogate: 2-Fluorobiphenyl	77.0 %		30-130							
367-12-4	Surrogate: 2-Fluorophenol	81.9 %		15-110							
4165-60-0	Surrogate: Nitrobenzene-d5	68.7 %		30-130							
4165-62-2	Surrogate: Phenol-d5	85.6 %		15-110							
1718-51-0	Surrogate: Terphenyl-d14	116 %		30-130							





## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
309-00-2	Aldrin	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
72-20-8	Endrin	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.66	9.66	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.93	1.93	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
8001-35-2	Toxaphene	ND		ug/kg dry	97.8	97.8	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:31	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
2051-24-3	Surrogate: Decachlorobiphenyl	109 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	120 %		30-150							

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW





## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW
1336-36-3	Total PCBs	ND		mg/kg dry	0.0199	0.0199	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 16:31	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	98.0 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	81.6 %		30-150							

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	9660		mg/kg dry	1.19	2.34	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-36-0	Antimony	ND		mg/kg dry	0.258	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-38-2	Arsenic	6.35		mg/kg dry	0.398	1.17	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-39-3	Barium	21.8		mg/kg dry	0.152	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.117	0.117	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.117	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-70-2	Calcium	1930		mg/kg dry	0.047	5.85	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-47-3	Chromium	16.5		mg/kg dry	0.140	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-48-4	Cobalt	6.63		mg/kg dry	0.094	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-50-8	Copper	12.9		mg/kg dry	0.140	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7439-89-6	Iron	20200		mg/kg dry	0.761	2.34	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7439-92-1	Lead	6.63		mg/kg dry	0.199	0.351	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7439-95-4	Magnesium	2560		mg/kg dry	0.527	5.85	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7439-96-5	Manganese	189		mg/kg dry	0.129	1.17	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-02-0	Nickel	8.02		mg/kg dry	0.152	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-09-7	Potassium	1190		mg/kg dry	3.96	11.7	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7782-49-2	Selenium	2.97		mg/kg dry	0.585	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-22-4	Silver	ND		mg/kg dry	0.117	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-23-5	Sodium	118		mg/kg dry	6.17	11.7	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-28-0	Thallium	ND		mg/kg dry	0.375	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-62-2	Vanadium	26.6		mg/kg dry	0.129	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW
7440-66-6	Zinc	33.3		mg/kg dry	0.105	0.585	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 11:55	MW





## Sample Information

**Client Sample ID:** SP-2 8-9 ft (Duplicate)

**York Sample ID:** 13D1004-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0386	0.0386	1	EPA SW846-7471	04/30/2013 09:06	04/30/2013 17:17	AA

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	85.4		%	0.100	0.100	1	SM 2540G	04/30/2013 11:28	04/30/2013 11:28	AMC

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.410	0.585	1	SW846-7196A	04/30/2013 14:38	04/30/2013 14:38	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	16.5		mg/kg	0.250	0.500	1	CALCULATION	04/30/2013 14:31	05/01/2013 10:16	AMC

## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS





## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	50	100	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
67-64-1	Acetone	ND		ug/kg dry	2.5	10	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
71-43-2	Benzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
108-86-1	Bromobenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-25-2	Bromoform	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
67-66-3	Chloroform	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS





## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-09-2	Methylene chloride	3.5	J, B	ug/kg dry	2.5	10	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.5	10	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.0	10	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
100-42-5	Styrene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
127-18-4	Tetrachloroethylene	3.9	J	ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
108-88-3	Toluene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.5	15	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
108-05-4	Vinyl acetate	ND		ug/kg dry	2.5	5.0	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:23	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %	73-130								
460-00-4	Surrogate: p-Bromofluorobenzene	110 %	72-127								
2037-26-5	Surrogate: Toluene-d8	107 %	84-117								





## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	499	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	661	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
62-53-3	Aniline	ND		ug/kg dry	788	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
120-12-7	Anthracene	ND		ug/kg dry	752	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	515	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	546	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	1150	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	458	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	1380	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	1380	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	761	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	664	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	929	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	358	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	474	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	703	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	485	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	951	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	744	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	455	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	808	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
218-01-9	Chrysene	ND		ug/kg dry	634	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	554	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	642	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	559	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	901	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	849	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	435	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	722	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	1120	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	865	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	965	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR





## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
131-11-3	Dimethyl phthalate	ND		ug/kg dry	615	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	1740	2760	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	1200	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	1160	2760	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	708	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	609	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	1380	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
206-44-0	Fluoranthene	ND		ug/kg dry	808	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
86-73-7	Fluorene	ND		ug/kg dry	661	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	813	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	466	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	1030	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	394	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	628	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
78-59-1	Isophorone	ND		ug/kg dry	474	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	1060	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	524	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	598	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
91-20-3	Naphthalene	ND		ug/kg dry	339	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	1370	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	571	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	405	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	518	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	375	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	460	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	565	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	623	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	1040	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
85-01-8	Phenanthrene	ND		ug/kg dry	719	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
108-95-2	Phenol	ND		ug/kg dry	595	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
129-00-0	Pyrene	ND		ug/kg dry	562	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
110-86-1	Pyridine	ND		ug/kg dry	967	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR





## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	499	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	1070	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	700	1380	5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
	Dioxin Screen	0.00		ug/kg dry			5	EPA SW-846 8270C	04/30/2013 14:34	05/01/2013 21:04	SR
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
5175-83-7	Surrogate: 2,4,6-Tribromophenol	56.9 %		15-110							
321-60-8	Surrogate: 2-Fluorobiphenyl	85.7 %		30-130							
367-12-4	Surrogate: 2-Fluorophenol	57.7 %		15-110							
4165-60-0	Surrogate: Nitrobenzene-d5	75.1 %		30-130							
4165-62-2	Surrogate: Phenol-d5	63.6 %		15-110							
1718-51-0	Surrogate: Terphenyl-d14	75.1 %		30-130							

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
309-00-2	Aldrin	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
72-20-8	Endrin	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.10	9.10	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW





## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.82	1.82	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
8001-35-2	Toxaphene	ND		ug/kg dry	92.1	92.1	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 14:46	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
2051-24-3	Surrogate: Decachlorobiphenyl	108 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	119 %		30-150							

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
1336-36-3	Total PCBs	ND		mg/kg dry	0.0187	0.0187	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:00	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	94.5 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	79.6 %		30-150							

### Metals, Target Analyte

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	9050		mg/kg dry	1.12	2.20	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-36-0	Antimony	ND		mg/kg dry	0.243	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-38-2	Arsenic	4.21		mg/kg dry	0.375	1.10	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-39-3	Barium	86.0		mg/kg dry	0.143	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.110	0.110	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.110	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-70-2	Calcium	16400		mg/kg dry	0.044	5.51	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-47-3	Chromium	14.1		mg/kg dry	0.132	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-48-4	Cobalt	8.29		mg/kg dry	0.088	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-50-8	Copper	54.6		mg/kg dry	0.132	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7439-89-6	Iron	17200		mg/kg dry	0.717	2.20	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7439-92-1	Lead	96.8		mg/kg dry	0.187	0.331	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW





## Sample Information

**Client Sample ID:** SP-3 0-2 ft

**York Sample ID:** 13D1004-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	3250		mg/kg dry	0.496	5.51	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7439-96-5	Manganese	458		mg/kg dry	0.121	1.10	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-02-0	Nickel	9.85		mg/kg dry	0.143	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-09-7	Potassium	1970		mg/kg dry	3.73	11.0	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7782-49-2	Selenium	2.22		mg/kg dry	0.551	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-22-4	Silver	ND		mg/kg dry	0.110	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-23-5	Sodium	282		mg/kg dry	5.81	11.0	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-28-0	Thallium	ND		mg/kg dry	0.353	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-62-2	Vanadium	45.2		mg/kg dry	0.121	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW
7440-66-6	Zinc	64.7		mg/kg dry	0.099	0.551	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:00	MW

### Mercury by 7470/7471

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0364	0.0364	1	EPA SW846-7471	04/30/2013 09:06	04/30/2013 17:17	AA

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	90.7		%	0.100	0.100	1	SM 2540G	04/30/2013 11:28	04/30/2013 11:28	AMC

### Chromium, Hexavalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.386	0.551	1	SW846-7196A	04/30/2013 14:38	04/30/2013 14:38	AMC

### Chromium, Trivalent

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	14.1		mg/kg	0.250	0.500	1	CALCULATION	04/30/2013 14:31	05/01/2013 10:16	AMC

## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	47	93	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
78-93-3	2-Butanone	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
67-64-1	Acetone	3.1	J	ug/kg dry	2.3	9.3	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
71-43-2	Benzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
108-86-1	Bromobenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-25-2	Bromoform	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
74-83-9	Bromomethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-00-3	Chloroethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
67-66-3	Chloroform	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
74-87-3	Chloromethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-09-2	Methylene chloride	ND		ug/kg dry	2.3	9.3	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
91-20-3	Naphthalene	ND		ug/kg dry	2.3	9.3	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	4.7	9.3	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
100-42-5	Styrene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
108-88-3	Toluene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.0	14	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-05-4	Vinyl acetate	ND		ug/kg dry	2.3	4.7	1	EPA SW846-8260B	04/30/2013 09:22	04/30/2013 16:58	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	103 %		73-130							
460-00-4	Surrogate: p-Bromofluorobenzene	99.5 %		72-127							
2037-26-5	Surrogate: Toluene-d8	104 %		84-117							

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	96.9	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	128	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
62-53-3	Aniline	ND		ug/kg dry	153	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
120-12-7	Anthracene	ND		ug/kg dry	146	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	100	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	106	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	224	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	88.8	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	268	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	268	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	148	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	129	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	180	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	69.6	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	92.1	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	136	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	94.2	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	185	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	144	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	88.3	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	157	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
218-01-9	Chrysene	ND		ug/kg dry	123	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	108	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	125	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	109	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	175	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	165	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	84.6	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	140	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	218	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	168	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	187	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	119	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	337	535	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	233	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	225	535	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	138	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	118	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	268	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
206-44-0	Fluoranthene	ND		ug/kg dry	157	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
86-73-7	Fluorene	ND		ug/kg dry	128	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	158	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	90.4	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	199	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	76.5	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	122	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
78-59-1	Isophorone	ND		ug/kg dry	92.1	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	206	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	102	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	116	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
91-20-3	Naphthalene	ND		ug/kg dry	65.8	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	266	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	111	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	78.7	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	101	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	72.8	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	89.4	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	110	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	121	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	202	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
85-01-8	Phenanthrene	ND		ug/kg dry	140	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
108-95-2	Phenol	ND		ug/kg dry	116	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
129-00-0	Pyrene	ND		ug/kg dry	109	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
110-86-1	Pyridine	ND		ug/kg dry	188	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	96.9	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	208	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	136	268	1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
	Dioxin Screen	0.00		ug/kg dry			1	EPA SW-846 8270C	04/30/2013 07:46	04/30/2013 16:05	SR
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
5175-83-7	Surrogate: 2,4,6-Tribromophenol	74.3 %		15-110							
321-60-8	Surrogate: 2-Fluorobiphenyl	63.1 %		30-130							
367-12-4	Surrogate: 2-Fluorophenol	44.5 %		15-110							
4165-60-0	Surrogate: Nitrobenzene-d5	42.4 %		30-130							
4165-62-2	Surrogate: Phenol-d5	66.8 %		15-110							
1718-51-0	Surrogate: Terphenyl-d14	88.0 %		30-130							

### Pesticides, 8081 target list

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
309-00-2	Aldrin	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-20-8	Endrin	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
72-43-5	Methoxychlor	ND		ug/kg dry	8.83	8.83	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.77	1.77	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
8001-35-2	Toxaphene	ND		ug/kg dry	89.4	89.4	5	EPA SW 846-8081B	04/30/2013 07:39	04/30/2013 15:12	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
2051-24-3	Surrogate: Decachlorobiphenyl	139 %		30-150							
877-09-8	Surrogate: Tetrachloro-m-xylene	147 %		30-150							

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
1336-36-3	Total PCBs	ND		mg/kg dry	0.0182	0.0182	1	EPA SW 846-8082A	04/30/2013 07:39	04/30/2013 17:29	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	118 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	101 %		30-150							

### Metals, Target Analyte

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	8960		mg/kg dry	1.09	2.14	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-36-0	Antimony	ND		mg/kg dry	0.235	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-38-2	Arsenic	3.93		mg/kg dry	0.364	1.07	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-39-3	Barium	36.3		mg/kg dry	0.139	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-41-7	Beryllium	ND		mg/kg dry	0.107	0.107	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.107	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-70-2	Calcium	617		mg/kg dry	0.043	5.35	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-47-3	Chromium	15.7		mg/kg dry	0.128	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-48-4	Cobalt	7.08		mg/kg dry	0.086	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-50-8	Copper	13.4		mg/kg dry	0.128	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7439-89-6	Iron	16600		mg/kg dry	0.696	2.14	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7439-92-1	Lead	5.18		mg/kg dry	0.182	0.321	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7439-95-4	Magnesium	3130		mg/kg dry	0.482	5.35	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7439-96-5	Manganese	413		mg/kg dry	0.118	1.07	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-02-0	Nickel	12.3		mg/kg dry	0.139	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-09-7	Potassium	1470		mg/kg dry	3.62	10.7	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7782-49-2	Selenium	2.65		mg/kg dry	0.535	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-22-4	Silver	ND		mg/kg dry	0.107	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-23-5	Sodium	142		mg/kg dry	5.64	10.7	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-28-0	Thallium	ND		mg/kg dry	0.343	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-62-2	Vanadium	21.7		mg/kg dry	0.118	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW
7440-66-6	Zinc	34.0		mg/kg dry	0.096	0.535	1	EPA SW846-6010B	04/30/2013 09:20	04/30/2013 12:05	MW

### Mercury by 7470/7471

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-7471

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0353	0.0353	1	EPA SW846-7471	04/30/2013 09:06	04/30/2013 17:17	AA

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	93.4		%	0.100	0.100	1	SM 2540G	04/30/2013 11:28	04/30/2013 11:28	AMC





## Sample Information

**Client Sample ID:** SP-3 8-9 ft

**York Sample ID:** 13D1004-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Soil

April 24, 2013 3:00 pm

04/26/2013

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/kg dry	0.375	0.535	1	SW846-7196A	04/30/2013 14:38	04/30/2013 14:38	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3060

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	15.7		mg/kg	0.250	0.500	1	CALCULATION	04/30/2013 14:31	05/01/2013 10:16	AMC

## Sample Information

**Client Sample ID:** Filed Blank

**York Sample ID:** 13D1004-08

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS





## Sample Information

**Client Sample ID:** Filed Blank

**York Sample ID:** 13D1004-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
67-64-1	Acetone	12		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
98-82-8	Isopropylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-09-2	Methylene chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
91-20-3	Naphthalene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS





## Sample Information

**Client Sample ID:** Filed Blank

**York Sample ID:** 13D1004-08

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 24, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
1330-20-7	Xylenes, Total	ND		ug/L	7.5	15	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
108-05-4	Vinyl acetate	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/29/2013 08:39	04/30/2013 18:14	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	99.6 %	72.6-129								
460-00-4	Surrogate: p-Bromofluorobenzene	132 %	63.5-145								
2037-26-5	Surrogate: Toluene-d8	105 %	81.2-127								

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
208-96-8	Acenaphthylene	ND		ug/L	1.78	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
62-53-3	Aniline	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
120-12-7	Anthracene	ND		ug/L	1.22	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	1.34	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	1.33	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	1.45	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
100-51-6	Benzyl alcohol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	1.75	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	0.874	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR





## Sample Information

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York Project (SDG) No.

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	1.36	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
106-47-8	4-Chloroaniline	ND		ug/L	3.06	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	3.07	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	4.90	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.26	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
95-57-8	2-Chlorophenol	ND		ug/L	1.84	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.51	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
218-01-9	Chrysene	ND		ug/L	1.51	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	1.60	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
132-64-9	Dibenzofuran	ND		ug/L	2.47	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.10	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.68	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.55	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.27	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	1.64	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
131-11-3	Dimethyl phthalate	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	1.66	10.3	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.31	10.3	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
206-44-0	Fluoranthene	ND		ug/L	1.27	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
86-73-7	Fluorene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
118-74-1	Hexachlorobenzene	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.86	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	2.59	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR





## Sample Information

**Client Sample ID:** Filed Blank

**York Sample ID:** 13D1004-08

York Project (SDG) No.

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Matrix

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 24, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-72-1	Hexachloroethane	ND		ug/L	3.12	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	1.74	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
78-59-1	Isophorone	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
95-48-7	2-Methylphenol	ND		ug/L	1.19	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
91-20-3	Naphthalene	ND		ug/L	2.04	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
99-09-2	3-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
88-74-4	2-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
98-95-3	Nitrobenzene	ND		ug/L	1.73	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.42	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
100-02-7	4-Nitrophenol	ND		ug/L	1.70	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.399	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	5.13	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
87-86-5	Pentachlorophenol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
85-01-8	Phenanthrene	ND		ug/L	1.41	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
108-95-2	Phenol	ND		ug/L	1.13	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
129-00-0	Pyrene	ND		ug/L	1.77	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
110-86-1	Pyridine	ND		ug/L	4.01	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.53	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	1.79	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/01/2013 07:34	05/01/2013 12:28	SR

Surrogate Recoveries		Result	Acceptance Range
5175-83-7	Surrogate: 2,4,6-Tribromophenol	%	15-110
321-60-8	Surrogate: 2-Fluorobiphenyl	69.6 %	30-130
367-12-4	Surrogate: 2-Fluorophenol	%	15-110
4165-60-0	Surrogate: Nitrobenzene-d5	66.5 %	30-130
4165-62-2	Surrogate: Phenol-d5	%	10-110
1718-51-0	Surrogate: Terphenyl-d14	86.2 %	30-130





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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 24, 2013 3:00 pm

04/26/2013

### Pesticides, 8081 target list

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-54-8	4,4'-DDD	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
309-00-2	Aldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
319-84-6	alpha-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
319-85-7	beta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
5103-74-2	gamma-Chlordane	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
319-86-8	delta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
60-57-1	Dieldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
959-98-8	Endosulfan I	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
72-20-8	Endrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
53494-70-5	Endrin ketone	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
76-44-8	Heptachlor	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
5103-71-9	alpha-Chlordane	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
72-43-5	Methoxychlor	ND		ug/L	0.00500	0.00500	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
8001-35-2	Toxaphene	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081B	05/01/2013 07:30	05/01/2013 16:40	JW
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
2051-24-3	Surrogate: Decachlorobiphenyl	72.3 %	30-150								
877-09-8	Surrogate: Tetrachloro-m-xylene	56.5 %	30-150								

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW
11104-28-2	Aroclor 1221	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW
11141-16-5	Aroclor 1232	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW
53469-21-9	Aroclor 1242	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW
12672-29-6	Aroclor 1248	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW





## Sample Information

**Client Sample ID:** Filed Blank

**York Sample ID:** 13D1004-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 24, 2013 3:00 pm

04/26/2013

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11097-69-1	Aroclor 1254	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW
11096-82-5	Aroclor 1260	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW
1336-36-3	Total PCBs	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8082A	05/01/2013 07:30	05/02/2013 10:52	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	53.5 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	59.7 %		30-150							

### Metals, Target Analyte

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	ND		mg/L	0.010	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-36-0	Antimony	ND		mg/L	0.003	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-39-3	Barium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-43-9	Cadmium	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-70-2	Calcium	ND		mg/L	0.019	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-47-3	Chromium	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-48-4	Cobalt	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-50-8	Copper	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7439-89-6	Iron	ND		mg/L	0.010	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7439-92-1	Lead	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7439-95-4	Magnesium	ND		mg/L	0.010	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7439-96-5	Manganese	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-02-0	Nickel	ND		mg/L	0.001	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-09-7	Potassium	ND		mg/L	0.026	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7782-49-2	Selenium	ND		mg/L	0.007	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-22-4	Silver	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-23-5	Sodium	ND		mg/L	0.061	0.100	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-28-0	Thallium	ND		mg/L	0.003	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-62-2	Vanadium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW
7440-66-6	Zinc	ND		mg/L	0.002	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:13	MW





## Sample Information

**Client Sample ID:** Filed Blank

**York Sample ID:** 13D1004-08

**York Project (SDG) No.**

13D1004

**Client Project ID**

#130030 11-28 31st Drive Queens NY

**Matrix**

Water

**Collection Date/Time**

April 24, 2013 3:00 pm

**Date Received**

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	0.0002	1	EPA SW846-7470	04/30/2013 17:15	04/30/2013 17:15	AA

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes: HT-02

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.00600	0.0100	1	SW846-7196A	04/26/2013 16:25	04/26/2013 16:25	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	ND		mg/L	0.00800	0.0100	1	Calculation	05/01/2013 10:15	05/01/2013 10:15	AMC

## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13D1004-09

**York Project (SDG) No.**

13D1004

**Client Project ID**

#130030 11-28 31st Drive Queens NY

**Matrix**

Water

**Collection Date/Time**

April 25, 2013 3:00 pm

**Date Received**

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13D1004-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
78-93-3	2-Butanone	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
67-64-1	Acetone	4.0	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13D1004-09

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	3.0	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
179601-23-1	p- & m- Xylenes	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
1330-20-7	Xylenes, Total	ND		ug/L	2.5	15	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
108-05-4	Vinyl acetate	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 14:25	BK
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	101 %	72.6-129								
460-00-4	Surrogate: p-Bromofluorobenzene	97.7 %	63.5-145								
2037-26-5	Surrogate: Toluene-d8	92.9 %	81.2-127								

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	1.77	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
208-96-8	Acenaphthylene	ND		ug/L	1.74	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
62-53-3	Aniline	ND		ug/L	1.50	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
120-12-7	Anthracene	ND		ug/L	1.19	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	1.31	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	1.30	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	1.41	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13D1004-09

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		ug/L	1.45	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	1.71	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	1.83	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	0.852	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	1.33	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	1.89	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.98	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	1.77	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.50	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.99	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	4.78	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.20	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
95-57-8	2-Chlorophenol	ND		ug/L	1.79	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.45	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
218-01-9	Chrysene	ND		ug/L	1.47	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	1.56	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
132-64-9	Dibenzofuran	ND		ug/L	2.41	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
84-74-2	Di-n-butyl phthalate	11.2		ug/L	2.05	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.49	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.61	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.21	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	1.27	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	1.89	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.56	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	1.60	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
131-11-3	Dimethyl phthalate	ND		ug/L	1.91	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	1.62	10.0	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.25	10.0	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	1.61	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	1.61	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	1.12	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
206-44-0	Fluoranthene	ND		ug/L	1.24	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13D1004-09

**York Project (SDG) No.**

**Client Project ID**

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**Collection Date/Time**

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		ug/L	1.83	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
118-74-1	Hexachlorobenzene	ND		ug/L	1.27	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.79	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	2.53	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
67-72-1	Hexachloroethane	ND		ug/L	3.04	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	1.70	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
78-59-1	Isophorone	ND		ug/L	2.68	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.76	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	1.12	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
95-48-7	2-Methylphenol	ND		ug/L	1.16	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
91-20-3	Naphthalene	ND		ug/L	1.99	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.68	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
99-09-2	3-Nitroaniline	ND		ug/L	1.68	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
88-74-4	2-Nitroaniline	ND		ug/L	1.68	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
98-95-3	Nitrobenzene	ND		ug/L	1.69	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.36	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
100-02-7	4-Nitrophenol	ND		ug/L	1.66	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.56	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.389	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	5.00	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
87-86-5	Pentachlorophenol	ND		ug/L	1.45	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
85-01-8	Phenanthrene	ND		ug/L	1.37	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
108-95-2	Phenol	ND		ug/L	1.10	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
129-00-0	Pyrene	ND		ug/L	1.73	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
110-86-1	Pyridine	ND		ug/L	3.91	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.47	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	1.75	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	1.91	5.00	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:05	SR

Surrogate Recoveries		Result	Acceptance Range
5175-83-7	Surrogate: 2,4,6-Tribromophenol	73.4 %	15-110
321-60-8	Surrogate: 2-Fluorobiphenyl	62.2 %	30-130
367-12-4	Surrogate: 2-Fluorophenol	27.8 %	15-110
4165-60-0	Surrogate: Nitrobenzene-d5	58.0 %	30-130





## Sample Information

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York Project (SDG) No.

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Matrix

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-62-2	Surrogate: Phenol-d5	18.5 %			10-110						
1718-51-0	Surrogate: Terphenyl-d14	92.5 %			30-130						

### Pesticides/PCBs, EPA 8081/8082 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
72-43-5	Methoxychlor	ND		ug/L	0.00513	0.00513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
76-44-8	Heptachlor	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
53494-70-5	Endrin ketone	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
72-20-8	Endrin	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
959-98-8	Endosulfan I	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
60-57-1	Dieldrin	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
319-86-8	delta-BHC	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
57-74-9	Chlordane, total	ND		ug/L	0.00410	0.00410	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
319-85-7	beta-BHC	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
319-84-6	alpha-BHC	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
309-00-2	Aldrin	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
72-54-8	4,4'-DDD	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 16:55	JW
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13D1004-09

**York Project (SDG) No.**

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**Matrix**

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Pesticides/PCBs, EPA 8081/8082 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1336-36-3	Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:12	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	59.9 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	54.8 %		30-150							

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	<b>0.280</b>		mg/L	0.010	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-36-0	Antimony	ND		mg/L	0.003	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-39-3	Barium	<b>0.065</b>		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-43-9	Cadmium	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-70-2	Calcium	<b>50.9</b>		mg/L	0.019	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-47-3	Chromium	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-48-4	Cobalt	<b>0.006</b>		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-50-8	Copper	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7439-89-6	Iron	<b>0.243</b>		mg/L	0.010	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7439-92-1	Lead	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7439-95-4	Magnesium	<b>10.7</b>		mg/L	0.010	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7439-96-5	Manganese	<b>1.98</b>		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-02-0	Nickel	<b>0.007</b>		mg/L	0.001	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-09-7	Potassium	<b>4.59</b>		mg/L	0.026	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7782-49-2	Selenium	ND		mg/L	0.007	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-22-4	Silver	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-23-5	Sodium	<b>35.6</b>		mg/L	0.061	0.100	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-28-0	Thallium	ND		mg/L	0.003	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-62-2	Vanadium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW
7440-66-6	Zinc	ND		mg/L	0.002	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:18	MW





## Sample Information

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	0.0002	1	EPA SW846-7470	04/30/2013 17:15	04/30/2013 17:15	AA

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes: HT-02

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.00600	0.0100	1	SW846-7196A	04/26/2013 16:25	04/26/2013 16:25	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	ND		mg/L	0.00800	0.0100	1	Calculation	05/01/2013 10:15	05/01/2013 10:15	AMC

## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 13D1004-10

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

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13D1004

#130030 11-28 31st Drive Queens NY

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### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK





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### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
78-93-3	2-Butanone	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
67-64-1	Acetone	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK





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### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	3.3	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
179601-23-1	p- & m- Xylenes	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
1330-20-7	Xylenes, Total	ND		ug/L	2.5	15	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
108-05-4	Vinyl acetate	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:06	BK
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	99.8 %	72.6-129								
460-00-4	Surrogate: p-Bromofluorobenzene	96.8 %	63.5-145								
2037-26-5	Surrogate: Toluene-d8	93.4 %	81.2-127								

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
208-96-8	Acenaphthylene	ND		ug/L	1.78	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
62-53-3	Aniline	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
120-12-7	Anthracene	ND		ug/L	1.22	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	1.34	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	1.33	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	1.45	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR





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April 25, 2013 3:00 pm

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### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	1.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	0.874	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	1.36	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
106-47-8	4-Chloroaniline	ND		ug/L	3.06	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	3.07	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	4.90	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.26	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
95-57-8	2-Chlorophenol	ND		ug/L	1.84	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
218-01-9	Chrysene	ND		ug/L	1.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	1.60	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
132-64-9	Dibenzofuran	ND		ug/L	2.47	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.10	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.68	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.55	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	1.64	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
131-11-3	Dimethyl phthalate	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	1.66	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.31	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
206-44-0	Fluoranthene	ND		ug/L	1.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR





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### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
118-74-1	Hexachlorobenzene	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.86	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	2.59	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
67-72-1	Hexachloroethane	ND		ug/L	3.12	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	1.74	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
78-59-1	Isophorone	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
95-48-7	2-Methylphenol	ND		ug/L	1.19	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
91-20-3	Naphthalene	ND		ug/L	2.04	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
99-09-2	3-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
88-74-4	2-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
98-95-3	Nitrobenzene	ND		ug/L	1.73	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.42	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
100-02-7	4-Nitrophenol	ND		ug/L	1.70	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.399	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	5.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
87-86-5	Pentachlorophenol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
85-01-8	Phenanthrene	ND		ug/L	1.41	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
108-95-2	Phenol	ND		ug/L	1.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
129-00-0	Pyrene	ND		ug/L	1.77	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
110-86-1	Pyridine	ND		ug/L	4.01	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.53	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	1.79	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 15:37	SR

Surrogate Recoveries		Result	Acceptance Range
5175-83-7	Surrogate: 2,4,6-Tribromophenol	78.0 %	15-110
321-60-8	Surrogate: 2-Fluorobiphenyl	65.1 %	30-130
367-12-4	Surrogate: 2-Fluorophenol	31.2 %	15-110
4165-60-0	Surrogate: Nitrobenzene-d5	65.8 %	30-130





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 13D1004-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-62-2	Surrogate: Phenol-d5	20.9 %			10-110						
1718-51-0	Surrogate: Terphenyl-d14	106 %			30-130						

### Pesticides/PCBs, EPA 8081/8082 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
72-43-5	Methoxychlor	ND		ug/L	0.00500	0.00500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
76-44-8	Heptachlor	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
53494-70-5	Endrin ketone	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
72-20-8	Endrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
959-98-8	Endosulfan I	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
60-57-1	Dieldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
319-86-8	delta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
57-74-9	Chlordane, total	ND		ug/L	0.00400	0.00400	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
319-85-7	beta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
319-84-6	alpha-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
309-00-2	Aldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
72-54-8	4,4'-DDD	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:10	JW
11096-82-5	Aroclor 1260	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW
11097-69-1	Aroclor 1254	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW
12672-29-6	Aroclor 1248	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW
53469-21-9	Aroclor 1242	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW
11141-16-5	Aroclor 1232	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW
11104-28-2	Aroclor 1221	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW
12674-11-2	Aroclor 1016	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 13D1004-10

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Pesticides/PCBs, EPA 8081/8082 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1336-36-3	Total PCBs	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:31	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	54.2 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	60.9 %		30-150							

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	1.91		mg/L	0.010	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-36-0	Antimony	ND		mg/L	0.003	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-39-3	Barium	0.184		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-43-9	Cadmium	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-70-2	Calcium	120		mg/L	0.019	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-47-3	Chromium	0.008		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-48-4	Cobalt	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-50-8	Copper	0.007		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7439-89-6	Iron	0.860		mg/L	0.010	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7439-92-1	Lead	0.003		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7439-95-4	Magnesium	16.5		mg/L	0.010	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7439-96-5	Manganese	1.19		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-02-0	Nickel	0.005		mg/L	0.001	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-09-7	Potassium	4.94		mg/L	0.026	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7782-49-2	Selenium	ND		mg/L	0.007	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-22-4	Silver	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-23-5	Sodium	27.0		mg/L	0.061	0.100	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-28-0	Thallium	ND		mg/L	0.003	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-62-2	Vanadium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW
7440-66-6	Zinc	0.027		mg/L	0.002	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:23	MW





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 13D1004-10

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	0.0002	1	EPA SW846-7470	04/30/2013 17:15	04/30/2013 17:15	AA

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes: HT-02

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.00600	0.0100	1	SW846-7196A	04/26/2013 16:25	04/26/2013 16:25	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	ND		mg/L	0.00800	0.0100	1	Calculation	05/01/2013 10:15	05/01/2013 10:15	AMC

## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
78-93-3	2-Butanone	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
67-64-1	Acetone	3.6	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	2.8	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
179601-23-1	p- & m- Xylenes	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
127-18-4	Tetrachloroethylene	38		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
1330-20-7	Xylenes, Total	ND		ug/L	2.5	15	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
108-05-4	Vinyl acetate	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 15:46	BK
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	98.7 %	72.6-129								
460-00-4	Surrogate: p-Bromofluorobenzene	98.6 %	63.5-145								
2037-26-5	Surrogate: Toluene-d8	93.7 %	81.2-127								

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
208-96-8	Acenaphthylene	ND		ug/L	1.78	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
62-53-3	Aniline	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
120-12-7	Anthracene	ND		ug/L	1.22	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	1.34	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	1.33	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	1.45	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	1.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	0.874	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	1.36	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
106-47-8	4-Chloroaniline	ND		ug/L	3.06	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	3.07	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
117-81-7	Bis(2-ethylhexyl)phthalate	470		ug/L	98.1	103	20	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:50	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.26	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
95-57-8	2-Chlorophenol	ND		ug/L	1.84	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
218-01-9	Chrysene	ND		ug/L	1.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	1.60	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
132-64-9	Dibenzofuran	ND		ug/L	2.47	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.10	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.68	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.55	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	1.64	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
131-11-3	Dimethyl phthalate	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	1.66	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.31	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
206-44-0	Fluoranthene	ND		ug/L	1.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
118-74-1	Hexachlorobenzene	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.86	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	2.59	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
67-72-1	Hexachloroethane	ND		ug/L	3.12	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	1.74	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
78-59-1	Isophorone	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
95-48-7	2-Methylphenol	ND		ug/L	1.19	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
91-20-3	Naphthalene	ND		ug/L	2.04	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
99-09-2	3-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
88-74-4	2-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
98-95-3	Nitrobenzene	ND		ug/L	1.73	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.42	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
100-02-7	4-Nitrophenol	ND		ug/L	1.70	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.399	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	5.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
87-86-5	Pentachlorophenol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
85-01-8	Phenanthrene	ND		ug/L	1.41	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
108-95-2	Phenol	ND		ug/L	1.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
129-00-0	Pyrene	ND		ug/L	1.77	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
110-86-1	Pyridine	ND		ug/L	4.01	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.53	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	1.79	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:08	SR

Surrogate Recoveries		Result	Acceptance Range
5175-83-7	Surrogate: 2,4,6-Tribromophenol	95.6 %	15-110
321-60-8	Surrogate: 2-Fluorobiphenyl	77.1 %	30-130
367-12-4	Surrogate: 2-Fluorophenol	35.0 %	15-110
4165-60-0	Surrogate: Nitrobenzene-d5	74.4 %	30-130





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-62-2	Surrogate: Phenol-d5	21.4 %			10-110						
1718-51-0	Surrogate: Terphenyl-d14	132 %	S-04		30-130						

### Pesticides/PCBs, EPA 8081/8082 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
72-43-5	Methoxychlor	ND		ug/L	0.00500	0.00500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
76-44-8	Heptachlor	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
53494-70-5	Endrin ketone	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
72-20-8	Endrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
959-98-8	Endosulfan I	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
60-57-1	Dieldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
319-86-8	delta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
57-74-9	Chlordane, total	ND		ug/L	0.00400	0.00400	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
319-85-7	beta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
319-84-6	alpha-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
309-00-2	Aldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
72-54-8	4,4'-DDD	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:25	JW
11096-82-5	Aroclor 1260	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW
11097-69-1	Aroclor 1254	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW
12672-29-6	Aroclor 1248	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW
53469-21-9	Aroclor 1242	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW
11141-16-5	Aroclor 1232	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW
11104-28-2	Aroclor 1221	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW
12674-11-2	Aroclor 1016	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Pesticides/PCBs, EPA 8081/8082 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1336-36-3	Total PCBs	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 11:51	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	52.0 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	58.0 %		30-150							

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	<b>0.053</b>		mg/L	0.010	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-36-0	Antimony	ND		mg/L	0.003	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-39-3	Barium	<b>0.041</b>		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-43-9	Cadmium	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-70-2	Calcium	<b>68.7</b>		mg/L	0.019	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-47-3	Chromium	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-48-4	Cobalt	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-50-8	Copper	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7439-89-6	Iron	<b>0.052</b>		mg/L	0.010	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7439-92-1	Lead	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7439-95-4	Magnesium	<b>14.4</b>		mg/L	0.010	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7439-96-5	Manganese	<b>0.019</b>		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-02-0	Nickel	ND		mg/L	0.001	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-09-7	Potassium	<b>2.16</b>		mg/L	0.026	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7782-49-2	Selenium	ND		mg/L	0.007	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-22-4	Silver	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-23-5	Sodium	<b>58.6</b>		mg/L	0.061	0.100	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-28-0	Thallium	ND		mg/L	0.003	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-62-2	Vanadium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW
7440-66-6	Zinc	ND		mg/L	0.002	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:28	MW





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13D1004-11

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	0.0002	1	EPA SW846-7470	04/30/2013 17:15	04/30/2013 17:15	AA

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes: HT-02

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.00600	0.0100	1	SW846-7196A	04/26/2013 16:25	04/26/2013 16:25	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	ND		mg/L	0.00800	0.0100	1	Calculation	05/01/2013 10:15	05/01/2013 10:15	AMC

## Sample Information

**Client Sample ID:** MW-3 (Duplicate)

**York Sample ID:** 13D1004-12

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK





## Sample Information

**Client Sample ID:** MW-3 (Duplicate)

**York Sample ID:** 13D1004-12

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
78-93-3	2-Butanone	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
67-64-1	Acetone	3.9	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
67-66-3	Chloroform	4.7	J	ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK





## Sample Information

**Client Sample ID:** MW-3 (Duplicate)

**York Sample ID:** 13D1004-12

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	4.2	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
179601-23-1	p- & m- Xylenes	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
127-18-4	Tetrachloroethylene	83		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
1330-20-7	Xylenes, Total	ND		ug/L	2.5	15	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
108-05-4	Vinyl acetate	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 16:27	BK
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	89.1 %	72.6-129								
460-00-4	Surrogate: p-Bromofluorobenzene	99.0 %	63.5-145								
2037-26-5	Surrogate: Toluene-d8	97.5 %	81.2-127								

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
208-96-8	Acenaphthylene	ND		ug/L	1.78	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
62-53-3	Aniline	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
120-12-7	Anthracene	ND		ug/L	1.22	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	1.34	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	1.33	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	1.45	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR





## Sample Information

**Client Sample ID:** MW-3 (Duplicate)

**York Sample ID:** 13D1004-12

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	1.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	0.874	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	1.36	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
106-47-8	4-Chloroaniline	ND		ug/L	3.06	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	3.07	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	4.90	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.26	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
95-57-8	2-Chlorophenol	ND		ug/L	1.84	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
218-01-9	Chrysene	ND		ug/L	1.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	1.60	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
132-64-9	Dibenzofuran	ND		ug/L	2.47	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.10	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.55	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.68	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	1.64	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
131-11-3	Dimethyl phthalate	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	1.66	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.31	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
206-44-0	Fluoranthene	ND		ug/L	1.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR





## Sample Information

**Client Sample ID:** MW-3 (Duplicate)

**York Sample ID:** 13D1004-12

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
118-74-1	Hexachlorobenzene	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.86	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	2.59	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
67-72-1	Hexachloroethane	ND		ug/L	3.12	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	1.74	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
78-59-1	Isophorone	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
95-48-7	2-Methylphenol	ND		ug/L	1.19	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
91-20-3	Naphthalene	ND		ug/L	2.04	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
99-09-2	3-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
88-74-4	2-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
98-95-3	Nitrobenzene	ND		ug/L	1.73	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.42	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
100-02-7	4-Nitrophenol	ND		ug/L	1.70	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.399	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	5.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
87-86-5	Pentachlorophenol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
85-01-8	Phenanthrene	ND		ug/L	1.41	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
108-95-2	Phenol	ND		ug/L	1.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
129-00-0	Pyrene	ND		ug/L	1.77	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
110-86-1	Pyridine	ND		ug/L	4.01	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.53	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	1.79	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 16:38	SR

	Surrogate Recoveries	Result	Acceptance Range
5175-83-7	Surrogate: 2,4,6-Tribromophenol	79.0 %	15-110
321-60-8	Surrogate: 2-Fluorobiphenyl	69.6 %	30-130
367-12-4	Surrogate: 2-Fluorophenol	28.9 %	15-110
4165-60-0	Surrogate: Nitrobenzene-d5	64.9 %	30-130





## Sample Information

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**York Sample ID:** 13D1004-12

York Project (SDG) No.

Client Project ID

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-62-2	Surrogate: Phenol-d5	20.4 %			10-110						
1718-51-0	Surrogate: Terphenyl-d14	110 %			30-130						

### Pesticides/PCBs, EPA 8081/8082 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
72-43-5	Methoxychlor	ND		ug/L	0.00513	0.00513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
76-44-8	Heptachlor	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
53494-70-5	Endrin ketone	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
72-20-8	Endrin	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
959-98-8	Endosulfan I	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
60-57-1	Dieldrin	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
319-86-8	delta-BHC	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
57-74-9	Chlordane, total	ND		ug/L	0.00410	0.00410	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
319-85-7	beta-BHC	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
319-84-6	alpha-BHC	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
309-00-2	Aldrin	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
72-54-8	4,4'-DDD	ND		ug/L	0.00103	0.00103	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:40	JW
11096-82-5	Aroclor 1260	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW
11097-69-1	Aroclor 1254	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW
12672-29-6	Aroclor 1248	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW
53469-21-9	Aroclor 1242	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW
11141-16-5	Aroclor 1232	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW
11104-28-2	Aroclor 1221	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW
12674-11-2	Aroclor 1016	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW





## Sample Information

**Client Sample ID:** MW-3 (Duplicate)

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13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Pesticides/PCBs, EPA 8081/8082 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1336-36-3	Total PCBs	ND		ug/L	0.0513	0.0513	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:11	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	70.3 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	65.2 %		30-150							

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	<b>0.748</b>		mg/L	0.010	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-36-0	Antimony	ND		mg/L	0.003	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-39-3	Barium	<b>0.071</b>		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-43-9	Cadmium	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-70-2	Calcium	<b>70.4</b>		mg/L	0.019	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-47-3	Chromium	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-48-4	Cobalt	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-50-8	Copper	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7439-89-6	Iron	<b>0.402</b>		mg/L	0.010	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7439-92-1	Lead	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7439-95-4	Magnesium	<b>14.8</b>		mg/L	0.010	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7439-96-5	Manganese	<b>0.165</b>		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-02-0	Nickel	ND		mg/L	0.001	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-09-7	Potassium	<b>2.23</b>		mg/L	0.026	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7782-49-2	Selenium	ND		mg/L	0.007	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-22-4	Silver	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-23-5	Sodium	<b>58.0</b>		mg/L	0.061	0.100	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-28-0	Thallium	ND		mg/L	0.003	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-62-2	Vanadium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW
7440-66-6	Zinc	<b>0.021</b>		mg/L	0.002	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:33	MW





## Sample Information

**Client Sample ID:** MW-3 (Duplicate)

**York Sample ID:** 13D1004-12

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	0.0002	1	EPA SW846-7470	04/30/2013 17:15	04/30/2013 17:15	AA

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes: HT-02

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.00600	0.0100	1	SW846-7196A	04/26/2013 16:25	04/26/2013 16:25	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	ND		mg/L	0.00800	0.0100	1	Calculation	05/01/2013 10:15	05/01/2013 10:15	AMC

## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
78-93-3	2-Butanone	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
67-64-1	Acetone	5.4	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	5.4	J, B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
179601-23-1	p- & m- Xylenes	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
1330-20-7	Xylenes, Total	ND		ug/L	2.5	15	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
108-05-4	Vinyl acetate	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:07	BK
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %	72.6-129								
460-00-4	Surrogate: p-Bromofluorobenzene	94.2 %	63.5-145								
2037-26-5	Surrogate: Toluene-d8	94.4 %	81.2-127								

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
208-96-8	Acenaphthylene	ND		ug/L	1.78	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
62-53-3	Aniline	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
120-12-7	Anthracene	ND		ug/L	1.22	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	1.34	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
50-32-8	Benzo(a)pyrene	ND		ug/L	1.33	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/L	1.45	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-51-6	Benzyl alcohol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	1.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	0.874	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	1.36	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
106-47-8	4-Chloroaniline	ND		ug/L	3.06	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	1.82	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	1.54	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	3.07	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/L	4.90	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.26	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
95-57-8	2-Chlorophenol	ND		ug/L	1.84	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
218-01-9	Chrysene	ND		ug/L	1.51	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	1.60	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
132-64-9	Dibenzofuran	ND		ug/L	2.47	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.10	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.55	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.68	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	1.94	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	1.64	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
131-11-3	Dimethyl phthalate	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	1.66	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.31	10.3	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	1.65	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
206-44-0	Fluoranthene	ND		ug/L	1.27	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		ug/L	1.88	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
118-74-1	Hexachlorobenzene	ND		ug/L	1.30	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.86	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/L	2.59	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
67-72-1	Hexachloroethane	ND		ug/L	3.12	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	1.74	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
78-59-1	Isophorone	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.83	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	1.15	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
95-48-7	2-Methylphenol	ND		ug/L	1.19	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
91-20-3	Naphthalene	ND		ug/L	2.04	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.75	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
99-09-2	3-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
88-74-4	2-Nitroaniline	ND		ug/L	1.72	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
98-95-3	Nitrobenzene	ND		ug/L	1.73	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.42	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
100-02-7	4-Nitrophenol	ND		ug/L	1.70	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.63	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.399	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	5.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
87-86-5	Pentachlorophenol	ND		ug/L	1.49	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
85-01-8	Phenanthrene	ND		ug/L	1.41	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
108-95-2	Phenol	ND		ug/L	1.13	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
129-00-0	Pyrene	ND		ug/L	1.77	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
110-86-1	Pyridine	ND		ug/L	4.01	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.53	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	1.79	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	1.96	5.13	1	EPA SW-846 8270C/EPA 625	05/02/2013 07:57	05/02/2013 17:06	SR

Surrogate Recoveries		Result	Acceptance Range
5175-83-7	Surrogate: 2,4,6-Tribromophenol	83.4 %	15-110
321-60-8	Surrogate: 2-Fluorobiphenyl	74.3 %	30-130
367-12-4	Surrogate: 2-Fluorophenol	34.0 %	15-110
4165-60-0	Surrogate: Nitrobenzene-d5	72.7 %	30-130





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-62-2	Surrogate: Phenol-d5	22.5 %			10-110						
1718-51-0	Surrogate: Terphenyl-d14	118 %			30-130						

### Pesticides/PCBs, EPA 8081/8082 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
8001-35-2	Toxaphene	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
72-43-5	Methoxychlor	ND		ug/L	0.00500	0.00500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
76-44-8	Heptachlor	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
53494-70-5	Endrin ketone	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
72-20-8	Endrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
33213-65-9	Endosulfan II	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
959-98-8	Endosulfan I	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
60-57-1	Dieldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
319-86-8	delta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
57-74-9	Chlordane, total	ND		ug/L	0.00400	0.00400	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
319-85-7	beta-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
319-84-6	alpha-BHC	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
309-00-2	Aldrin	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
72-54-8	4,4'-DDD	ND		ug/L	0.00100	0.00100	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/01/2013 17:55	JW
11096-82-5	Aroclor 1260	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW
11097-69-1	Aroclor 1254	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW
12672-29-6	Aroclor 1248	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW
53469-21-9	Aroclor 1242	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW
11141-16-5	Aroclor 1232	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW
11104-28-2	Aroclor 1221	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW
12674-11-2	Aroclor 1016	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Pesticides/PCBs, EPA 8081/8082 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1336-36-3	Total PCBs	ND		ug/L	0.0500	0.0500	1	EPA SW 846-8081/8082	05/01/2013 07:30	05/02/2013 12:30	JW
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
877-09-8	Surrogate: Tetrachloro-m-xylene	53.1 %		30-150							
2051-24-3	Surrogate: Decachlorobiphenyl	65.9 %		30-150							

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	ND		mg/L	0.010	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-36-0	Antimony	ND		mg/L	0.003	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-39-3	Barium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-43-9	Cadmium	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-70-2	Calcium	6.05		mg/L	0.019	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-47-3	Chromium	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-48-4	Cobalt	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-50-8	Copper	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7439-89-6	Iron	ND		mg/L	0.010	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7439-92-1	Lead	ND		mg/L	0.002	0.003	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7439-95-4	Magnesium	0.953		mg/L	0.010	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7439-96-5	Manganese	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-02-0	Nickel	ND		mg/L	0.001	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-09-7	Potassium	0.654		mg/L	0.026	0.050	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7782-49-2	Selenium	ND		mg/L	0.007	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-22-4	Silver	ND		mg/L	0.002	0.005	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-23-5	Sodium	5.72		mg/L	0.061	0.100	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-28-0	Thallium	ND		mg/L	0.003	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-62-2	Vanadium	ND		mg/L	0.002	0.010	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW
7440-66-6	Zinc	ND		mg/L	0.002	0.020	1	EPA SW846-6010B/EPA 200.7	04/30/2013 15:34	04/30/2013 18:38	MW





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 13D1004-13

**York Project (SDG) No.**

13D1004

**Client Project ID**

#130030 11-28 31st Drive Queens NY

**Matrix**

Water

**Collection Date/Time**

April 25, 2013 3:00 pm

**Date Received**

04/26/2013

### Mercury by 7470/7471

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA SW846-7470

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	0.0002	1	EPA SW846-7470	04/30/2013 17:15	04/30/2013 17:15	AA

### Chromium, Hexavalent

#### Log-in Notes:

#### Sample Notes: HT-02

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
18540-29-9	Chromium, Hexavalent	ND		mg/L	0.00600	0.0100	1	SW846-7196A	04/26/2013 16:25	04/26/2013 16:25	AMC

### Chromium, Trivalent

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: \*\*\* DEFAULT PREP \*\*\*

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
16065-83-1	Chromium, Trivalent	ND		mg/L	0.00800	0.0100	1	Calculation	05/01/2013 10:15	05/01/2013 10:15	AMC

## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 13D1004-14

**York Project (SDG) No.**

13D1004

**Client Project ID**

#130030 11-28 31st Drive Queens NY

**Matrix**

Water

**Collection Date/Time**

April 25, 2013 3:00 pm

**Date Received**

04/26/2013

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 13D1004-14

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
78-93-3	2-Butanone	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
67-64-1	Acetone	16	B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
98-82-8	Isopropylbenzene	ND		ug/L	0.63	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 13D1004-14

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

13D1004

#130030 11-28 31st Drive Queens NY

Water

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	12	B	ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
179601-23-1	p- & m- Xylenes	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
1330-20-7	Xylenes, Total	ND		ug/L	2.5	15	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
108-05-4	Vinyl acetate	ND		ug/L	2.5	10	1	EPA SW846-8260B	04/30/2013 13:58	04/30/2013 17:48	BK
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %	72.6-129								
460-00-4	Surrogate: p-Bromofluorobenzene	98.7 %	63.5-145								
2037-26-5	Surrogate: Toluene-d8	93.7 %	81.2-127								





## Analytical Batch Summary

**Batch ID:** BD31353

**Preparation Method:** Analysis Preparation

**Prepared By:** AMC

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-08	Filed Blank	04/26/13
13D1004-09	MW-1	04/26/13
13D1004-10	MW-2	04/26/13
13D1004-11	MW-3	04/26/13
13D1004-12	MW-3 (Duplicate)	04/26/13
13D1004-13	Field Blank	04/26/13
BD31353-BLK1	Blank	04/26/13
BD31353-BS1	LCS	04/26/13
BD31353-DUP1	Duplicate	04/26/13
BD31353-MS1	Matrix Spike	04/26/13

**Batch ID:** BD31378

**Preparation Method:** EPA 3550B

**Prepared By:** SA

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13
BD31378-BLK1	Blank	04/30/13
BD31378-BLK1	Blank	04/30/13
BD31378-BS1	LCS	04/30/13
BD31378-BS2	LCS	04/30/13
BD31378-BSD1	LCS Dup	04/30/13
BD31378-MS1	Matrix Spike	04/30/13

**Batch ID:** BD31380

**Preparation Method:** EPA 3545A

**Prepared By:** CM

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13
BD31380-BLK1	Blank	04/30/13





BD31380-BS1	LCS	04/30/13
BD31380-BSD1	LCS Dup	04/30/13
BD31380-MS1	Matrix Spike	04/30/13

**Batch ID:** BD31385      **Preparation Method:** EPA SW846-3060      **Prepared By:** AMC

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13
BD31385-BLK1	Blank	04/30/13
BD31385-DUP1	Duplicate	04/30/13
BD31385-MS1	Matrix Spike	04/30/13
BD31385-SRM1	Reference	04/30/13

**Batch ID:** BD31386      **Preparation Method:** % Solids Prep      **Prepared By:** AMC

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13

**Batch ID:** BD31390      **Preparation Method:** EPA 5035A      **Prepared By:** SS

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13
BD31390-BLK1	Blank	04/30/13
BD31390-BS1	LCS	04/30/13
BD31390-BSD1	LCS Dup	04/30/13

**Batch ID:** BD31392      **Preparation Method:** EPA 5030B      **Prepared By:** EKM

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-09	MW-1	04/30/13
13D1004-10	MW-2	04/30/13





13D1004-11	MW-3	04/30/13
13D1004-12	MW-3 (Duplicate)	04/30/13
13D1004-13	Field Blank	04/30/13
13D1004-14	Trip Blank	04/30/13
BD31392-BLK1	Blank	04/30/13
BD31392-BS1	LCS	04/30/13
BD31392-BSD1	LCS Dup	04/30/13
BD31392-MS1	Matrix Spike	04/30/13

**Batch ID:** BD31393      **Preparation Method:** EPA 5030B      **Prepared By:** SS

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-08	Filed Blank	04/29/13
BD31393-BLK1	Blank	04/30/13
BD31393-BS1	LCS	04/30/13
BD31393-BSD1	LCS Dup	04/30/13

**Batch ID:** BD31397      **Preparation Method:** EPA SW846-7471      **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13
BD31397-BLK1	Blank	04/30/13
BD31397-BS1	LCS	04/30/13

**Batch ID:** BD31400      **Preparation Method:** EPA 3050B      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13
BD31400-BLK1	Blank	04/30/13
BD31400-SRM1	Reference	04/30/13

**Batch ID:** BD31404      **Preparation Method:** EPA SW846-7470      **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-08	Filed Blank	04/30/13
13D1004-09	MW-1	04/30/13
13D1004-10	MW-2	04/30/13





13D1004-11	MW-3	04/30/13
13D1004-12	MW-3 (Duplicate)	04/30/13
13D1004-13	Field Blank	04/30/13
BD31404-BLK1	Blank	04/30/13
BD31404-BS1	LCS	04/30/13
BD31404-BS2	LCS	04/30/13

**Batch ID:** BD31431      **Preparation Method:** EPA SW846-3060      **Prepared By:** AMC

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-01	SP-1 0-2 ft	04/30/13
13D1004-02	SP-1 8-9 ft	04/30/13
13D1004-03	SP-2 0-2 ft	04/30/13
13D1004-04	SP-2 8-9 ft	04/30/13
13D1004-05	SP-2 8-9 ft (Duplicate)	04/30/13
13D1004-06	SP-3 0-2 ft	04/30/13
13D1004-07	SP-3 8-9 ft	04/30/13

**Batch ID:** BD31432      **Preparation Method:** \*\*\* DEFAULT PREP \*\*\*      **Prepared By:** AMC

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-08	Filed Blank	05/01/13
13D1004-09	MW-1	05/01/13
13D1004-10	MW-2	05/01/13
13D1004-11	MW-3	05/01/13
13D1004-12	MW-3 (Duplicate)	05/01/13
13D1004-13	Field Blank	05/01/13

**Batch ID:** BD31437      **Preparation Method:** EPA 3010A      **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-08	Filed Blank	04/30/13
13D1004-09	MW-1	04/30/13
13D1004-10	MW-2	04/30/13
13D1004-11	MW-3	04/30/13
13D1004-12	MW-3 (Duplicate)	04/30/13
13D1004-13	Field Blank	04/30/13
BD31437-BLK1	Blank	04/30/13
BD31437-SRM1	Reference	04/30/13
BD31437-SRM2	Reference	04/30/13

**Batch ID:** BE30004      **Preparation Method:** EPA SW846-3510C Low Level      **Prepared By:** KAM

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-08	Filed Blank	05/01/13
13D1004-08	Filed Blank	05/01/13
13D1004-09	MW-1	05/01/13
13D1004-10	MW-2	05/01/13
13D1004-11	MW-3	05/01/13





13D1004-12	MW-3 (Duplicate)	05/01/13
13D1004-13	Field Blank	05/01/13
BE30004-BLK1	Blank	05/01/13
BE30004-BLK1	Blank	05/01/13
BE30004-BS1	LCS	05/01/13
BE30004-BS2	LCS	05/01/13
BE30004-BS2	LCS	05/01/13
BE30004-BSD1	LCS Dup	05/01/13
BE30004-BSD2	LCS Dup	05/01/13
BE30004-BSD2	LCS Dup	05/01/13

**Batch ID:** BE30009      **Preparation Method:** EPA 3510C      **Prepared By:** KAM

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-08	Filed Blank	05/01/13

**Batch ID:** BE30069      **Preparation Method:** EPA 3510C      **Prepared By:** KAM

YORK Sample ID	Client Sample ID	Preparation Date
13D1004-09	MW-1	05/02/13
13D1004-10	MW-2	05/02/13
13D1004-11	MW-3	05/02/13
13D1004-12	MW-3 (Duplicate)	05/02/13
13D1004-13	Field Blank	05/02/13





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag
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#### Batch BD31390 - EPA 5035A

#### Blank (BD31390-BLK1)

Prepared & Analyzed: 04/30/2013

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,1-Dichloropropylene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	10	"
1,2,3-Trichloropropane	ND	5.0	"
1,2,4-Trichlorobenzene	ND	10	"
1,2,4-Trimethylbenzene	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	10	"
1,2-Dibromoethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
1,4-Dioxane	ND	50	"
2,2-Dichloropropane	ND	5.0	"
2-Butanone	ND	10	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Acetone	ND	10	"
Benzene	ND	5.0	"
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
cis-1,2-Dichloroethylene	ND	5.0	"
cis-1,3-Dichloropropylene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
Dibromomethane	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
Ethyl Benzene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
Methyl tert-butyl ether (MTBE)	ND	5.0	"
Methylene chloride	3.5	10	"
Naphthalene	ND	10	"
n-Butylbenzene	ND	5.0	"
n-Propylbenzene	ND	5.0	"





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31390 - EPA 5035A

##### Blank (BD31390-BLK1)

Prepared & Analyzed: 04/30/2013

o-Xylene	ND	5.0	ug/kg wet								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
Styrene	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								
Vinyl acetate	ND	10	"								

Surrogate: 1,2-Dichloroethane-d4	52.6		ug/L	50.0		105	73-130				
Surrogate: p-Bromofluorobenzene	49.8		"	50.0		99.5	72-127				
Surrogate: Toluene-d8	51.0		"	50.0		102	84-117				

##### LCS (BD31390-BS1)

Prepared & Analyzed: 04/30/2013

1,1,1,2-Tetrachloroethane	53		ug/L	50.0		105	72-132				
1,1,1-Trichloroethane	48		"	50.0		95.2	77-131				
1,1,2,2-Tetrachloroethane	62		"	50.0		124	68-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	40		"	50.0		81.0	75-143				
1,1,2-Trichloroethane	51		"	50.0		102	72-128				
1,1-Dichloroethane	46		"	50.0		91.9	78-133				
1,1-Dichloroethylene	40		"	50.0		80.4	71-142				
1,1-Dichloropropylene	44		"	50.0		88.2	77-124				
1,2,3-Trichlorobenzene	50		"	50.0		99.2	65-134				
1,2,3-Trichloropropane	56		"	50.0		113	65-127				
1,2,4-Trichlorobenzene	49		"	50.0		98.6	59-133				
1,2,4-Trimethylbenzene	47		"	50.0		94.9	68-128				
1,2-Dibromo-3-chloropropane	78		"	50.0		155	58-145	High Bias			
1,2-Dibromoethane	55		"	50.0		110	73-128				
1,2-Dichlorobenzene	51		"	50.0		102	69-126				
1,2-Dichloroethane	50		"	50.0		100	78-131				
1,2-Dichloropropane	51		"	50.0		102	72-129				
1,3,5-Trimethylbenzene	48		"	50.0		96.1	67-125				
1,3-Dichlorobenzene	50		"	50.0		99.1	67-125				
1,3-Dichloropropane	53		"	50.0		106	73-126				
1,4-Dichlorobenzene	50		"	50.0		99.0	67-127				
1,4-Dioxane	84		"	50.0		167	10-265				
2,2-Dichloropropane	54		"	50.0		108	68-133				
2-Butanone	49		"	50.0		97.9	49-138				
2-Chlorotoluene	48		"	50.0		96.2	61-121				
4-Chlorotoluene	50		"	50.0		99.8	65-126				
Acetone	20		"	50.0		39.5	21-131				
Benzene	46		"	50.0		93.0	81-125				
Bromobenzene	53		"	50.0		106	65-125				
Bromochloromethane	52		"	50.0		104	78-127				
Bromodichloromethane	51		"	50.0		102	73-131				
Bromoform	57		"	50.0		114	66-137				





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31390 - EPA 5035A

#### LCS (BD31390-BS1)

Prepared & Analyzed: 04/30/2013

Bromomethane	30		ug/L	50.0		59.6	55-144				
Carbon tetrachloride	49		"	50.0		97.5	74-137				
Chlorobenzene	51		"	50.0		101	75-127				
Chloroethane	38		"	50.0		75.0	65-138				
Chloroform	48		"	50.0		96.2	82-128				
Chloromethane	24		"	50.0		48.4	51-138	Low Bias			
cis-1,2-Dichloroethylene	46		"	50.0		92.2	77-130				
cis-1,3-Dichloropropylene	57		"	50.0		114	68-123				
Dibromochloromethane	55		"	50.0		110	73-136				
Dibromomethane	54		"	50.0		109	75-131				
Dichlorodifluoromethane	11		"	50.0		22.3	10-183				
Ethyl Benzene	51		"	50.0		101	75-130				
Hexachlorobutadiene	51		"	50.0		102	59-130				
Isopropylbenzene	48		"	50.0		96.2	68-135				
Methyl tert-butyl ether (MTBE)	52		"	50.0		103	76-136				
Methylene chloride	48		"	50.0		95.4	55-143				
Naphthalene	44		"	50.0		87.9	65-140				
n-Butylbenzene	46		"	50.0		92.1	63-123				
n-Propylbenzene	48		"	50.0		95.5	65-127				
o-Xylene	50		"	50.0		99.4	71-123				
p- & m- Xylenes	100		"	100		101	72-127				
p-Isopropyltoluene	48		"	50.0		96.7	69-128				
sec-Butylbenzene	50		"	50.0		99.6	69-125				
Styrene	52		"	50.0		103	74-127				
tert-Butylbenzene	51		"	50.0		101	59-164				
Tetrachloroethylene	40		"	50.0		80.6	65-151				
Toluene	48		"	50.0		96.6	72-127				
trans-1,2-Dichloroethylene	44		"	50.0		88.8	73-137				
trans-1,3-Dichloropropylene	61		"	50.0		122	67-131				
Trichloroethylene	47		"	50.0		93.8	73-129				
Trichlorofluoromethane	38		"	50.0		76.3	69-136				
Vinyl Chloride	27		"	50.0		53.7	58-132	Low Bias			
Vinyl acetate	77		"	50.0		155	10-84	High Bias			
Surrogate: 1,2-Dichloroethane-d4	52.8		"	50.0		106	73-130				
Surrogate: p-Bromofluorobenzene	49.3		"	50.0		98.5	72-127				
Surrogate: Toluene-d8	49.8		"	50.0		99.5	84-117				





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BD31390 - EPA 5035A</b>											
<b>LCS Dup (BD31390-BSD1)</b>						Prepared & Analyzed: 04/30/2013					
1,1,1,2-Tetrachloroethane	52		ug/L	50.0		105	72-132		0.495	30	
1,1,1-Trichloroethane	51		"	50.0		101	77-131		6.35	30	
1,1,2,2-Tetrachloroethane	62		"	50.0		125	68-129		0.225	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	43		"	50.0		85.5	75-143		5.41	30	
1,1,2-Trichloroethane	50		"	50.0		99.6	72-128		2.09	30	
1,1-Dichloroethane	48		"	50.0		96.2	78-133		4.64	30	
1,1-Dichloroethylene	42		"	50.0		83.6	71-142		3.85	30	
1,1-Dichloropropylene	46		"	50.0		93.0	77-124		5.28	30	
1,2,3-Trichlorobenzene	53		"	50.0		106	65-134		6.40	30	
1,2,3-Trichloropropane	57		"	50.0		114	65-127		0.919	30	
1,2,4-Trichlorobenzene	51		"	50.0		102	59-133		3.02	30	
1,2,4-Trimethylbenzene	50		"	50.0		99.8	68-128		5.07	30	
1,2-Dibromo-3-chloropropane	61		"	50.0		122	58-145		23.8	30	
1,2-Dibromoethane	54		"	50.0		108	73-128		2.22	30	
1,2-Dichlorobenzene	51		"	50.0		102	69-126		0.646	30	
1,2-Dichloroethane	51		"	50.0		102	78-131		1.33	30	
1,2-Dichloropropane	53		"	50.0		105	72-129		3.31	30	
1,3,5-Trimethylbenzene	51		"	50.0		103	67-125		6.78	30	
1,3-Dichlorobenzene	49		"	50.0		98.1	67-125		0.974	30	
1,3-Dichloropropane	53		"	50.0		107	73-126		1.13	30	
1,4-Dichlorobenzene	52		"	50.0		103	67-127		3.94	30	
1,4-Dioxane	52		"	50.0		103	10-265		47.3	30	Non-dir.
2,2-Dichloropropane	56		"	50.0		112	68-133		3.55	30	
2-Butanone	48		"	50.0		95.5	49-138		2.54	30	
2-Chlorotoluene	54		"	50.0		107	61-121		10.8	30	
4-Chlorotoluene	53		"	50.0		106	65-126		5.71	30	
Acetone	21		"	50.0		42.8	21-131		8.11	30	
Benzene	49		"	50.0		97.5	81-125		4.72	30	
Bromobenzene	54		"	50.0		108	65-125		2.40	30	
Bromochloromethane	52		"	50.0		104	78-127		0.249	30	
Bromodichloromethane	51		"	50.0		102	73-131		0.628	30	
Bromoform	56		"	50.0		111	66-137		2.59	30	
Bromomethane	32		"	50.0		63.6	55-144		6.53	30	
Carbon tetrachloride	51		"	50.0		101	74-137		3.76	30	
Chlorobenzene	51		"	50.0		101	75-127		0.0198	30	
Chloroethane	39		"	50.0		77.3	65-138		2.92	30	
Chloroform	49		"	50.0		98.9	82-128		2.73	30	
Chloromethane	26		"	50.0		51.2	51-138		5.66	30	
cis-1,2-Dichloroethylene	48		"	50.0		95.8	77-130		3.83	30	
cis-1,3-Dichloropropylene	56		"	50.0		113	68-123		1.27	30	
Dibromochloromethane	54		"	50.0		109	73-136		0.752	30	
Dibromomethane	52		"	50.0		105	75-131		3.65	30	
Dichlorodifluoromethane	10		"	50.0		20.6	10-183		7.74	30	
Ethyl Benzene	52		"	50.0		103	75-130		1.86	30	
Hexachlorobutadiene	52		"	50.0		104	59-130		2.85	30	
Isopropylbenzene	51		"	50.0		101	68-135		5.20	30	
Methyl tert-butyl ether (MTBE)	53		"	50.0		106	76-136		2.88	30	
Methylene chloride	48		"	50.0		96.4	55-143		1.04	30	
Naphthalene	47		"	50.0		93.6	65-140		6.28	30	
n-Butylbenzene	49		"	50.0		97.5	63-123		5.63	30	
n-Propylbenzene	50		"	50.0		101	65-127		5.42	30	





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31390 - EPA 5035A

##### LCS Dup (BD31390-BSD1)

Prepared & Analyzed: 04/30/2013

o-Xylene	50		ug/L	50.0		101	71-123		1.36	30	
p- & m- Xylenes	100		"	100		103	72-127		2.56	30	
p-Isopropyltoluene	51		"	50.0		101	69-128		4.45	30	
sec-Butylbenzene	51		"	50.0		102	69-125		2.03	30	
Styrene	53		"	50.0		106	74-127		2.35	30	
tert-Butylbenzene	53		"	50.0		105	59-164		3.49	30	
Tetrachloroethylene	43		"	50.0		86.6	65-151		7.13	30	
Toluene	50		"	50.0		99.5	72-127		2.88	30	
trans-1,2-Dichloroethylene	46		"	50.0		92.4	73-137		3.91	30	
trans-1,3-Dichloropropylene	62		"	50.0		123	67-131		1.32	30	
Trichloroethylene	49		"	50.0		97.1	73-129		3.48	30	
Trichlorofluoromethane	39		"	50.0		77.7	69-136		1.79	30	
Vinyl Chloride	27		"	50.0		54.3	58-132	Low Bias	1.15	30	
Vinyl acetate	76		"	50.0		153	10-84	High Bias	1.22	30	
Surrogate: 1,2-Dichloroethane-d4	52.0		"	50.0		104	73-130				
Surrogate: p-Bromofluorobenzene	51.1		"	50.0		102	72-127				
Surrogate: Toluene-d8	50.0		"	50.0		100	84-117				

#### Batch BD31392 - EPA 5030B

##### Blank (BD31392-BLK1)

Prepared & Analyzed: 04/30/2013

1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,1-Dichloropropylene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	10	"
1,2,3-Trichloropropane	ND	5.0	"
1,2,4-Trichlorobenzene	ND	10	"
1,2,4-Trimethylbenzene	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	10	"
1,2-Dibromoethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
2-Butanone	ND	10	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Acetone	5.0	10	"
Benzene	ND	5.0	"
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31392 - EPA 5030B

##### Blank (BD31392-BLK1)

Prepared & Analyzed: 04/30/2013

Bromomethane	ND	5.0	ug/L
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
cis-1,2-Dichloroethylene	ND	5.0	"
cis-1,3-Dichloropropylene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
Dibromomethane	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
Ethyl Benzene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
Methyl tert-butyl ether (MTBE)	ND	5.0	"
Methylene chloride	4.4	10	"
Naphthalene	ND	10	"
n-Butylbenzene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
Trichloroethylene	ND	5.0	"
Trichlorofluoromethane	ND	5.0	"
Vinyl Chloride	ND	5.0	"
Xylenes, Total	ND	15	"
Vinyl acetate	ND	10	"

Surrogate: 1,2-Dichloroethane-d4	50.4	"	50.0	101	72.6-129
Surrogate: p-Bromofluorobenzene	49.2	"	50.0	98.5	63.5-145
Surrogate: Toluene-d8	46.4	"	50.0	92.8	81.2-127





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BD31392 - EPA 5030B</b>											
<b>LCS (BD31392-BS1)</b>						Prepared & Analyzed: 04/30/2013					
1,1,1,2-Tetrachloroethane	50		ug/L	50.0		99.6	82.3-130				
1,1,1-Trichloroethane	53		"	50.0		105	75.6-137				
1,1,2,2-Tetrachloroethane	48		"	50.0		96.7	71.3-131				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50		"	50.0		100	71.1-129				
1,1,2-Trichloroethane	49		"	50.0		97.4	74.5-129				
1,1-Dichloroethane	52		"	50.0		104	79.6-132				
1,1-Dichloroethylene	51		"	50.0		102	80.2-146				
1,1-Dichloropropylene	48		"	50.0		96.9	75-136				
1,2,3-Trichlorobenzene	48		"	50.0		95.0	66.1-136				
1,2,3-Trichloropropane	51		"	50.0		102	63-131				
1,2,4-Trichlorobenzene	48		"	50.0		96.6	70.6-136				
1,2,4-Trimethylbenzene	45		"	50.0		90.1	75.3-135				
1,2-Dibromo-3-chloropropane	49		"	50.0		98.1	58.9-140				
1,2-Dibromoethane	51		"	50.0		103	79-130				
1,2-Dichlorobenzene	46		"	50.0		92.9	76.1-122				
1,2-Dichloroethane	55		"	50.0		111	74.6-132				
1,2-Dichloropropane	47		"	50.0		94.8	76.9-129				
1,3,5-Trimethylbenzene	46		"	50.0		91.2	70.6-127				
1,3-Dichlorobenzene	47		"	50.0		93.9	77-124				
1,3-Dichloropropane	50		"	50.0		99.9	75.8-126				
1,4-Dichlorobenzene	47		"	50.0		93.6	76.6-125				
2,2-Dichloropropane	53		"	50.0		106	69-133				
2-Butanone	55		"	50.0		110	70-130				
2-Chlorotoluene	45		"	50.0		90.0	66.3-119				
4-Chlorotoluene	47		"	50.0		94.6	69.2-127				
Acetone	42		"	50.0		85.0	70-130				
Benzene	52		"	50.0		105	76.2-129				
Bromobenzene	45		"	50.0		90.9	71.3-123				
Bromochloromethane	53		"	50.0		105	70.8-137				
Bromodichloromethane	50		"	50.0		100	79.7-134				
Bromoform	49		"	50.0		97.8	70.5-141				
Bromomethane	43		"	50.0		85.2	43.9-147				
Carbon tetrachloride	54		"	50.0		109	78.1-138				
Chlorobenzene	49		"	50.0		97.9	80.4-125				
Chloroethane	47		"	50.0		94.3	55.8-140				
Chloroform	54		"	50.0		108	76.6-133				
Chloromethane	31		"	50.0		62.2	48.8-115				
cis-1,2-Dichloroethylene	52		"	50.0		105	75.1-128				
cis-1,3-Dichloropropylene	52		"	50.0		103	74.5-128				
Dibromochloromethane	52		"	50.0		103	79.8-134				
Dibromomethane	51		"	50.0		102	79-130				
Dichlorodifluoromethane	13		"	50.0		26.5	47.1-101	Low Bias			
Ethyl Benzene	50		"	50.0		99.1	80.8-128				
Hexachlorobutadiene	45		"	50.0		89.8	64.8-128				
Isopropylbenzene	45		"	50.0		89.3	75.5-135				
Methyl tert-butyl ether (MTBE)	60		"	50.0		120	65.1-140				
Methylene chloride	56		"	50.0		113	61.3-120				
Naphthalene	53		"	50.0		106	62.3-148				
n-Butylbenzene	44		"	50.0		88.2	67.2-123				
n-Propylbenzene	46		"	50.0		91.1	70.5-127				
o-Xylene	48		"	50.0		95.5	75.9-122				





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31392 - EPA 5030B

##### LCS (BD31392-BS1)

Prepared & Analyzed: 04/30/2013

p- & m- Xylenes	98		ug/L	100		98.1	77.7-127				
p-Isopropyltoluene	46		"	50.0		91.8	75.6-129				
sec-Butylbenzene	46		"	50.0		91.2	71.5-125				
Styrene	50		"	50.0		101	77.8-123				
tert-Butylbenzene	46		"	50.0		91.3	75.9-151				
Tetrachloroethylene	45		"	50.0		90.9	63.6-167				
Toluene	48		"	50.0		95.3	77-123				
trans-1,2-Dichloroethylene	52		"	50.0		104	76.3-139				
trans-1,3-Dichloropropylene	51		"	50.0		102	72.5-137				
Trichloroethylene	45		"	50.0		89.5	77.9-130				
Trichlorofluoromethane	44		"	50.0		88.2	57.4-133				
Vinyl Chloride	34		"	50.0		67.5	54.9-124				
Vinyl acetate	49		"	50.0		98.9	70-130				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>53.9</i>		<i>"</i>	<i>50.0</i>		<i>108</i>	<i>72.6-129</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>48.6</i>		<i>"</i>	<i>50.0</i>		<i>97.2</i>	<i>63.5-145</i>				
<i>Surrogate: Toluene-d8</i>	<i>46.5</i>		<i>"</i>	<i>50.0</i>		<i>93.0</i>	<i>81.2-127</i>				

##### LCS Dup (BD31392-BSD1)

Prepared & Analyzed: 04/30/2013

1,1,1,2-Tetrachloroethane	51		ug/L	50.0		101	82.3-130		1.65	21.1	
1,1,1-Trichloroethane	53		"	50.0		106	75.6-137		0.247	19.7	
1,1,2,2-Tetrachloroethane	45		"	50.0		89.5	71.3-131		7.80	20.8	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	49		"	50.0		97.5	71.1-129		2.81	21.7	
1,1,2-Trichloroethane	49		"	50.0		97.3	74.5-129		0.0822	20.3	
1,1-Dichloroethane	51		"	50.0		101	79.6-132		2.73	20.6	
1,1-Dichloroethylene	50		"	50.0		99.0	80.2-146		2.77	20	
1,1-Dichloropropylene	48		"	50.0		96.0	75-136		0.892	19.3	
1,2,3-Trichlorobenzene	46		"	50.0		92.6	66.1-136		2.64	21.6	
1,2,3-Trichloropropane	47		"	50.0		94.0	63-131		8.67	23.9	
1,2,4-Trichlorobenzene	47		"	50.0		93.8	70.6-136		2.92	21.7	
1,2,4-Trimethylbenzene	46		"	50.0		92.6	75.3-135		2.69	18.8	
1,2-Dibromo-3-chloropropane	45		"	50.0		90.0	58.9-140		8.59	27.7	
1,2-Dibromoethane	50		"	50.0		99.6	79-130		3.05	23	
1,2-Dichlorobenzene	46		"	50.0		92.8	76.1-122		0.129	19.8	
1,2-Dichloroethane	53		"	50.0		106	74.6-132		4.53	20.2	
1,2-Dichloropropane	47		"	50.0		94.8	76.9-129		0.00	20.7	
1,3,5-Trimethylbenzene	47		"	50.0		93.9	70.6-127		2.94	18.9	
1,3-Dichlorobenzene	47		"	50.0		94.6	77-124		0.806	19.2	
1,3-Dichloropropane	49		"	50.0		97.9	75.8-126		1.98	22.1	
1,4-Dichlorobenzene	47		"	50.0		93.4	76.6-125		0.235	18.6	
2,2-Dichloropropane	52		"	50.0		104	69-133		2.59	19.8	
2-Butanone	47		"	50.0		93.9	70-130		16.2	30	
2-Chlorotoluene	46		"	50.0		92.9	66.3-119		3.11	21.6	
4-Chlorotoluene	49		"	50.0		97.2	69.2-127		2.73	19	
Acetone	39		"	50.0		78.2	70-130		8.31	30	
Benzene	51		"	50.0		102	76.2-129		2.81	19	
Bromobenzene	46		"	50.0		92.5	71.3-123		1.77	20.3	
Bromochloromethane	49		"	50.0		98.1	70.8-137		6.98	23.9	
Bromodichloromethane	50		"	50.0		99.1	79.7-134		1.22	21	
Bromoform	49		"	50.0		98.3	70.5-141		0.510	21.8	
Bromomethane	41		"	50.0		81.9	43.9-147		3.95	28.4	
Carbon tetrachloride	53		"	50.0		107	78.1-138		1.90	20.1	
Chlorobenzene	49		"	50.0		99.0	80.4-125		1.08	19.9	





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31392 - EPA 5030B

#### LCS Dup (BD31392-BSD1)

Prepared & Analyzed: 04/30/2013

Chloroethane	44		ug/L	50.0		87.3	55.8-140		7.76	23.3	
Chloroform	53		"	50.0		105	76.6-133		2.48	20.3	
Chloromethane	29		"	50.0		57.2	48.8-115		8.28	24.5	
cis-1,2-Dichloroethylene	52		"	50.0		104	75.1-128		0.594	20.5	
cis-1,3-Dichloropropylene	52		"	50.0		103	74.5-128		0.155	19.9	
Dibromochloromethane	51		"	50.0		101	79.8-134		2.03	21.3	
Dibromomethane	51		"	50.0		101	79-130		0.276	22.4	
Dichlorodifluoromethane	11		"	50.0		22.0	47.1-101	Low Bias	18.7	23.9	
Ethyl Benzene	50		"	50.0		99.5	80.8-128		0.423	19.2	
Hexachlorobutadiene	46		"	50.0		91.5	64.8-128		1.79	20.6	
Isopropylbenzene	46		"	50.0		92.9	75.5-135		3.97	20	
Methyl tert-butyl ether (MTBE)	55		"	50.0		109	65.1-140		8.97	23.6	
Methylene chloride	54		"	50.0		107	61.3-120		5.40	20.4	
Naphthalene	48		"	50.0		95.3	62.3-148		10.8	27.1	
n-Butylbenzene	45		"	50.0		89.3	67.2-123		1.22	19.1	
n-Propylbenzene	47		"	50.0		93.5	70.5-127		2.54	23.4	
o-Xylene	48		"	50.0		96.9	75.9-122		1.48	19.3	
p- & m- Xylenes	98		"	100		98.1	77.7-127		0.0102	18.6	
p-Isopropyltoluene	48		"	50.0		96.2	75.6-129		4.77	19.1	
sec-Butylbenzene	47		"	50.0		93.9	71.5-125		2.94	18.9	
Styrene	51		"	50.0		102	77.8-123		1.34	20.9	
tert-Butylbenzene	48		"	50.0		95.1	75.9-151		4.10	20.9	
Tetrachloroethylene	48		"	50.0		96.2	63.6-167		5.60	27.7	
Toluene	49		"	50.0		97.0	77-123		1.83	18.7	
trans-1,2-Dichloroethylene	51		"	50.0		102	76.3-139		1.34	19.5	
trans-1,3-Dichloropropylene	50		"	50.0		99.9	72.5-137		1.92	19.3	
Trichloroethylene	47		"	50.0		94.0	77.9-130		4.92	20.5	
Trichlorofluoromethane	43		"	50.0		86.1	57.4-133		2.41	21.4	
Vinyl Chloride	32		"	50.0		63.2	54.9-124		6.61	22.3	
Vinyl acetate	45		"	50.0		89.3	70-130		10.2	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>50.4</i>		<i>"</i>	<i>50.0</i>		<i>101</i>	<i>72.6-129</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>50.5</i>		<i>"</i>	<i>50.0</i>		<i>101</i>	<i>63.5-145</i>				
<i>Surrogate: Toluene-d8</i>	<i>47.5</i>		<i>"</i>	<i>50.0</i>		<i>95.0</i>	<i>81.2-127</i>				





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31392 - EPA 5030B

Matrix Spike (BD31392-MS1)	*Source sample: 13D1004-09 (MW-1)					Prepared & Analyzed: 04/30/2013					
1,1,1,2-Tetrachloroethane	50		ug/L	50.0	ND	99.4	82-138				
1,1,1-Trichloroethane	52		"	50.0	ND	105	85.7-133				
1,1,2,2-Tetrachloroethane	44		"	50.0	ND	87.4	78.6-136				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50		"	50.0	ND	99.6	74.8-131				
1,1,2-Trichloroethane	48		"	50.0	ND	96.4	82.5-129				
1,1-Dichloroethane	53		"	50.0	ND	106	81.4-137				
1,1-Dichloroethylene	51		"	50.0	ND	102	90-138				
1,1-Dichloropropylene	47		"	50.0	ND	94.1	91.7-131				
1,2,3-Trichlorobenzene	45		"	50.0	ND	89.7	75.9-130				
1,2,3-Trichloropropane	44		"	50.0	ND	87.3	77.1-140				
1,2,4-Trichlorobenzene	44		"	50.0	ND	87.7	69.8-135				
1,2,4-Trimethylbenzene	43		"	50.0	ND	87.0	79.4-131				
1,2-Dibromo-3-chloropropane	40		"	50.0	ND	80.3	66.6-143				
1,2-Dibromoethane	49		"	50.0	ND	97.7	79.8-136				
1,2-Dichlorobenzene	44		"	50.0	ND	88.4	79.9-130				
1,2-Dichloroethane	52		"	50.0	ND	105	85-133				
1,2-Dichloropropane	47		"	50.0	ND	93.5	81.1-132				
1,3,5-Trimethylbenzene	44		"	50.0	ND	88.3	76.1-121				
1,3-Dichlorobenzene	44		"	50.0	ND	88.2	79.1-124				
1,3-Dichloropropane	48		"	50.0	ND	95.8	83.3-130				
1,4-Dichlorobenzene	44		"	50.0	ND	87.9	79.4-128				
2,2-Dichloropropane	50		"	50.0	ND	100	54.2-126				
2-Butanone	48		"	50.0	ND	96.6	70-130				
2-Chlorotoluene	44		"	50.0	ND	88.0	60.2-144				
4-Chlorotoluene	45		"	50.0	ND	90.4	79.8-128				
Acetone	40		"	50.0	4.0	72.6	70-130				
Benzene	53		"	50.0	ND	105	74.1-134				
Bromobenzene	44		"	50.0	ND	87.2	76.6-125				
Bromochloromethane	53		"	50.0	ND	107	85-133				
Bromodichloromethane	49		"	50.0	ND	98.0	80.8-143				
Bromoform	46		"	50.0	ND	91.5	65.8-164				
Bromomethane	39		"	50.0	ND	78.1	68.7-112				
Carbon tetrachloride	53		"	50.0	ND	106	85.7-138				
Chlorobenzene	49		"	50.0	ND	98.0	79.9-129				
Chloroethane	43		"	50.0	ND	86.4	74.7-127				
Chloroform	54		"	50.0	ND	108	50.6-145				
Chloromethane	27		"	50.0	ND	54.9	64-111	Low Bias			
cis-1,2-Dichloroethylene	53		"	50.0	ND	106	75.5-129				
cis-1,3-Dichloropropylene	50		"	50.0	ND	101	74.3-128				
Dibromochloromethane	50		"	50.0	ND	99.1	76.8-150				
Dibromomethane	49		"	50.0	ND	97.7	83.3-140				
Dichlorodifluoromethane	10		"	50.0	ND	20.5	51-100	Low Bias			
Ethyl Benzene	49		"	50.0	ND	98.3	82.9-127				
Hexachlorobutadiene	44		"	50.0	ND	87.1	73-128				
Isopropylbenzene	44		"	50.0	ND	87.7	78.7-131				
Methyl tert-butyl ether (MTBE)	56		"	50.0	ND	113	81.2-134				
Methylene chloride	61		"	50.0	3.0	115	57.8-103	High Bias			
Naphthalene	46		"	50.0	ND	91.2	80.1-122				
n-Butylbenzene	42		"	50.0	ND	85.0	72.4-120				
n-Propylbenzene	44		"	50.0	ND	88.1	74-130				
o-Xylene	47		"	50.0	ND	94.4	78.8-122				





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31392 - EPA 5030B

Matrix Spike (BD31392-MS1)		*Source sample: 13D1004-09 (MW-1)					Prepared & Analyzed: 04/30/2013				
p- & m- Xylenes	97		ug/L	100	ND	96.8	82.5-123				
p-Isopropyltoluene	45		"	50.0	ND	89.7	64.9-132				
sec-Butylbenzene	44		"	50.0	ND	88.8	25.4-151				
Styrene	50		"	50.0	ND	100	74.1-134				
tert-Butylbenzene	45		"	50.0	ND	90.4	79.5-171				
Tetrachloroethylene	44		"	50.0	ND	87.4	72.5-130				
Toluene	47		"	50.0	ND	93.9	77.8-121				
trans-1,2-Dichloroethylene	52		"	50.0	ND	105	83.8-140				
trans-1,3-Dichloropropylene	49		"	50.0	ND	97.3	74.9-136				
Trichloroethylene	46		"	50.0	ND	92.2	84.4-125				
Trichlorofluoromethane	44		"	50.0	ND	87.2	78.7-127				
Vinyl Chloride	31		"	50.0	ND	62.1	72.1-116	Low Bias			
Vinyl acetate	44		"	50.0	ND	89.0	70-130				
Surrogate: 1,2-Dichloroethane-d4		51.3	"	50.0		103	72.6-129				
Surrogate: p-Bromofluorobenzene		48.0	"	50.0		96.0	63.5-145				
Surrogate: Toluene-d8		46.9	"	50.0		93.7	81.2-127				

#### Batch BD31393 - EPA 5030B

Blank (BD31393-BLK1)		Prepared & Analyzed: 04/30/2013									
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L								
1,1,1-Trichloroethane	ND	5.0	"								
1,1,2,2-Tetrachloroethane	ND	5.0	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"								
1,1,2-Trichloroethane	ND	5.0	"								
1,1-Dichloroethane	ND	5.0	"								
1,1-Dichloroethylene	ND	5.0	"								
1,1-Dichloropropylene	ND	5.0	"								
1,2,3-Trichlorobenzene	ND	5.0	"								
1,2,3-Trichloropropane	ND	5.0	"								
1,2,4-Trichlorobenzene	ND	5.0	"								
1,2,4-Trimethylbenzene	ND	5.0	"								
1,2-Dibromo-3-chloropropane	ND	5.0	"								
1,2-Dibromoethane	ND	5.0	"								
1,2-Dichlorobenzene	ND	5.0	"								
1,2-Dichloroethane	ND	5.0	"								
1,2-Dichloropropane	ND	5.0	"								
1,3,5-Trimethylbenzene	ND	5.0	"								
1,3-Dichlorobenzene	ND	5.0	"								
1,3-Dichloropropane	ND	5.0	"								
1,4-Dichlorobenzene	ND	5.0	"								
2,2-Dichloropropane	ND	5.0	"								
2-Butanone	ND	5.0	"								
2-Chlorotoluene	ND	5.0	"								
4-Chlorotoluene	ND	5.0	"								
Acetone	ND	5.0	"								
Benzene	ND	5.0	"								
Bromobenzene	ND	5.0	"								
Bromochloromethane	ND	5.0	"								
Bromodichloromethane	ND	5.0	"								
Bromoform	ND	5.0	"								
Bromomethane	ND	5.0	"								





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31393 - EPA 5030B

#### Blank (BD31393-BLK1)

Prepared & Analyzed: 04/30/2013

Carbon tetrachloride	ND	5.0	ug/L								
Chlorobenzene	ND	5.0	"								
Chloroethane	ND	5.0	"								
Chloroform	ND	5.0	"								
Chloromethane	ND	5.0	"								
cis-1,2-Dichloroethylene	ND	5.0	"								
cis-1,3-Dichloropropylene	ND	5.0	"								
Dibromochloromethane	ND	5.0	"								
Dibromomethane	ND	5.0	"								
Dichlorodifluoromethane	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Hexachlorobutadiene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Methylene chloride	ND	5.0	"								
Naphthalene	ND	5.0	"								
n-Butylbenzene	ND	5.0	"								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
Styrene	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								
Vinyl acetate	ND	5.0	"								
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Surrogate: 1,2-Dichloroethane-d4	10.3		"	10.0		103	72.6-129				
Surrogate: p-Bromofluorobenzene	12.4		"	10.0		124	63.5-145				
Surrogate: Toluene-d8	10.3		"	10.0		103	81.2-127				





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31393 - EPA 5030B

#### LCS (BD31393-BS1)

Prepared & Analyzed: 04/30/2013

1,1,1,2-Tetrachloroethane	11		ug/L	10.0		106	82.3-130				
1,1,1-Trichloroethane	10		"	10.0		102	75.6-137				
1,1,2,2-Tetrachloroethane	11		"	10.0		107	71.3-131				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.3		"	10.0		93.3	71.1-129				
1,1,2-Trichloroethane	10		"	10.0		102	74.5-129				
1,1-Dichloroethane	10		"	10.0		104	79.6-132				
1,1-Dichloroethylene	9.6		"	10.0		95.7	80.2-146				
1,1-Dichloropropylene	9.8		"	10.0		97.8	75-136				
1,2,3-Trichlorobenzene	10		"	10.0		102	66.1-136				
1,2,3-Trichloropropane	12		"	10.0		121	63-131				
1,2,4-Trichlorobenzene	9.8		"	10.0		97.6	70.6-136				
1,2,4-Trimethylbenzene	11		"	10.0		112	75.3-135				
1,2-Dibromo-3-chloropropane	13		"	10.0		132	58.9-140				
1,2-Dibromoethane	11		"	10.0		107	79-130				
1,2-Dichlorobenzene	9.9		"	10.0		99.4	76.1-122				
1,2-Dichloroethane	11		"	10.0		107	74.6-132				
1,2-Dichloropropane	9.8		"	10.0		98.5	76.9-129				
1,3,5-Trimethylbenzene	11		"	10.0		110	70.6-127				
1,3-Dichlorobenzene	10		"	10.0		104	77-124				
1,3-Dichloropropane	10		"	10.0		101	75.8-126				
1,4-Dichlorobenzene	10		"	10.0		101	76.6-125				
2,2-Dichloropropane	11		"	10.0		107	69-133				
2-Butanone	13		"	10.0		126	70-130				
2-Chlorotoluene	11		"	10.0		106	66.3-119				
4-Chlorotoluene	11		"	10.0		112	69.2-127				
Acetone	7.8		"	10.0		78.4	70-130				
Benzene	11		"	10.0		105	76.2-129				
Bromobenzene	11		"	10.0		110	71.3-123				
Bromochloromethane	11		"	10.0		113	70.8-137				
Bromodichloromethane	10		"	10.0		103	79.7-134				
Bromoform	10		"	10.0		101	70.5-141				
Bromomethane	4.0		"	10.0		39.7	43.9-147	Low Bias			
Carbon tetrachloride	10		"	10.0		100	78.1-138				
Chlorobenzene	10		"	10.0		99.7	80.4-125				
Chloroethane	8.0		"	10.0		80.4	55.8-140				
Chloroform	11		"	10.0		107	76.6-133				
Chloromethane	3.8		"	10.0		38.4	48.8-115	Low Bias			
cis-1,2-Dichloroethylene	11		"	10.0		106	75.1-128				
cis-1,3-Dichloropropylene	10		"	10.0		101	74.5-128				
Dibromochloromethane	11		"	10.0		107	79.8-134				
Dibromomethane	11		"	10.0		112	79-130				
Dichlorodifluoromethane	2.1		"	10.0		21.3	47.1-101	Low Bias			
Ethyl Benzene	10		"	10.0		104	80.8-128				
Hexachlorobutadiene	10		"	10.0		102	64.8-128				
Isopropylbenzene	11		"	10.0		109	75.5-135				
Methyl tert-butyl ether (MTBE)	10		"	10.0		100	65.1-140				
Methylene chloride	12		"	10.0		116	61.3-120				
Naphthalene	9.5		"	10.0		94.9	62.3-148				
n-Butylbenzene	11		"	10.0		108	67.2-123				
n-Propylbenzene	11		"	10.0		109	70.5-127				
o-Xylene	9.9		"	10.0		99.0	75.9-122				





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BD31393 - EPA 5030B</b>											
<b>LCS (BD31393-BS1)</b>						Prepared & Analyzed: 04/30/2013					
p- & m- Xylenes	21		ug/L	20.0		104	77.7-127				
p-Isopropyltoluene	11		"	10.0		108	75.6-129				
sec-Butylbenzene	11		"	10.0		110	71.5-125				
Styrene	10		"	10.0		100	77.8-123				
tert-Butylbenzene	11		"	10.0		111	75.9-151				
Tetrachloroethylene	9.8		"	10.0		98.0	63.6-167				
Toluene	10		"	10.0		102	77-123				
trans-1,2-Dichloroethylene	10		"	10.0		101	76.3-139				
trans-1,3-Dichloropropylene	10		"	10.0		104	72.5-137				
Trichloroethylene	10		"	10.0		103	77.9-130				
Trichlorofluoromethane	7.9		"	10.0		79.2	57.4-133				
Vinyl Chloride	5.4		"	10.0		54.0	54.9-124	Low Bias			
Vinyl acetate	9.6		"	10.0		95.8	70-130				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.2</i>		<i>"</i>	<i>10.0</i>		<i>102</i>	<i>72.6-129</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>10.7</i>		<i>"</i>	<i>10.0</i>		<i>107</i>	<i>63.5-145</i>				
<i>Surrogate: Toluene-d8</i>	<i>10.2</i>		<i>"</i>	<i>10.0</i>		<i>102</i>	<i>81.2-127</i>				
<b>LCS Dup (BD31393-BSD1)</b>						Prepared & Analyzed: 04/30/2013					
1,1,1,2-Tetrachloroethane	11		ug/L	10.0		109	82.3-130		2.97	21.1	
1,1,1-Trichloroethane	10		"	10.0		101	75.6-137		1.67	19.7	
1,1,2,2-Tetrachloroethane	11		"	10.0		109	71.3-131		2.04	20.8	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.1		"	10.0		91.2	71.1-129		2.28	21.7	
1,1,2-Trichloroethane	10		"	10.0		100	74.5-129		2.27	20.3	
1,1-Dichloroethane	10		"	10.0		100	79.6-132		3.72	20.6	
1,1-Dichloroethylene	9.0		"	10.0		90.1	80.2-146		6.03	20	
1,1-Dichloropropylene	9.9		"	10.0		99.4	75-136		1.62	19.3	
1,2,3-Trichlorobenzene	11		"	10.0		108	66.1-136		5.15	21.6	
1,2,3-Trichloropropane	14		"	10.0		142	63-131	High Bias	16.5	23.9	
1,2,4-Trichlorobenzene	11		"	10.0		108	70.6-136		10.4	21.7	
1,2,4-Trimethylbenzene	12		"	10.0		120	75.3-135		7.68	18.8	
1,2-Dibromo-3-chloropropane	14		"	10.0		144	58.9-140	High Bias	9.42	27.7	
1,2-Dibromoethane	10		"	10.0		101	79-130		5.97	23	
1,2-Dichlorobenzene	11		"	10.0		108	76.1-122		8.39	19.8	
1,2-Dichloroethane	9.9		"	10.0		99.2	74.6-132		7.75	20.2	
1,2-Dichloropropane	11		"	10.0		106	76.9-129		7.71	20.7	
1,3,5-Trimethylbenzene	12		"	10.0		119	70.6-127		8.15	18.9	
1,3-Dichlorobenzene	11		"	10.0		111	77-124		6.79	19.2	
1,3-Dichloropropane	10		"	10.0		100	75.8-126		0.695	22.1	
1,4-Dichlorobenzene	12		"	10.0		117	76.6-125		14.8	18.6	
2,2-Dichloropropane	10		"	10.0		103	69-133		3.61	19.8	
2-Butanone	10		"	10.0		104	70-130		19.1	30	
2-Chlorotoluene	12		"	10.0		120	66.3-119	High Bias	12.2	21.6	
4-Chlorotoluene	13		"	10.0		126	69.2-127		11.5	19	
Acetone	7.4		"	10.0		73.9	70-130		5.91	30	
Benzene	10		"	10.0		101	76.2-129		4.47	19	
Bromobenzene	12		"	10.0		117	71.3-123		6.44	20.3	
Bromochloromethane	10		"	10.0		104	70.8-137		8.49	23.9	
Bromodichloromethane	11		"	10.0		105	79.7-134		2.50	21	
Bromoform	11		"	10.0		111	70.5-141		9.71	21.8	
Bromomethane	4.0		"	10.0		40.1	43.9-147	Low Bias	1.00	28.4	
Carbon tetrachloride	10		"	10.0		102	78.1-138		1.58	20.1	
Chlorobenzene	11		"	10.0		105	80.4-125		5.27	19.9	





## Volatile Organic Compounds by EPA SW846-8260B - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31393 - EPA 5030B

#### LCS Dup (BD31393-BSD1)

Prepared & Analyzed: 04/30/2013

Chloroethane	8.0		ug/L	10.0		79.9	55.8-140		0.624	23.3	
Chloroform	11		"	10.0		105	76.6-133		1.60	20.3	
Chloromethane	3.7		"	10.0		37.0	48.8-115	Low Bias	3.71	24.5	
cis-1,2-Dichloroethylene	10		"	10.0		99.7	75.1-128		5.94	20.5	
cis-1,3-Dichloropropylene	10		"	10.0		100	74.5-128		0.894	19.9	
Dibromochloromethane	11		"	10.0		113	79.8-134		5.18	21.3	
Dibromomethane	12		"	10.0		116	79-130		3.49	22.4	
Dichlorodifluoromethane	2.2		"	10.0		21.9	47.1-101	Low Bias	2.78	23.9	
Ethyl Benzene	11		"	10.0		109	80.8-128		4.69	19.2	
Hexachlorobutadiene	12		"	10.0		117	64.8-128		14.0	20.6	
Isopropylbenzene	12		"	10.0		119	75.5-135		8.86	20	
Methyl tert-butyl ether (MTBE)	9.2		"	10.0		92.3	65.1-140		8.51	23.6	
Methylene chloride	11		"	10.0		114	61.3-120		1.65	20.4	
Naphthalene	11		"	10.0		111	62.3-148		15.6	27.1	
n-Butylbenzene	12		"	10.0		121	67.2-123		11.5	19.1	
n-Propylbenzene	12		"	10.0		119	70.5-127		8.41	23.4	
o-Xylene	10		"	10.0		102	75.9-122		3.08	19.3	
p- & m- Xylenes	22		"	20.0		110	77.7-127		5.23	18.6	
p-Isopropyltoluene	12		"	10.0		121	75.6-129		11.1	19.1	
sec-Butylbenzene	13		"	10.0		126	71.5-125	High Bias	13.7	18.9	
Styrene	10		"	10.0		104	77.8-123		4.11	20.9	
tert-Butylbenzene	13		"	10.0		125	75.9-151		11.7	20.9	
Tetrachloroethylene	10		"	10.0		101	63.6-167		3.41	27.7	
Toluene	11		"	10.0		106	77-123		4.13	18.7	
trans-1,2-Dichloroethylene	9.5		"	10.0		95.1	76.3-139		5.92	19.5	
trans-1,3-Dichloropropylene	10		"	10.0		101	72.5-137		3.13	19.3	
Trichloroethylene	11		"	10.0		114	77.9-130		10.2	20.5	
Trichlorofluoromethane	8.0		"	10.0		79.9	57.4-133		0.880	21.4	
Vinyl Chloride	5.2		"	10.0		52.4	54.9-124	Low Bias	3.01	22.3	
Vinyl acetate	8.4		"	10.0		84.0	70-130		13.1	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>9.12</i>		<i>"</i>	<i>10.0</i>		<i>91.2</i>	<i>72.6-129</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>11.7</i>		<i>"</i>	<i>10.0</i>		<i>117</i>	<i>63.5-145</i>				
<i>Surrogate: Toluene-d8</i>	<i>10.2</i>		<i>"</i>	<i>10.0</i>		<i>102</i>	<i>81.2-127</i>				





## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31380 - EPA 3545A

##### Blank (BD31380-BLK1)

Prepared & Analyzed: 04/30/2013

Acenaphthene	ND	250	ug/kg wet
Acenaphthylene	ND	250	"
Aniline	ND	250	"
Anthracene	ND	250	"
Benzo(a)anthracene	ND	250	"
Benzo(a)pyrene	ND	250	"
Benzo(b)fluoranthene	ND	250	"
Benzo(g,h,i)perylene	ND	250	"
Benzyl alcohol	ND	250	"
Benzo(k)fluoranthene	ND	250	"
Benzyl butyl phthalate	ND	250	"
4-Bromophenyl phenyl ether	ND	250	"
4-Chloro-3-methylphenol	ND	250	"
4-Chloroaniline	ND	250	"
Bis(2-chloroethoxy)methane	ND	250	"
Bis(2-chloroethyl)ether	ND	250	"
Bis(2-chloroisopropyl)ether	ND	250	"
Bis(2-ethylhexyl)phthalate	ND	250	"
2-Chloronaphthalene	ND	250	"
2-Chlorophenol	ND	250	"
4-Chlorophenyl phenyl ether	ND	250	"
Chrysene	ND	250	"
Dibenzo(a,h)anthracene	ND	250	"
Dibenzofuran	ND	250	"
Di-n-butyl phthalate	ND	250	"
1,2-Dichlorobenzene	ND	250	"
1,4-Dichlorobenzene	ND	250	"
1,3-Dichlorobenzene	ND	250	"
3,3'-Dichlorobenzidine	ND	250	"
2,4-Dichlorophenol	ND	250	"
Diethyl phthalate	ND	250	"
2,4-Dimethylphenol	ND	250	"
Dimethyl phthalate	ND	250	"
4,6-Dinitro-2-methylphenol	ND	500	"
2-Nitroaniline	ND	250	"
2,4-Dinitrophenol	ND	500	"
2,6-Dinitrotoluene	ND	250	"
2,4-Dinitrotoluene	ND	250	"
Di-n-octyl phthalate	ND	250	"
Fluoranthene	ND	250	"
Fluorene	ND	250	"
Hexachlorobenzene	ND	250	"
Hexachlorobutadiene	ND	250	"
Hexachlorocyclopentadiene	ND	250	"
Hexachloroethane	ND	250	"
Indeno(1,2,3-cd)pyrene	ND	250	"
Isophorone	ND	250	"
2-Methylnaphthalene	ND	250	"
2-Methylphenol	ND	250	"
3- & 4-Methylphenols	ND	250	"
Naphthalene	ND	250	"





## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31380 - EPA 3545A

##### Blank (BD31380-BLK1)

Prepared & Analyzed: 04/30/2013

3-Nitroaniline	ND	250	ug/kg wet							
4-Nitroaniline	ND	250	"							
Nitrobenzene	ND	250	"							
4-Nitrophenol	ND	250	"							
2-Nitrophenol	ND	250	"							
N-nitroso-di-n-propylamine	ND	250	"							
N-Nitrosodimethylamine	ND	250	"							
N-Nitrosodiphenylamine	ND	250	"							
Pentachlorophenol	ND	250	"							
Phenanthrene	ND	250	"							
Phenol	ND	250	"							
Pyrene	ND	250	"							
Pyridine	ND	250	"							
1,2,4-Trichlorobenzene	ND	250	"							
2,4,5-Trichlorophenol	ND	250	"							
2,4,6-Trichlorophenol	ND	250	"							
Dioxin Screen	0.00		"							

Surrogate: 2,4,6-Tribromophenol	2230		"	3750		59.5	15-110			
Surrogate: 2-Fluorobiphenyl	1560		"	2500		62.5	30-130			
Surrogate: 2-Fluorophenol	1950		"	3750		51.9	15-110			
Surrogate: Nitrobenzene-d5	1060		"	2500		42.5	30-130			
Surrogate: Phenol-d5	2860		"	3760		76.1	15-110			
Surrogate: Terphenyl-d14	2020		"	2500		80.9	30-130			

##### LCS (BD31380-BS1)

Prepared & Analyzed: 04/30/2013

Acenaphthene	2410	250	ug/kg wet	2500		96.3	31.1-109			
Acenaphthylene	2260	250	"	2500		90.6	31.1-106			
Aniline	2050	250	"	2500		82.1	5.07-149			
Anthracene	2300	250	"	2500		92.1	31.5-107			
Benzo(a)anthracene	2400	250	"	2500		96.2	31.5-115			
Benzo(a)pyrene	2690	250	"	2500		108	29.1-138			
Benzo(b)fluoranthene	2670	250	"	2500		107	14.9-131			
Benzo(g,h,i)perylene	2080	250	"	2500		83.1	6.56-121			
Benzyl alcohol	2390	250	"	2500		95.8	25.4-119			
Benzo(k)fluoranthene	2660	250	"	2500		107	29.1-121			
Benzyl butyl phthalate	2700	250	"	2500		108	31.3-112			
4-Bromophenyl phenyl ether	2220	250	"	2500		88.8	25.2-113			
4-Chloro-3-methylphenol	2380	250	"	2500		95.4	29.5-124			
4-Chloroaniline	2820	250	"	2500		113	10-177			
Bis(2-chloroethoxy)methane	2400	250	"	2500		96.2	27.9-111			
Bis(2-chloroethyl)ether	2550	250	"	2500		102	18-122			
Bis(2-chloroisopropyl)ether	2630	250	"	2500		105	9.62-123			
Bis(2-ethylhexyl)phthalate	2620	250	"	2500		105	25-105			
2-Chloronaphthalene	2300	250	"	2500		91.8	31.7-108			
2-Chlorophenol	2290	250	"	2500		91.5	20.3-125			
4-Chlorophenyl phenyl ether	2270	250	"	2500		90.6	23.6-110			
Chrysene	2380	250	"	2500		95.1	27.4-117			
Dibenzo(a,h)anthracene	2110	250	"	2500		84.3	14.6-119			
Dibenzofuran	2350	250	"	2500		93.9	30.2-108			
Di-n-butyl phthalate	2620	250	"	2500		105	33.5-100	High Bias		
1,2-Dichlorobenzene	2250	250	"	2500		89.9	22.8-114			





## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31380 - EPA 3545A

#### LCS (BD31380-BS1)

Prepared & Analyzed: 04/30/2013

1,4-Dichlorobenzene	2480	250	ug/kg wet	2500		99.0	19.8-121				
1,3-Dichlorobenzene	1930	250	"	2500		77.2	20.6-119				
3,3'-Dichlorobenzidine	2220	250	"	2500		88.9	10-180				
2,4-Dichlorophenol	2310	250	"	2500		92.3	23.3-125				
Diethyl phthalate	2470	250	"	2500		98.8	29.7-111				
2,4-Dimethylphenol	2380	250	"	2500		95.1	29.8-115				
Dimethyl phthalate	2390	250	"	2500		95.5	27-118				
4,6-Dinitro-2-methylphenol	2200	500	"	2500		88.2	10-122				
2-Nitroaniline	2390	250	"	2500		95.6	40-140				
2,4-Dinitrophenol	1380	500	"	2500		55.2	10-151				
2,6-Dinitrotoluene	2550	250	"	2500		102	26.1-119				
2,4-Dinitrotoluene	2520	250	"	2500		101	21.4-126				
Di-n-octyl phthalate	3080	250	"	2500		123	19-129				
Fluoranthene	2630	250	"	2500		105	31.3-110				
Fluorene	2330	250	"	2500		93.3	29.9-108				
Hexachlorobenzene	2450	250	"	2500		98.1	31.7-102				
Hexachlorobutadiene	2360	250	"	2500		94.2	10.1-134				
Hexachlorocyclopentadiene	1910	250	"	2500		76.6	10-122				
Hexachloroethane	2220	250	"	2500		88.6	20.2-114				
Indeno(1,2,3-cd)pyrene	1720	250	"	2500		68.8	12.6-120				
Isophorone	2630	250	"	2500		105	27.2-113				
2-Methylnaphthalene	2270	250	"	2500		90.8	17.4-119				
2-Methylphenol	2390	250	"	2500		95.5	23.6-125				
3- & 4-Methylphenols	2190	250	"	2500		87.7	21.3-115				
Naphthalene	2300	250	"	2500		92.0	25.2-111				
3-Nitroaniline	2570	250	"	2500		103	9.73-147				
4-Nitroaniline	1830	250	"	2500		73.2	6.42-169				
Nitrobenzene	2440	250	"	2500		97.5	21.8-118				
4-Nitrophenol	1410	250	"	2500		56.5	10-136				
2-Nitrophenol	2250	250	"	2500		89.9	20.6-119				
N-nitroso-di-n-propylamine	2620	250	"	2500		105	25.3-118				
N-Nitrosodimethylamine	2060	250	"	2500		82.5	10-142				
N-Nitrosodiphenylamine	2580	250	"	2500		103	35.8-132				
Pentachlorophenol	2830	250	"	2500		113	3.68-146				
Phenanthrene	2400	250	"	2500		95.9	31.2-105				
Phenol	2360	250	"	2500		94.3	23.2-117				
Pyrene	2550	250	"	2500		102	26.3-124				
Pyridine	721	250	"	2500		28.8	10-122				
1,2,4-Trichlorobenzene	2300	250	"	2500		92.0	19.3-128				
2,4,5-Trichlorophenol	2220	250	"	2500		88.9	19.5-131				
2,4,6-Trichlorophenol	2300	250	"	2500		91.9	24.2-123				
Surrogate: 2,4,6-Tribromophenol	3730		"	3750		99.3	15-110				
Surrogate: 2-Fluorobiphenyl	2280		"	2500		91.0	30-130				
Surrogate: 2-Fluorophenol	3870		"	3750		103	15-110				
Surrogate: Nitrobenzene-d5	2480		"	2500		99.2	30-130				
Surrogate: Phenol-d5	4000		"	3760		107	15-110				
Surrogate: Terphenyl-d14	2590		"	2500		103	30-130				





## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BD31380 - EPA 3545A</b>											
<b>LCS Dup (BD31380-BSD1)</b>						Prepared & Analyzed: 04/30/2013					
Acenaphthene	2240	250	ug/kg wet	2500		89.7	31.1-109		7.12	30	
Acenaphthylene	2150	250	"	2500		85.9	31.1-106		5.26	30	
Aniline	1950	250	"	2500		77.9	5.07-149		5.25	30	
Anthracene	2260	250	"	2500		90.5	31.5-107		1.84	30	
Benzo(a)anthracene	2290	250	"	2500		91.7	31.5-115		4.77	30	
Benzo(a)pyrene	2590	250	"	2500		104	29.1-138		3.75	30	
Benzo(b)fluoranthene	2590	250	"	2500		104	14.9-131		3.14	30	
Benzo(g,h,i)perylene	2010	250	"	2500		80.4	6.56-121		3.30	30	
Benzyl alcohol	2370	250	"	2500		94.9	25.4-119		0.902	30	
Benzo(k)fluoranthene	2560	250	"	2500		103	29.1-121		3.90	30	
Benzyl butyl phthalate	2570	250	"	2500		103	31.3-112		4.95	30	
4-Bromophenyl phenyl ether	2160	250	"	2500		86.5	25.2-113		2.62	30	
4-Chloro-3-methylphenol	2360	250	"	2500		94.5	29.5-124		0.969	30	
4-Chloroaniline	2760	250	"	2500		110	10-177		2.38	30	
Bis(2-chloroethoxy)methane	2290	250	"	2500		91.8	27.9-111		4.72	30	
Bis(2-chloroethyl)ether	2600	250	"	2500		104	18-122		2.27	30	
Bis(2-chloroisopropyl)ether	2520	250	"	2500		101	9.62-123		4.21	30	
Bis(2-ethylhexyl)phthalate	2470	250	"	2500		98.7	25-105		5.90	30	
2-Chloronaphthalene	2120	250	"	2500		84.8	31.7-108		7.93	30	
2-Chlorophenol	2250	250	"	2500		90.1	20.3-125		1.54	30	
4-Chlorophenyl phenyl ether	2180	250	"	2500		87.1	23.6-110		3.98	30	
Chrysene	2270	250	"	2500		90.8	27.4-117		4.65	30	
Dibenzo(a,h)anthracene	1970	250	"	2500		79.0	14.6-119		6.56	30	
Dibenzofuran	2230	250	"	2500		89.0	30.2-108		5.33	30	
Di-n-butyl phthalate	2380	250	"	2500		95.4	33.5-100		9.54	30	
1,2-Dichlorobenzene	2190	250	"	2500		87.4	22.8-114		2.82	30	
1,4-Dichlorobenzene	2500	250	"	2500		99.8	19.8-121		0.805	30	
1,3-Dichlorobenzene	1750	250	"	2500		70.1	20.6-119		9.61	30	
3,3'-Dichlorobenzidine	2120	250	"	2500		84.9	10-180		4.70	30	
2,4-Dichlorophenol	2190	250	"	2500		87.5	23.3-125		5.29	30	
Diethyl phthalate	2440	250	"	2500		97.4	29.7-111		1.41	30	
2,4-Dimethylphenol	2300	250	"	2500		91.8	29.8-115		3.49	30	
Dimethyl phthalate	2330	250	"	2500		93.1	27-118		2.52	30	
4,6-Dinitro-2-methylphenol	2000	500	"	2500		80.2	10-122		9.50	30	
2-Nitroaniline	2270	250	"	2500		90.7	40-140		5.28	30	
2,4-Dinitrophenol	1310	500	"	2500		52.3	10-151		5.28	30	
2,6-Dinitrotoluene	2480	250	"	2500		99.1	26.1-119		2.81	30	
2,4-Dinitrotoluene	2470	250	"	2500		98.7	21.4-126		2.19	30	
Di-n-octyl phthalate	2990	250	"	2500		120	19-129		2.91	30	
Fluoranthene	2430	250	"	2500		97.0	31.3-110		8.20	30	
Fluorene	2270	250	"	2500		91.0	29.9-108		2.52	30	
Hexachlorobenzene	2390	250	"	2500		95.6	31.7-102		2.64	30	
Hexachlorobutadiene	2210	250	"	2500		88.4	10.1-134		6.35	30	
Hexachlorocyclopentadiene	1750	250	"	2500		70.1	10-122		8.87	30	
Hexachloroethane	2180	250	"	2500		87.1	20.2-114		1.66	30	
Indeno(1,2,3-cd)pyrene	2000	250	"	2500		80.0	12.6-120		14.9	30	
Isophorone	2560	250	"	2500		103	27.2-113		2.65	30	
2-Methylnaphthalene	2240	250	"	2500		89.5	17.4-119		1.40	30	
2-Methylphenol	2380	250	"	2500		95.0	23.6-125		0.483	30	
3- & 4-Methylphenols	2200	250	"	2500		88.0	21.3-115		0.342	30	
Naphthalene	2210	250	"	2500		88.2	25.2-111		4.17	30	





## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31380 - EPA 3545A

##### LCS Dup (BD31380-BSD1)

Prepared & Analyzed: 04/30/2013

3-Nitroaniline	2530	250	ug/kg wet	2500		101	9.73-147		1.35	30	
4-Nitroaniline	1580	250	"	2500		63.4	6.42-169		14.4	30	
Nitrobenzene	2320	250	"	2500		92.7	21.8-118		4.98	30	
4-Nitrophenol	1410	250	"	2500		56.3	10-136		0.354	30	
2-Nitrophenol	2030	250	"	2500		81.4	20.6-119		9.95	30	
N-nitroso-di-n-propylamine	2550	250	"	2500		102	25.3-118		2.65	30	
N-Nitrosodimethylamine	1670	250	"	2500		66.7	10-142		21.1	30	
N-Nitrosodiphenylamine	2470	250	"	2500		98.8	35.8-132		4.47	30	
Pentachlorophenol	2670	250	"	2500		107	3.68-146		5.86	30	
Phenanthrene	2260	250	"	2500		90.3	31.2-105		6.02	30	
Phenol	2310	250	"	2500		92.4	23.2-117		2.06	30	
Pyrene	2610	250	"	2500		105	26.3-124		2.26	30	
Pyridine	908	250	"	2500		36.3	10-122		23.0	30	
1,2,4-Trichlorobenzene	2190	250	"	2500		87.7	19.3-128		4.79	30	
2,4,5-Trichlorophenol	2140	250	"	2500		85.6	19.5-131		3.87	30	
2,4,6-Trichlorophenol	2140	250	"	2500		85.5	24.2-123		7.28	30	
<i>Surrogate: 2,4,6-Tribromophenol</i>	<i>3620</i>		<i>"</i>	<i>3750</i>		<i>96.6</i>	<i>15-110</i>				
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>2160</i>		<i>"</i>	<i>2500</i>		<i>86.2</i>	<i>30-130</i>				
<i>Surrogate: 2-Fluorophenol</i>	<i>3820</i>		<i>"</i>	<i>3750</i>		<i>102</i>	<i>15-110</i>				
<i>Surrogate: Nitrobenzene-d5</i>	<i>2330</i>		<i>"</i>	<i>2500</i>		<i>93.4</i>	<i>30-130</i>				
<i>Surrogate: Phenol-d5</i>	<i>3950</i>		<i>"</i>	<i>3760</i>		<i>105</i>	<i>15-110</i>				
<i>Surrogate: Terphenyl-d14</i>	<i>2600</i>		<i>"</i>	<i>2500</i>		<i>104</i>	<i>30-130</i>				

##### Matrix Spike (BD31380-MS1)

\*Source sample: 13D1004-07 (SP-3 8-9 ft)

Prepared & Analyzed: 04/30/2013

Acenaphthene	2250	268	ug/kg dry	2680	ND	84.1	31.1-109				
Acenaphthylene	2110	268	"	2680	ND	78.7	31.1-106				
Aniline	1630	268	"	2680	ND	61.0	21-140				
Anthracene	2170	268	"	2680	ND	81.3	31.5-107				
Benzo(a)anthracene	2310	268	"	2680	ND	86.2	31.5-115				
Benzo(a)pyrene	2480	268	"	2680	ND	92.7	29.1-138				
Benzo(b)fluoranthene	2560	268	"	2680	ND	95.6	14.9-131				
Benzo(g,h,i)perylene	2090	268	"	2680	ND	78.3	6.56-121				
Benzyl alcohol	2250	268	"	2680	ND	84.0	25.4-119				
Benzo(k)fluoranthene	2510	268	"	2680	ND	93.7	29.1-121				
Benzyl butyl phthalate	2540	268	"	2680	ND	94.8	31.3-112				
4-Bromophenyl phenyl ether	2090	268	"	2680	ND	78.2	25.2-113				
4-Chloro-3-methylphenol	2100	268	"	2680	ND	78.4	29.5-124				
4-Chloroaniline	2530	268	"	2680	ND	94.4	10-177				
Bis(2-chloroethoxy)methane	2180	268	"	2680	ND	81.5	27.9-111				
Bis(2-chloroethyl)ether	2270	268	"	2680	ND	84.8	18-122				
Bis(2-chloroisopropyl)ether	2310	268	"	2680	ND	86.3	9.62-123				
Bis(2-ethylhexyl)phthalate	2430	268	"	2680	ND	90.9	25-105				
2-Chloronaphthalene	2190	268	"	2680	ND	81.9	31.7-108				
2-Chlorophenol	2070	268	"	2680	ND	77.2	20.3-125				
4-Chlorophenyl phenyl ether	2160	268	"	2680	ND	80.8	23.6-110				
Chrysene	2230	268	"	2680	ND	83.2	27.4-117				
Dibenzo(a,h)anthracene	2060	268	"	2680	ND	76.8	14.6-119				
Dibenzofuran	2250	268	"	2680	ND	84.3	30.2-108				
Di-n-butyl phthalate	2480	268	"	2680	ND	92.7	33.5-100				
1,2-Dichlorobenzene	1940	268	"	2680	ND	72.7	22.8-114				
1,4-Dichlorobenzene	2150	268	"	2680	ND	80.2	19.8-121				





## Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31380 - EPA 3545A

Matrix Spike (BD31380-MS1)	*Source sample: 13D1004-07 (SP-3 8-9 ft)					Prepared & Analyzed: 04/30/2013					
1,3-Dichlorobenzene	1670	268	ug/kg dry	2680	ND	62.3	20.6-119				
3,3'-Dichlorobenzidine	1510	268	"	2680	ND	56.3	10-180				
2,4-Dichlorophenol	2010	268	"	2680	ND	75.2	23.3-125				
Diethyl phthalate	2340	268	"	2680	ND	87.3	29.7-111				
2,4-Dimethylphenol	1210	268	"	2680	ND	45.2	29.8-115				
Dimethyl phthalate	2270	268	"	2680	ND	84.7	27-118				
2-Nitroaniline	2310	268	"	2680	ND	86.3	40-140				
4,6-Dinitro-2-methylphenol	1900	535	"	2680	ND	71.0	10-122				
2,4-Dinitrophenol	1480	535	"	2680	ND	55.3	10-151				
2,6-Dinitrotoluene	2410	268	"	2680	ND	90.0	26.1-119				
2,4-Dinitrotoluene	2380	268	"	2680	ND	88.8	21.4-126				
Di-n-octyl phthalate	2910	268	"	2680	ND	109	19-129				
Fluoranthene	2600	268	"	2680	ND	97.2	31.3-110				
Fluorene	2270	268	"	2680	ND	84.7	29.9-108				
Hexachlorobenzene	2320	268	"	2680	ND	86.9	31.7-102				
Hexachlorobutadiene	2130	268	"	2680	ND	79.4	10.1-134				
Hexachlorocyclopentadiene	1860	268	"	2680	ND	69.5	10-122				
Hexachloroethane	1930	268	"	2680	ND	72.0	20.2-114				
Indeno(1,2,3-cd)pyrene	1730	268	"	2680	ND	64.8	12.6-120				
Isophorone	2390	268	"	2680	ND	89.5	27.2-113				
2-Methylnaphthalene	2170	268	"	2680	ND	81.0	17.4-119				
2-Methylphenol	1690	268	"	2680	ND	63.2	23.6-125				
3- & 4-Methylphenols	1710	268	"	2680	ND	63.9	21.3-115				
Naphthalene	2130	268	"	2680	ND	79.8	25.2-111				
3-Nitroaniline	2620	268	"	2680	ND	97.8	9.73-147				
4-Nitroaniline	1820	268	"	2680	ND	68.2	6.42-169				
Nitrobenzene	2150	268	"	2680	ND	80.5	21.8-118				
4-Nitrophenol	1130	268	"	2680	ND	42.2	10-136				
2-Nitrophenol	1980	268	"	2680	ND	74.2	20.6-119				
N-nitroso-di-n-propylamine	2390	268	"	2680	ND	89.3	25.3-118				
N-Nitrosodimethylamine	1600	268	"	2680	ND	59.9	21-140				
N-Nitrosodiphenylamine	1730	268	"	2680	ND	64.7	35.8-132				
Pentachlorophenol	2350	268	"	2680	ND	87.8	3.68-146				
Phenanthrene	2260	268	"	2680	ND	84.6	31.2-105				
Phenol	2050	268	"	2680	ND	76.6	23.2-117				
Pyrene	2500	268	"	2680	ND	93.4	26.3-124				
Pyridine	729	268	"	2680	ND	27.3	21-140				
1,2,4-Trichlorobenzene	2120	268	"	2680	ND	79.3	19.3-128				
2,4,5-Trichlorophenol	2010	268	"	2680	ND	75.2	19.5-131				
2,4,6-Trichlorophenol	1980	268	"	2680	ND	74.1	24.2-123				
Surrogate: 2,4,6-Tribromophenol	3300		"	4010		82.2	15-110				
Surrogate: 2-Fluorobiphenyl	2150		"	2680		80.1	30-130				
Surrogate: 2-Fluorophenol	3220		"	4010		80.2	15-110				
Surrogate: Nitrobenzene-d5	2150		"	2680		80.5	30-130				
Surrogate: Phenol-d5	3560		"	4020		88.7	15-110				
Surrogate: Terphenyl-d14	2500		"	2680		93.3	30-130				





## Organochlorine Pesticides by EPA SW 846-8081 - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31378 - EPA 3550B

##### Blank (BD31378-BLK1)

Prepared & Analyzed: 04/30/2013

4,4'-DDD	ND	0.330	ug/kg wet								
4,4'-DDE	ND	0.330	"								
4,4'-DDT	ND	0.330	"								
Aldrin	ND	0.330	"								
alpha-BHC	ND	0.330	"								
beta-BHC	ND	0.330	"								
gamma-Chlordane	ND	0.330	"								
delta-BHC	ND	0.330	"								
Dieldrin	ND	0.330	"								
Endosulfan I	ND	0.330	"								
Endosulfan II	ND	0.330	"								
Endosulfan sulfate	ND	0.330	"								
Endrin	ND	0.330	"								
Endrin aldehyde	ND	0.330	"								
Endrin ketone	ND	0.330	"								
gamma-BHC (Lindane)	ND	0.330	"								
Heptachlor	ND	0.330	"								
Heptachlor epoxide	ND	0.330	"								
Methoxychlor	ND	1.65	"								
alpha-Chlordane	ND	0.330	"								
Toxaphene	ND	16.7	"								
Surrogate: Decachlorobiphenyl	81.5		"	67.0		122	30-150				
Surrogate: Tetrachloro-m-xylene	91.5		"	66.7		137	30-150				

##### LCS (BD31378-BS1)

Prepared & Analyzed: 04/30/2013

4,4'-DDD	35.5	0.330	ug/kg wet	33.3		106	40-140				
4,4'-DDE	32.8	0.330	"	33.3		98.5	40-140				
4,4'-DDT	33.4	0.330	"	33.3		100	40-140				
Aldrin	31.4	0.330	"	33.3		94.2	40-140				
alpha-BHC	30.8	0.330	"	33.3		92.5	40-140				
beta-BHC	36.3	0.330	"	33.3		109	40-140				
gamma-Chlordane	30.6	0.330	"	33.3		91.9	40-140				
delta-BHC	29.8	0.330	"	33.3		89.3	40-140				
Dieldrin	31.3	0.330	"	33.3		93.8	40-140				
Endosulfan I	32.7	0.330	"	33.3		98.2	40-140				
Endosulfan II	31.5	0.330	"	33.3		94.4	40-140				
Endosulfan sulfate	31.7	0.330	"	33.3		95.2	40-140				
Endrin	33.9	0.330	"	33.3		102	40-140				
Endrin aldehyde	26.4	0.330	"	33.3		79.1	40-140				
Endrin ketone	29.7	0.330	"	33.3		89.0	40-140				
gamma-BHC (Lindane)	30.3	0.330	"	33.3		90.8	40-140				
Heptachlor	30.2	0.330	"	33.3		90.5	40-140				
Heptachlor epoxide	29.6	0.330	"	33.3		88.8	40-140				
Methoxychlor	30.1	1.65	"	33.3		90.3	40-140				
alpha-Chlordane	30.6	0.330	"	33.3		91.9	40-140				
Surrogate: Decachlorobiphenyl	68.0		"	67.0		101	30-150				
Surrogate: Tetrachloro-m-xylene	76.2		"	66.7		114	30-150				





## Organochlorine Pesticides by EPA SW 846-8081 - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31378 - EPA 3550B

##### LCS Dup (BD31378-BSD1)

Prepared & Analyzed: 04/30/2013

4,4'-DDD	30.3	0.330	ug/kg wet	33.3		90.8	40-140		15.8	200	
4,4'-DDE	27.9	0.330	"	33.3		83.6	40-140		16.4	200	
4,4'-DDT	31.0	0.330	"	33.3		92.9	40-140		7.47	200	
Aldrin	25.9	0.330	"	33.3		77.7	40-140		19.2	200	
alpha-BHC	23.9	0.330	"	33.3		71.6	40-140		25.6	200	
beta-BHC	24.7	0.330	"	33.3		74.2	40-140		38.0	200	
gamma-Chlordane	25.6	0.330	"	33.3		76.8	40-140		17.9	200	
delta-BHC	24.1	0.330	"	33.3		72.4	40-140		20.9	200	
Dieldrin	26.5	0.330	"	33.3		79.6	40-140		16.3	200	
Endosulfan I	27.6	0.330	"	33.3		82.8	40-140		17.0	200	
Endosulfan II	26.6	0.330	"	33.3		79.7	40-140		16.9	200	
Endosulfan sulfate	27.2	0.330	"	33.3		81.5	40-140		15.4	200	
Endrin	28.9	0.330	"	33.3		86.8	40-140		15.9	200	
Endrin aldehyde	25.3	0.330	"	33.3		76.0	40-140		4.10	200	
Endrin ketone	25.6	0.330	"	33.3		76.8	40-140		14.7	200	
gamma-BHC (Lindane)	24.3	0.330	"	33.3		72.8	40-140		21.9	200	
Heptachlor	25.2	0.330	"	33.3		75.6	40-140		18.0	200	
Heptachlor epoxide	25.0	0.330	"	33.3		75.1	40-140		16.7	200	
Methoxychlor	32.6	1.65	"	33.3		97.8	40-140		7.94	200	
alpha-Chlordane	25.5	0.330	"	33.3		76.5	40-140		18.4	200	
Surrogate: Decachlorobiphenyl	56.7		"	67.0		84.6	30-150				
Surrogate: Tetrachloro-m-xylene	61.5		"	66.7		92.2	30-150				

##### Matrix Spike (BD31378-MS1)

\*Source sample: 13D1004-07 (SP-3 8-9 ft)

Prepared: 04/30/2013 Analyzed: 05/01/2013

4,4'-DDD	34.8	1.77	ug/kg dry	35.7	ND	97.6	30-150				
4,4'-DDE	32.8	1.77	"	35.7	ND	91.9	30-150				
4,4'-DDT	38.4	1.77	"	35.7	ND	108	30-150				
Aldrin	36.3	1.77	"	35.7	ND	102	30-150				
alpha-BHC	33.3	1.77	"	35.7	ND	93.3	30-150				
beta-BHC	32.9	1.77	"	35.7	ND	92.2	30-150				
gamma-Chlordane	34.7	1.77	"	35.7	ND	97.3	30-150				
delta-BHC	31.5	1.77	"	35.7	ND	88.4	30-150				
Dieldrin	40.2	1.77	"	35.7	ND	113	30-150				
Endosulfan I	39.2	1.77	"	35.7	ND	110	30-150				
Endosulfan II	37.2	1.77	"	35.7	ND	104	30-150				
Endosulfan sulfate	34.3	1.77	"	35.7	ND	96.1	30-150				
Endrin	41.4	1.77	"	35.7	ND	116	30-150				
Endrin aldehyde	34.3	1.77	"	35.7	ND	96.2	30-150				
Endrin ketone	33.7	1.77	"	35.7	ND	94.4	30-150				
gamma-BHC (Lindane)	33.8	1.77	"	35.7	ND	94.8	30-150				
Heptachlor	34.9	1.77	"	35.7	ND	97.9	30-150				
Heptachlor epoxide	34.7	1.77	"	35.7	ND	97.3	30-150				
Methoxychlor	33.8	8.83	"	35.7	ND	94.8	30-150				
alpha-Chlordane	36.3	1.77	"	35.7	ND	102	30-150				
Surrogate: Decachlorobiphenyl	83.2		"	71.7		116	30-150				
Surrogate: Tetrachloro-m-xylene	92.6		"	71.4		130	30-150				





## Organochlorine Pesticides by EPA SW 846-8081 - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BE30004 - EPA SW846-3510C Low Level

##### Blank (BE30004-BLK1)

Prepared & Analyzed: 05/01/2013

4,4'-DDD	ND	0.00100	ug/L
Toxaphene	ND	0.0500	"
4,4'-DDE	ND	0.00100	"
4,4'-DDT	ND	0.00100	"
Aldrin	ND	0.00100	"
Methoxychlor	ND	0.00500	"
alpha-BHC	ND	0.00100	"
Heptachlor epoxide	ND	0.00100	"
beta-BHC	ND	0.00100	"
Heptachlor	ND	0.00100	"
gamma-Chlordane	ND	0.00100	"
gamma-BHC (Lindane)	ND	0.00100	"
delta-BHC	ND	0.00100	"
Endrin ketone	ND	0.00100	"
Dieldrin	ND	0.00100	"
Endrin aldehyde	ND	0.00100	"
Endosulfan I	ND	0.00100	"
Endrin	ND	0.00100	"
Endosulfan II	ND	0.00100	"
Endosulfan sulfate	ND	0.00100	"
Endosulfan sulfate	ND	0.00100	"
Endosulfan II	ND	0.00100	"
Endrin	ND	0.00100	"
Endosulfan I	ND	0.00100	"
Endrin aldehyde	ND	0.00100	"
Dieldrin	ND	0.00100	"
Endrin ketone	ND	0.00100	"
delta-BHC	ND	0.00100	"
gamma-BHC (Lindane)	ND	0.00100	"
Heptachlor	ND	0.00100	"
Chlordane, total	ND	0.00400	"
Heptachlor epoxide	ND	0.00100	"
beta-BHC	ND	0.00100	"
Methoxychlor	ND	0.00500	"
alpha-Chlordane	ND	0.00100	"
alpha-BHC	ND	0.00100	"
Toxaphene	ND	0.0500	"
Aldrin	ND	0.00100	"
4,4'-DDT	ND	0.00100	"
4,4'-DDE	ND	0.00100	"
4,4'-DDD	ND	0.00100	"
Aroclor 1260	ND	0.0500	"
Aroclor 1254	ND	0.0500	"
Aroclor 1248	ND	0.0500	"
Aroclor 1242	ND	0.0500	"
Aroclor 1232	ND	0.0500	"
Aroclor 1221	ND	0.0500	"
Aroclor 1016	ND	0.0500	"
Total PCBs	ND	0.0500	"

Surrogate: Tetrachloro-m-xylene	0.109	"	0.200	54.4	30-150
Surrogate: Decachlorobiphenyl	0.192	"	0.201	95.4	30-150





## Organochlorine Pesticides by EPA SW 846-8081 - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BE30004 - EPA SW846-3510C Low Level

##### Blank (BE30004-BLK1)

Prepared & Analyzed: 05/01/2013

Surrogate: Decachlorobiphenyl	0.192		ug/L	0.201		95.4	30-150				
Surrogate: Tetrachloro-m-xylene	0.109		"	0.200		54.4	30-150				

##### LCS (BE30004-BS1)

Prepared: 05/01/2013 Analyzed: 05/02/2013

4,4'-DDD	0.0926	0.00100	ug/L	0.100		92.6	40-140				
4,4'-DDE	0.0890	0.00100	"	0.100		89.0	40-140				
4,4'-DDT	0.0991	0.00100	"	0.100		99.1	40-140				
Methoxychlor	0.0821	0.00500	"	0.100		82.1	40-140				
Aldrin	0.0843	0.00100	"	0.100		84.3	40-140				
Heptachlor epoxide	0.0833	0.00100	"	0.100		83.3	40-140				
alpha-BHC	0.0849	0.00100	"	0.100		84.9	40-140				
Heptachlor	0.0804	0.00100	"	0.100		80.4	40-140				
beta-BHC	0.0845	0.00100	"	0.100		84.5	40-140				
gamma-Chlordane	0.0822	0.00100	"	0.100		82.2	40-140				
gamma-BHC (Lindane)	0.0829	0.00100	"	0.100		82.9	40-140				
Endrin ketone	0.0787	0.00100	"	0.100		78.7	40-140				
delta-BHC	0.0858	0.00100	"	0.100		85.8	40-140				
Endrin aldehyde	0.0813	0.00100	"	0.100		81.3	40-140				
Dieldrin	0.0839	0.00100	"	0.100		83.9	40-140				
Endrin	0.0888	0.00100	"	0.100		88.8	40-140				
Endosulfan I	0.0885	0.00100	"	0.100		88.5	40-140				
Endosulfan sulfate	0.0787	0.00100	"	0.100		78.7	40-140				
Endosulfan II	0.0799	0.00100	"	0.100		79.9	40-140				
Endosulfan II	0.0799	0.00100	"	0.100		79.9	40-140				
Endosulfan sulfate	0.0787	0.00100	"	0.100		78.7	40-140				
Endosulfan I	0.0885	0.00100	"	0.100		88.5	40-140				
Endrin	0.0888	0.00100	"	0.100		88.8	40-140				
Dieldrin	0.0839	0.00100	"	0.100		83.9	40-140				
Endrin aldehyde	0.0813	0.00100	"	0.100		81.3	40-140				
delta-BHC	0.0858	0.00100	"	0.100		85.8	40-140				
Endrin ketone	0.0787	0.00100	"	0.100		78.7	40-140				
gamma-BHC (Lindane)	0.0829	0.00100	"	0.100		82.9	40-140				
Heptachlor	0.0804	0.00100	"	0.100		80.4	40-140				
Heptachlor epoxide	0.0833	0.00100	"	0.100		83.3	40-140				
beta-BHC	0.0845	0.00100	"	0.100		84.5	40-140				
alpha-Chlordane	0.0825	0.00100	"	0.100		82.5	40-140				
Methoxychlor	0.0821	0.00500	"	0.100		82.1	40-140				
alpha-BHC	0.0849	0.00100	"	0.100		84.9	40-140				
Aldrin	0.0843	0.00100	"	0.100		84.3	40-140				
4,4'-DDT	0.0991	0.00100	"	0.100		99.1	40-140				
4,4'-DDE	0.0890	0.00100	"	0.100		89.0	40-140				
4,4'-DDD	0.0926	0.00100	"	0.100		92.6	40-140				
Surrogate: Tetrachloro-m-xylene	0.191		"	0.200		95.7	30-150				
Surrogate: Decachlorobiphenyl	0.186		"	0.201		92.6	30-150				
Surrogate: Decachlorobiphenyl	0.186		"	0.201		92.6	30-150				
Surrogate: Tetrachloro-m-xylene	0.191		"	0.200		95.7	30-150				





## Organochlorine Pesticides by EPA SW 846-8081 - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BE30004 - EPA SW846-3510C Low Level

##### LCS (BE30004-BS2)

Prepared: 05/01/2013 Analyzed: 05/02/2013

Aroclor 1260	1.02	0.0500	ug/L	1.00		102	40-140				
Aroclor 1016	0.977	0.0500	"	1.00		97.7	40-140				
Surrogate: Tetrachloro-m-xylene	0.138		"	0.200		69.0	30-150				
Surrogate: Decachlorobiphenyl	0.160		"	0.201		79.6	30-150				

##### LCS Dup (BE30004-BSD1)

Prepared: 05/01/2013 Analyzed: 05/02/2013

4,4'-DDD	0.0914	0.00100	ug/L	0.100		91.4	40-140		1.28	200	
4,4'-DDE	0.0874	0.00100	"	0.100		87.4	40-140		1.77	200	
4,4'-DDT	0.0945	0.00100	"	0.100		94.5	40-140		4.73	200	
Aldrin	0.0843	0.00100	"	0.100		84.3	40-140		0.0795	200	
Methoxychlor	0.0774	0.00500	"	0.100		77.4	40-140		5.93	200	
alpha-BHC	0.0846	0.00100	"	0.100		84.6	40-140		0.348	200	
Heptachlor epoxide	0.0824	0.00100	"	0.100		82.4	40-140		1.09	200	
beta-BHC	0.0836	0.00100	"	0.100		83.6	40-140		1.10	200	
Heptachlor	0.0807	0.00100	"	0.100		80.7	40-140		0.433	200	
gamma-Chlordane	0.0815	0.00100	"	0.100		81.5	40-140		0.853	200	
gamma-BHC (Lindane)	0.0820	0.00100	"	0.100		82.0	40-140		1.14	200	
delta-BHC	0.0839	0.00100	"	0.100		83.9	40-140		2.24	200	
Endrin ketone	0.0753	0.00100	"	0.100		75.3	40-140		4.30	200	
Dieldrin	0.0805	0.00100	"	0.100		80.5	40-140		4.15	200	
Endrin aldehyde	0.0786	0.00100	"	0.100		78.6	40-140		3.32	200	
Endosulfan I	0.0876	0.00100	"	0.100		87.6	40-140		0.953	200	
Endrin	0.0873	0.00100	"	0.100		87.3	40-140		1.71	200	
Endosulfan sulfate	0.0740	0.00100	"	0.100		74.0	40-140		6.18	200	
Endosulfan II	0.0776	0.00100	"	0.100		77.6	40-140		2.89	200	
Endosulfan II	0.0776	0.00100	"	0.100		77.6	40-140		2.89	200	
Endosulfan sulfate	0.0740	0.00100	"	0.100		74.0	40-140		6.18	200	
Endosulfan I	0.0876	0.00100	"	0.100		87.6	40-140		0.953	200	
Endrin	0.0873	0.00100	"	0.100		87.3	40-140		1.71	200	
Dieldrin	0.0805	0.00100	"	0.100		80.5	40-140		4.15	200	
Endrin aldehyde	0.0786	0.00100	"	0.100		78.6	40-140		3.32	200	
delta-BHC	0.0839	0.00100	"	0.100		83.9	40-140		2.24	200	
Endrin ketone	0.0753	0.00100	"	0.100		75.3	40-140		4.30	200	
gamma-BHC (Lindane)	0.0820	0.00100	"	0.100		82.0	40-140		1.14	200	
Heptachlor	0.0807	0.00100	"	0.100		80.7	40-140		0.433	200	
beta-BHC	0.0836	0.00100	"	0.100		83.6	40-140		1.10	200	
Heptachlor epoxide	0.0824	0.00100	"	0.100		82.4	40-140		1.09	200	
alpha-Chlordane	0.0810	0.00100	"	0.100		81.0	40-140		1.87	200	
Methoxychlor	0.0774	0.00500	"	0.100		77.4	40-140		5.93	200	
alpha-BHC	0.0846	0.00100	"	0.100		84.6	40-140		0.348	200	
Aldrin	0.0843	0.00100	"	0.100		84.3	40-140		0.0795	200	
4,4'-DDT	0.0945	0.00100	"	0.100		94.5	40-140		4.73	200	
4,4'-DDE	0.0874	0.00100	"	0.100		87.4	40-140		1.77	200	
4,4'-DDD	0.0914	0.00100	"	0.100		91.4	40-140		1.28	200	
Surrogate: Tetrachloro-m-xylene	0.199		"	0.200		99.6	30-150				
Surrogate: Decachlorobiphenyl	0.175		"	0.201		87.1	30-150				
Surrogate: Decachlorobiphenyl	0.175		"	0.201		87.1	30-150				
Surrogate: Tetrachloro-m-xylene	0.199		"	0.200		99.6	30-150				





Organochlorine Pesticides by EPA SW 846-8081 - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BE30004 - EPA SW846-3510C Low Level

LCS Dup (BE30004-BSD2)

Prepared: 05/01/2013 Analyzed: 05/02/2013

Aroclor 1260	1.03	0.0500	ug/L	1.00		103	40-140		0.720	200	
Aroclor 1016	0.918	0.0500	"	1.00		91.8	40-140		6.27	200	
Surrogate: Tetrachloro-m-xylene	0.131		"	0.200		65.5	30-150				
Surrogate: Decachlorobiphenyl	0.145		"	0.201		72.1	30-150				





## Polychlorinated Biphenyls (PCB) by EPA SW 846-8082/EPA Compendium Methods - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31378 - EPA 3550B

##### Blank (BD31378-BLK1)

Prepared & Analyzed: 04/30/2013

Aroclor 1016	ND	0.0170	mg/kg wet
Aroclor 1221	ND	0.0170	"
Aroclor 1232	ND	0.0170	"
Aroclor 1242	ND	0.0170	"
Aroclor 1248	ND	0.0170	"
Aroclor 1254	ND	0.0170	"
Aroclor 1260	ND	0.0170	"
Total PCBs	ND	0.0170	"

Surrogate: Tetrachloro-m-xylene

0.0913

"

0.0667

137

30-150

Surrogate: Decachlorobiphenyl

0.0743

"

0.0670

111

30-150

##### LCS (BD31378-BS2)

Prepared & Analyzed: 04/30/2013

Aroclor 1016	0.294	0.0170	mg/kg wet	0.333	88.3	40-140
Aroclor 1260	0.281	0.0170	"	0.333	84.3	40-140

Surrogate: Tetrachloro-m-xylene

0.0737

"

0.0667

110

30-150

Surrogate: Decachlorobiphenyl

0.0590

"

0.0670

88.1

30-150

#### Batch BE30004 - EPA SW846-3510C Low Level

##### Blank (BE30004-BLK1)

Prepared: 05/01/2013 Analyzed: 05/02/2013

Aroclor 1016	ND	0.0500	ug/L
Aroclor 1221	ND	0.0500	"
Aroclor 1232	ND	0.0500	"
Aroclor 1242	ND	0.0500	"
Aroclor 1248	ND	0.0500	"
Aroclor 1254	ND	0.0500	"
Aroclor 1260	ND	0.0500	"
Total PCBs	ND	0.0500	"

Surrogate: Tetrachloro-m-xylene

0.114

"

0.200

57.0

30-150

Surrogate: Decachlorobiphenyl

0.147

"

0.201

73.1

30-150





**Polychlorinated Biphenyls (PCB) by EPA SW 846-8082/EPA Compendium Methods - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BE30004 - EPA SW846-3510C Low Level**

**LCS (BE30004-BS2)**

Prepared: 05/01/2013 Analyzed: 05/02/2013

Aroclor 1016	0.977	0.0500	ug/L	1.00		97.7	40-140				
Aroclor 1260	1.02	0.0500	"	1.00		102	40-140				
<i>Surrogate: Tetrachloro-m-xylene</i>	<i>0.138</i>		<i>"</i>	<i>0.200</i>		<i>69.0</i>	<i>30-150</i>				
<i>Surrogate: Decachlorobiphenyl</i>	<i>0.160</i>		<i>"</i>	<i>0.201</i>		<i>79.6</i>	<i>30-150</i>				

**LCS Dup (BE30004-BSD2)**

Prepared: 05/01/2013 Analyzed: 05/02/2013

Aroclor 1016	0.918	0.0500	ug/L	1.00		91.8	40-140		6.27	200	
Aroclor 1260	1.03	0.0500	"	1.00		103	40-140		0.720	200	
<i>Surrogate: Tetrachloro-m-xylene</i>	<i>0.131</i>		<i>"</i>	<i>0.200</i>		<i>65.5</i>	<i>30-150</i>				
<i>Surrogate: Decachlorobiphenyl</i>	<i>0.145</i>		<i>"</i>	<i>0.201</i>		<i>72.1</i>	<i>30-150</i>				





## Metals by EPA 6000 Series Methods - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31400 - EPA 3050B

##### Blank (BD31400-BLK1)

Prepared & Analyzed: 04/30/2013

Aluminum	ND	2.00	mg/kg wet
Antimony	ND	0.500	"
Arsenic	ND	1.00	"
Barium	ND	0.500	"
Beryllium	ND	0.100	"
Cadmium	ND	0.500	"
Calcium	ND	5.00	"
Chromium	ND	0.500	"
Cobalt	ND	0.500	"
Copper	ND	0.500	"
Iron	ND	2.00	"
Lead	ND	0.300	"
Magnesium	ND	5.00	"
Manganese	ND	1.00	"
Nickel	ND	0.500	"
Potassium	ND	10.0	"
Selenium	ND	0.500	"
Silver	ND	0.500	"
Sodium	ND	10.0	"
Thallium	ND	0.500	"
Vanadium	ND	0.500	"
Zinc	ND	0.500	"

##### Reference (BD31400-SRM1)

Prepared & Analyzed: 04/30/2013

Aluminum	5260	2.00	mg/kg wet	8360	62.9	40.4-159
Antimony	79.3	0.500	"	92.9	85.4	24.8-272
Arsenic	91.6	1.00	"	94.5	97.0	69.2-131
Barium	153	0.500	"	166	92.2	72.9-127
Beryllium	51.9	0.100	"	52.6	98.6	73-127
Cadmium	57.4	0.500	"	59.9	95.8	73.1-127
Calcium	5630	5.00	"	6160	91.4	73.9-126
Chromium	60.8	0.500	"	69.3	87.8	68.4-132
Cobalt	99.9	0.500	"	101	98.9	74.2-125
Copper	78.6	0.500	"	78.0	101	73.6-126
Iron	9020	2.00	"	12800	70.4	31.8-168
Lead	85.7	0.300	"	91.7	93.5	70.2-130
Magnesium	2460	5.00	"	3030	81.2	66-134
Manganese	261	1.00	"	283	92.1	73.9-125
Nickel	56.7	0.500	"	56.6	100	70-130
Potassium	3220	10.0	"	3820	84.4	64.7-136
Selenium	159	0.500	"	159	100	67.9-133
Silver	30.7	0.500	"	33.9	90.7	65.5-135
Sodium	676	10.0	"	652	104	55.1-145
Thallium	111	0.500	"	119	93.0	67.6-133
Vanadium	46.9	0.500	"	56.3	83.2	53.3-147
Zinc	127	0.500	"	137	92.7	67.4-133





## Metals by EPA 6000 Series Methods - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31437 - EPA 3010A

##### Blank (BD31437-BLK1)

Prepared & Analyzed: 04/30/2013

Aluminum	ND	0.010	mg/L
Antimony	ND	0.005	"
Arsenic	ND	0.004	"
Barium	ND	0.010	"
Beryllium	ND	0.001	"
Cadmium	ND	0.003	"
Calcium	ND	0.050	"
Chromium	ND	0.005	"
Cobalt	ND	0.005	"
Copper	ND	0.005	"
Iron	ND	0.020	"
Lead	ND	0.003	"
Magnesium	ND	0.050	"
Manganese	ND	0.005	"
Nickel	ND	0.005	"
Potassium	ND	0.050	"
Selenium	ND	0.010	"
Silver	ND	0.005	"
Sodium	ND	0.100	"
Thallium	ND	0.010	"
Vanadium	ND	0.010	"
Zinc	ND	0.020	"

##### Reference (BD31437-SRM1)

Prepared & Analyzed: 04/30/2013

Aluminum	0.320	0.010	mg/L	0.292	110	72.6-129
Antimony	0.658	0.005	"	0.686	95.9	70.6-120
Arsenic	0.172	0.004	"	0.182	94.4	81.9-118
Barium	2.17	0.010	"	2.08	104	87-113
Beryllium	0.163	0.001	"	0.169	96.6	84.6-113
Cadmium	0.383	0.003	"	0.393	97.4	85.2-114
Chromium	0.596	0.005	"	0.611	97.6	87.1-113
Cobalt	0.292	0.005	"	0.290	101	87.6-112
Copper	0.580	0.005	"	0.569	102	90-110
Iron	0.460	0.020	"	0.462	99.5	87.9-114
Lead	0.264	0.003	"	0.259	102	85.7-114
Manganese	1.32	0.005	"	1.28	103	89.8-111
Nickel	0.298	0.005	"	0.279	107	88.5-113
Selenium	0.970	0.010	"	1.05	92.4	79.5-116
Silver	0.312	0.005	"	0.333	93.7	85.9-115
Thallium	0.511	0.010	"	0.487	105	80.1-120
Vanadium	0.439	0.010	"	0.455	96.5	87.5-112
Zinc	0.178	0.020	"	0.191	93.3	84.8-118





**Metals by EPA 6000 Series Methods - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BD31437 - EPA 3010A**

**Reference (BD31437-SRM2)**

Prepared & Analyzed: 04/30/2013

Calcium	62.2	0.050	mg/L	62.7		99.2	86-114				
Magnesium	29.1	0.050	"	29.0		100	86.2-114				
Potassium	34.3	0.050	"	32.4		106	85.2-115				
Sodium	85.2	0.100	"	85.1		100	85-115				





## Mercury by EPA 7000/200 Series Methods - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BD31397 - EPA SW846-7471

##### Blank (BD31397-BLK1)

Prepared & Analyzed: 04/30/2013

Mercury ND 0.0330 mg/kg wet

##### LCS (BD31397-BS1)

Prepared & Analyzed: 04/30/2013

Mercury 3.09 mg/kg 3.73 82.8 67.6-131

#### Batch BD31404 - EPA SW846-7470

##### Blank (BD31404-BLK1)

Prepared & Analyzed: 04/30/2013

Mercury ND 0.0002 mg/L

##### LCS (BD31404-BS1)

Prepared & Analyzed: 04/30/2013

Mercury 0.002158 0.0002 mg/L 0.00200 108 80-120

##### LCS (BD31404-BS2)

Prepared & Analyzed: 04/30/2013

Mercury 0.001952 0.0002 mg/L 0.00200 97.6 80-120





**Wet Chemistry Parameters - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BD31353 - Analysis Preparation</b>											
<b>Blank (BD31353-BLK1)</b>								Prepared & Analyzed: 04/26/2013			
Chromium, Hexavalent	ND	0.0100	mg/L								
<b>LCS (BD31353-BS1)</b>								Prepared & Analyzed: 04/26/2013			
Chromium, Hexavalent	0.495	0.0100	mg/L	0.500		99.0	80-120				
<b>Duplicate (BD31353-DUP1)</b> *Source sample: 13D1004-09 (MW-1)								Prepared & Analyzed: 04/26/2013			
Chromium, Hexavalent	ND	0.0100	mg/L		ND					20	
<b>Matrix Spike (BD31353-MS1)</b> *Source sample: 13D1004-09 (MW-1)								Prepared & Analyzed: 04/26/2013			
Chromium, Hexavalent	0.494	0.0100	mg/L	0.500	ND	98.8	75-125				
<b>Batch BD31385 - EPA SW846-3060</b>											
<b>Blank (BD31385-BLK1)</b>								Prepared & Analyzed: 04/30/2013			
Chromium, Hexavalent	ND	0.500	mg/kg wet								
<b>Duplicate (BD31385-DUP1)</b> *Source sample: 13D1004-07 (SP-3 8-9 ft)								Prepared & Analyzed: 04/30/2013			
Chromium, Hexavalent	ND	0.535	mg/kg dry		ND					35	
<b>Matrix Spike (BD31385-MS1)</b> *Source sample: 13D1004-07 (SP-3 8-9 ft)								Prepared & Analyzed: 04/30/2013			
Chromium, Hexavalent	22.2	0.535	mg/kg dry	21.4	ND	104	75-125				
<b>Reference (BD31385-SRM1)</b>								Prepared & Analyzed: 04/30/2013			
Chromium, Hexavalent	73.6		mg/L	76.7		96.0	20.2-180				





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
13D1004-01	SP-1 0-2 ft	8 oz. WM Clear Glass Cool to 4° C
13D1004-02	SP-1 8-9 ft	8 oz. WM Clear Glass Cool to 4° C
13D1004-03	SP-2 0-2 ft	8 oz. WM Clear Glass Cool to 4° C
13D1004-04	SP-2 8-9 ft	8 oz. WM Clear Glass Cool to 4° C
13D1004-05	SP-2 8-9 ft (Duplicate)	8 oz. WM Clear Glass Cool to 4° C
13D1004-06	SP-3 0-2 ft	8 oz. WM Clear Glass Cool to 4° C
13D1004-07	SP-3 8-9 ft	8 oz. WM Clear Glass Cool to 4° C
13D1004-08	Filed Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
13D1004-09	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
13D1004-10	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
13D1004-11	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
13D1004-12	MW-3 (Duplicate)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
13D1004-13	Field Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
13D1004-14	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL); therefore, the result is an estimated concentration.
HT-02	NON-COMPLIANT-This sample was received outside the EPA recommended holding time.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
ND	Analyte NOT DETECTED at the stated Reporting Limit (RL) or above.
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
MDL	METHOD DETECTION LIMIT - the minimum concentration that can be measured and reported with a 99% confidence that the concentration is greater than zero. If requested or required, a value reported below the RL and above the MDL is considered estimated and is noted with a "J" flag.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.





Non-Dir. Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two.

For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the MDL, with values between the MDL and the RL being "J" flagged as estimated results.

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Revision Description: Revised VOA, SVOA and Pesticide analyte list, per client request.



1120 RESEARCH DR. STRATFORD, CT 06615  
(203) 325-1371 FAX (203) 357-0166

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 13D1004

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type	
Company: Hydro Tech Env. Corp.		<b>SAME</b> <input checked="" type="checkbox"/>		<b>SAME</b>		#130030 11-28 31st Drive Queens NY		RUSH-Same Day		Summary Report X	
Address: 15 Ocean Ave, 2nd Fl		Name:		Muslima				RUSH-Next Day		QA Report X	
Bklyn , NY 11225		Company:		Hydro Tech Env. Corp.				RUSH-Two Day		CT RCP	
Phone.: 718-636-0800		Address:		77 Arkay Dr. Suite G				RUSH-Three Day		CT RCP DQA/DUE Pkg	
Contact: Paul I. Matli				Hauppauge Ny				RUSH-Four Day		NY ASP A Package	
E-mail: pmatli@hydrotechenv.com		E-mail:		mward_hydrotechenv.com				Standard (5-7day)		NY ASP B Package	
								5 days		NJDEP Reduced Deliv	
<p><b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b></p> <p>Samples Collected/Authorized By (Signature) _____  Paul E. Matli Name (printed)</p>											
<p><b>Matrix Codes</b></p> <p>S - soil  Other - specify (oil, etc.)  WW - wastewater  GW - groundwater  DW - drinking water  Air-A - ambient air  Air-SV - soil vapor</p>											
<p><b>Analysis Requested (List above includes common analysis)</b></p> <p>EPA 8260/8270C/8081/8082/TAL Metals (Incl.Chromium Hex)</p>											
Sample Identification		Date-Time Sampled	Matrix	Container Description							
SP-1 0-2 ft	4/24/2013	X	S	4 terra core vials + 8 oz jar							
SP-1 8-9 ft	X	X	X	X							
SP-2 0-2 ft	X	X	X	X							
SP-2 8-9 ft (Duplicate)	X	X	X	X							
SP-3 0-2 ft	X	X	X	X							
SP-3 8-9 ft	X	X	X	X							
Filed Blank	X	X	X	2x40ml vial, 2x250 plastic, 3x1L amber 1x500 ml plastic							
<p><b>Comments:</b></p> <p>X = same as before      Samples referred to by job ID #120028  NYSDCE Part 375 Unrestricted and Restricted Residential  Apply E -designation quote for billing</p> <p>Soil sample for VOCs collected per EPA 5053</p>											
Preservation (check all applicable)				4°C _____ Frozen _____ HCl _____ MeOH _____ HNO <sub>3</sub> _____ NaOH _____				OTHER: _____			
Special Instructions				ZnAC _____ Ascorbic Acid _____ Other _____				_____			
Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>				Samples Relinquished By _____ Date/Time _____				Samples Received By _____ Date/Time _____			
Temperature on Receipt _____ °C				Date/Time _____				Date/Time _____			



# Field Chain-of-Custody Record

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 13D1004

[illegible]



# 2013 Soil Vapor Lab Report





# Technical Report

prepared for:

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 05/01/2013

**Client Project ID: 11-28 31 Drive NY # 130030**

York Project (SDG) No.: 13D0962

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440



Report Date: 05/01/2013  
Client Project ID: 11-28 31 Drive NY # 130030  
York Project (SDG) No.: 13D0962

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

---

**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 26, 2013 and listed below. The project was identified as your project: **11-28 31 Drive NY # 130030**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
13D0962-01	SV-1	Soil Vapor	04/25/2013	04/26/2013
13D0962-02	SV-2	Soil Vapor	04/25/2013	04/26/2013
13D0962-03	SV-3	Soil Vapor	04/25/2013	04/26/2013

**General Notes for York Project (SDG) No.: 13D0962**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 05/01/2013

**YORK**





## Sample Information

**Client Sample ID:** SV-1

**York Sample ID:** 13D0962-01

**York Project (SDG) No.**

13D0962

**Client Project ID**

11-28 31 Drive NY # 130030

**Matrix**

Soil Vapor

**Collection Date/Time**

April 25, 2013 3:00 pm

**Date Received**

04/26/2013

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	5.0	5.0	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	6.9	6.9	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
79-01-6	Trichloroethylene	ND		ug/m <sup>3</sup>	5.3	5.3	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	8.9	8.9	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	7.8	7.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
108-88-3	Toluene	48		ug/m <sup>3</sup>	7.4	7.4	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
109-99-9	Tetrahydrofuran	23		ug/m <sup>3</sup>	5.8	5.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
127-18-4	Tetrachloroethylene	140		ug/m <sup>3</sup>	13	13	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
100-42-5	Styrene	ND		ug/m <sup>3</sup>	8.4	8.4	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
115-07-01	Propylene	ND		ug/m <sup>3</sup>	3.4	3.4	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
622-96-8	p-Ethyltoluene	ND		ug/m <sup>3</sup>	48	48	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
179601-23-1	p- & m- Xylenes	43		ug/m <sup>3</sup>	8.6	8.6	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
95-47-6	o-Xylene	14		ug/m <sup>3</sup>	8.6	8.6	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
110-54-3	n-Hexane	9.0		ug/m <sup>3</sup>	6.9	6.9	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
142-82-5	n-Heptane	820		ug/m <sup>3</sup>	8.1	8.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-09-2	Methylene chloride	17		ug/m <sup>3</sup>	6.8	6.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	7.1	7.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
108-10-1	4-Methyl-2-pentanone	ND		ug/m <sup>3</sup>	8.1	8.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
67-63-0	Isopropanol	2200	QCAL, E	ug/m <sup>3</sup>	4.8	4.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	21	21	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
100-41-4	Ethyl Benzene	10		ug/m <sup>3</sup>	8.6	8.6	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
141-78-6	Ethyl acetate	230		ug/m <sup>3</sup>	7.1	7.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
110-82-7	Cyclohexane	ND		ug/m <sup>3</sup>	6.8	6.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	8.9	8.9	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	7.8	7.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
74-87-3	Chloromethane	ND		ug/m <sup>3</sup>	4.1	4.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	9.6	9.6	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	5.2	5.2	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	6.2	6.2	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	6.1	6.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	7.7	7.7	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	20	20	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	12	12	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD





## Sample Information

**Client Sample ID:** SV-1

**York Sample ID:** 13D0962-01

York Project (SDG) No.

13D0962

Client Project ID

11-28 31 Drive NY # 130030

Matrix

Soil Vapor

Collection Date/Time

April 25, 2013 3:00 pm

Date Received

04/26/2013

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	10	10	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
71-43-2	Benzene	ND		ug/m <sup>3</sup>	6.3	6.3	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
67-64-1	Acetone	900		ug/m <sup>3</sup>	4.7	4.7	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
591-78-6	2-Hexanone	ND		ug/m <sup>3</sup>	8.1	8.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
78-93-3	2-Butanone	40		ug/m <sup>3</sup>	5.8	5.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	7.1	7.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	12	12	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	12	12	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	8.5	8.5	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	9.7	9.7	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	14	14	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	9.1	9.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	8.0	8.0	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	12	12	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m <sup>3</sup>	9.7	9.7	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	15	15	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	7.8	7.8	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	8.0	8.0	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m <sup>3</sup>	11	11	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	11	11	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	15	15	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	14	14	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	11	11	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
75-71-8	Dichlorodifluoromethane	ND		ug/m <sup>3</sup>	9.7	9.7	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	15	15	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	16	16	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	8.1	8.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	9.1	9.1	19.38	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:01	TD
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
460-00-4	Surrogate: p-Bromofluorobenzene	102 %	70-130								





## Sample Information

**Client Sample ID:** SV-2

**York Sample ID:** 13D0962-02

**York Project (SDG) No.**

13D0962

**Client Project ID**

11-28 31 Drive NY # 130030

**Matrix**

Soil Vapor

**Collection Date/Time**

April 25, 2013 3:00 pm

**Date Received**

04/26/2013

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	4.9	4.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	6.8	6.8	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
79-01-6	Trichloroethylene	9.3		ug/m <sup>3</sup>	5.2	5.2	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	8.7	8.7	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	7.6	7.6	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
108-88-3	Toluene	33		ug/m <sup>3</sup>	7.3	7.3	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
109-99-9	Tetrahydrofuran	25		ug/m <sup>3</sup>	5.7	5.7	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
127-18-4	Tetrachloroethylene	1600		ug/m <sup>3</sup>	13	13	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
100-42-5	Styrene	ND		ug/m <sup>3</sup>	8.2	8.2	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
115-07-01	Propylene	ND		ug/m <sup>3</sup>	3.3	3.3	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
622-96-8	p-Ethyltoluene	ND		ug/m <sup>3</sup>	47	47	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
179601-23-1	p- & m- Xylenes	50		ug/m <sup>3</sup>	8.4	8.4	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
95-47-6	o-Xylene	15		ug/m <sup>3</sup>	8.4	8.4	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
110-54-3	n-Hexane	ND		ug/m <sup>3</sup>	6.8	6.8	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
142-82-5	n-Heptane	55		ug/m <sup>3</sup>	7.9	7.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-09-2	Methylene chloride	29		ug/m <sup>3</sup>	6.7	6.7	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	6.9	6.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
108-10-1	4-Methyl-2-pentanone	ND		ug/m <sup>3</sup>	7.9	7.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
67-63-0	Isopropanol	210		ug/m <sup>3</sup>	4.7	4.7	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	21	21	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
100-41-4	Ethyl Benzene	12		ug/m <sup>3</sup>	8.4	8.4	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
141-78-6	Ethyl acetate	ND		ug/m <sup>3</sup>	6.9	6.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
110-82-7	Cyclohexane	ND		ug/m <sup>3</sup>	6.6	6.6	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	8.7	8.7	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	7.6	7.6	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
74-87-3	Chloromethane	ND		ug/m <sup>3</sup>	4.0	4.0	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	9.4	9.4	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	5.1	5.1	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	6.1	6.1	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-15-0	Carbon disulfide	8.4		ug/m <sup>3</sup>	6.0	6.0	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	7.5	7.5	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	20	20	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	12	12	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD





## Sample Information

**Client Sample ID:** SV-2

**York Sample ID:** 13D0962-02

**York Project (SDG) No.**

13D0962

**Client Project ID**

11-28 31 Drive NY # 130030

**Matrix**

Soil Vapor

**Collection Date/Time**

April 25, 2013 3:00 pm

**Date Received**

04/26/2013

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	10	10	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
71-43-2	Benzene	ND		ug/m <sup>3</sup>	6.2	6.2	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
67-64-1	Acetone	520		ug/m <sup>3</sup>	4.6	4.6	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
591-78-6	2-Hexanone	ND		ug/m <sup>3</sup>	7.9	7.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
78-93-3	2-Butanone	15		ug/m <sup>3</sup>	5.7	5.7	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	6.9	6.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	12	12	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	12	12	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	8.4	8.4	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	9.5	9.5	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	13	13	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	8.9	8.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	7.8	7.8	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	12	12	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
95-63-6	1,2,4-Trimethylbenzene	35		ug/m <sup>3</sup>	9.5	9.5	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	14	14	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	7.6	7.6	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	7.8	7.8	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m <sup>3</sup>	11	11	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	11	11	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	15	15	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	13	13	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	11	11	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
75-71-8	Dichlorodifluoromethane	ND		ug/m <sup>3</sup>	9.5	9.5	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	15	15	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	15	15	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	7.9	7.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	8.9	8.9	18.95	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 20:47	TD
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
460-00-4	Surrogate: p-Bromofluorobenzene	104 %	70-130								





## Sample Information

**Client Sample ID:** SV-3

**York Sample ID:** 13D0962-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

13D0962

11-28 31 Drive NY # 130030

Soil Vapor

April 25, 2013 3:00 pm

04/26/2013

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	5.8	5.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	8.0	8.0	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
79-01-6	Trichloroethylene	15		ug/m <sup>3</sup>	6.1	6.1	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	10	10	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	9.0	9.0	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
108-88-3	Toluene	22		ug/m <sup>3</sup>	8.5	8.5	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
109-99-9	Tetrahydrofuran	20		ug/m <sup>3</sup>	6.7	6.7	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
127-18-4	Tetrachloroethylene	1400		ug/m <sup>3</sup>	15	15	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
100-42-5	Styrene	ND		ug/m <sup>3</sup>	9.6	9.6	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
115-07-01	Propylene	ND		ug/m <sup>3</sup>	3.9	3.9	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
622-96-8	p-Ethyltoluene	ND		ug/m <sup>3</sup>	56	56	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
179601-23-1	p- & m- Xylenes	41		ug/m <sup>3</sup>	9.8	9.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
95-47-6	o-Xylene	12		ug/m <sup>3</sup>	9.8	9.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
110-54-3	n-Hexane	ND		ug/m <sup>3</sup>	8.0	8.0	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
142-82-5	n-Heptane	32		ug/m <sup>3</sup>	9.3	9.3	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-09-2	Methylene chloride	9.4		ug/m <sup>3</sup>	7.8	7.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	8.1	8.1	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
108-10-1	4-Methyl-2-pentanone	ND		ug/m <sup>3</sup>	9.2	9.2	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
67-63-0	Isopropanol	79		ug/m <sup>3</sup>	5.6	5.6	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	24	24	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
100-41-4	Ethyl Benzene	9.8		ug/m <sup>3</sup>	9.8	9.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
141-78-6	Ethyl acetate	ND		ug/m <sup>3</sup>	8.1	8.1	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
110-82-7	Cyclohexane	44		ug/m <sup>3</sup>	7.8	7.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	10	10	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	9.0	9.0	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
74-87-3	Chloromethane	ND		ug/m <sup>3</sup>	4.7	4.7	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
67-66-3	Chloroform	18		ug/m <sup>3</sup>	11	11	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	6.0	6.0	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	7.1	7.1	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-15-0	Carbon disulfide	7.0		ug/m <sup>3</sup>	7.0	7.0	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	8.8	8.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	23	23	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	14	14	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD





## Sample Information

**Client Sample ID:** SV-3

**York Sample ID:** 13D0962-03

**York Project (SDG) No.**

13D0962

**Client Project ID**

11-28 31 Drive NY # 130030

**Matrix**

Soil Vapor

**Collection Date/Time**

April 25, 2013 3:00 pm

**Date Received**

04/26/2013

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	12	12	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
71-43-2	Benzene	ND		ug/m <sup>3</sup>	7.2	7.2	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
67-64-1	Acetone	82		ug/m <sup>3</sup>	5.4	5.4	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
591-78-6	2-Hexanone	ND		ug/m <sup>3</sup>	9.2	9.2	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
78-93-3	2-Butanone	ND		ug/m <sup>3</sup>	6.7	6.7	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	8.1	8.1	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	14	14	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	14	14	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	9.8	9.8	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	11	11	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	16	16	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	10	10	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	9.1	9.1	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	14	14	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
95-63-6	1,2,4-Trimethylbenzene	29		ug/m <sup>3</sup>	11	11	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	17	17	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	9.0	9.0	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	9.1	9.1	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m <sup>3</sup>	13	13	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	12	12	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	17	17	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	16	16	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	12	12	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
75-71-8	Dichlorodifluoromethane	ND		ug/m <sup>3</sup>	11	11	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	17	17	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	18	18	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	9.2	9.2	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	10	10	22.2	EPA Compendium TO-15	04/29/2013 09:00	04/30/2013 21:32	TD
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
460-00-4	Surrogate: p-Bromofluorobenzene	105 %	70-130								





## Analytical Batch Summary

**Batch ID:** BD31427

**Preparation Method:** EPA TO15 PREP

**Prepared By:** TD

YORK Sample ID	Client Sample ID	Preparation Date
13D0962-01	SV-1	04/29/13
13D0962-02	SV-2	04/29/13
13D0962-03	SV-3	04/29/13





Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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## Notes and Definitions

QCAL	This analyte is outside calibration QC limits due to the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
ND	Analyte NOT DETECTED at the stated Reporting Limit (RL) or above.
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
MDL	METHOD DETECTION LIMIT - the minimum concentration that can be measured and reported with a 99% confidence that the concentration is greater than zero. If requested or required, a value reported below the RL and above the MDL is considered estimated and is noted with a "J" flag.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the MDL, with values between the MDL and the RL being "J" flagged as estimated results.



YORK

ANALYTICAL LABORATORIES, INC.  
120 RESEARCH DR. • STRATFORD, CT 06615  
(203) 325-1371 FAX (203) 357-0166

## Field Chain-of-Custody Record - AIR

Page 1 of 1

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 13D0962

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type/Deliverables	
Company: <u>Hydrotech Env.</u>	Company: <u>SATC</u>	Company: <u>SATC</u>	Company: <u>SATC</u>	11-28-91	11-28-91	Summary Report	Summary w/ QA Summary	<input type="checkbox"/>	<input type="checkbox"/>	CT RCP Package	<input type="checkbox"/>
Address: <u>150 Green Ave</u>	Address: <u>547 E</u>	Address: <u>547 E</u>	Address: <u>547 E</u>	<u>5219</u>	<u>5219</u>	NY ASP A Package	NY ASP B/CLP Pkg	<input type="checkbox"/>	<input type="checkbox"/>	NY ASP A Package	<input type="checkbox"/>
Phone No. <u>715-636-0808</u>	Phone No. <u>547 E</u>	Phone No. <u>547 E</u>	Phone No. <u>547 E</u>	Purchase Order No. <u>5219</u>	Purchase Order No. <u>5219</u>	NYDEP Reduced	Electronic Deliverables:	<input type="checkbox"/>	<input type="checkbox"/>	Standard Excel	<input checked="" type="checkbox"/>
Contact Person: <u>Paul Mettli</u>	Attention: <u>Paul Mettli</u>	Attention: <u>Paul Mettli</u>	Attention: <u>Paul Mettli</u>	Samples from: CT <u>NY</u>	Samples from: CT <u>NY</u>	EDD (Specify Type)	Regulatory Excel	<input type="checkbox"/>	<input type="checkbox"/>	Standard Comparison Excel	<input type="checkbox"/>
E-Mail Address:	E-Mail Address:	E-Mail Address:	E-Mail Address:	EPA TO-15 List	EPA TO-15 List	Special Instructions					
Air Matrix Codes				TO-15 Volatiles and Other Gas Analyses				Detection Limits Required			
AI - INDOOR Ambient Air	AI - INDOOR Ambient Air			EPA TO-14A List				≤ 1 ug/m <sup>3</sup>			
AO - OUTDOOR Amb. Air	AO - OUTDOOR Amb. Air			Tentatively Identified Compounds				NYSDEC VI Limits			
AE - Vapor Extraction Well/ Process Gas/Effluent	AE - Vapor Extraction Well/ Process Gas/Effluent			NYSDEC VI list				(VI vapor extraction) NJDEP low level			
AS - SOIL Vapor/Sub-Slab	AS - SOIL Vapor/Sub-Slab			Project Specific List by TO-15				Routine Survey			
Samples Collected/Authorized By (Signature)				NJDEP Target List				Other: <u>6.5 mg/m<sup>3</sup></u>			
: Name (printed): <u>Paul Mettli</u>				CTDEP RCP Target List							
Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Choose Analyses Needed from the Menu Above and Enter Below		Sampling Media				
<u>SV-1</u>	<u>4/25</u>	<u>AS</u>	<u>-30+</u>	<u>-8</u>	<u>EPA TO-15</u>		<u>6 Liter Summa canister</u>				
<u>SV-2</u>	<u>↓</u>	<u>↓</u>	<u>-30</u>	<u>-5</u>	<u>↓</u>		<u>Tedlar Bag</u>				
<u>SV-3</u>	<u>↓</u>	<u>↓</u>	<u>-30</u>	<u>-8</u>	<u>↓</u>		<u>6 Liter Summa canister</u>				
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# 2015 Groundwater Lab Report





# Technical Report

prepared for:

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 01/20/2015

**Client Project ID: #140344 11-28 31 Drive, LIC NY**

York Project (SDG) No.: 15A0377

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440



**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

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**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on January 14, 2015 and listed below. The project was identified as your project: **#140344 11-28 31 Drive, LIC NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
15A0377-01	MW-1	Water	01/13/2015	01/14/2015
15A0377-02	MW-2	Water	01/13/2015	01/14/2015
15A0377-03	MW-3	Water	01/13/2015	01/14/2015
15A0377-04	MW-4	Water	01/13/2015	01/14/2015
15A0377-05	MW-5	Water	01/13/2015	01/14/2015
15A0377-06	MW-6	Water	01/13/2015	01/14/2015
15A0377-07	MW-7	Water	01/13/2015	01/14/2015
15A0377-08	MW-8	Water	01/13/2015	01/14/2015
15A0377-09	Field Blank	Water	01/13/2015	01/14/2015
15A0377-10	Trip Blank	Water	01/13/2015	01/14/2015



## **General Notes for York Project (SDG) No.: 15A0377**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 01/20/2015







## Sample Information

<b><u>Client Sample ID:</u></b>	<b>MW-1</b>	<b><u>York Sample ID:</u></b>	<b>15A0377-01</b>	
<b><u>York Project (SDG) No.</u></b>	<b><u>Client Project ID</u></b>	<b><u>Matrix</u></b>	<b><u>Collection Date/Time</u></b>	<b><u>Date Received</u></b>
15A0377	#140344 11-28 31 Drive, LIC NY	Water	January 13, 2015 3:00 pm	01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>0.21</b>	<b>J</b>	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 15A0377-01

**York Project (SDG) No.**

15A0377

**Client Project ID**

#140344 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

January 13, 2015 3:00 pm

**Date Received**

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>0.28</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
108-88-3	<b>Toluene</b>	<b>0.28</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/17/2015 08:21	01/17/2015 14:59	SS





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 15A0377-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	112 %			69-130						
460-00-4	Surrogate: p-Bromofluorobenzene	103 %			79-122						
2037-26-5	Surrogate: Toluene-d8	99.1 %			81-117						

## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 15A0377-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 15A0377-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
67-66-3	<b>Chloroform</b>	<b>0.35</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 15A0377-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>3.2</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/17/2015 08:21	01/17/2015 15:32	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %		69-130							
460-00-4	Surrogate: p-Bromofluorobenzene	103 %		79-122							
2037-26-5	Surrogate: Toluene-d8	97.1 %		81-117							

## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 15A0377-03

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 15A0377-03

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
67-66-3	<b>Chloroform</b>	<b>0.54</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>1.1</b>	CCV-E	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 15A0377-03

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>21</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
79-01-6	<b>Trichloroethylene</b>	<b>0.52</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:04	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	123 %	69-130								
460-00-4	Surrogate: p-Bromofluorobenzene	103 %	79-122								
2037-26-5	Surrogate: Toluene-d8	98.0 %	81-117								





## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 15A0377-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	<b>1,1,1,2-Tetrachloroethane</b>	<b>1.4</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
79-00-5	<b>1,1,2-Trichloroethane</b>	<b>0.76</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-35-4	<b>1,1-Dichloroethylene</b>	<b>0.46</b>	CCV-E, J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
67-64-1	<b>Acetone</b>	<b>1.4</b>	CCV-E, J	ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS





## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 15A0377-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
67-66-3	<b>Chloroform</b>	<b>0.37</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>20</b>	CCV-E	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>3.1</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>3800</b>		ug/L	50	120	250	EPA 8260C	01/17/2015 08:21	01/20/2015 14:05	SS
108-88-3	<b>Toluene</b>	<b>0.34</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
79-01-6	<b>Trichloroethylene</b>	<b>17</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
75-01-4	<b>Vinyl Chloride</b>	<b>0.81</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/17/2015 08:21	01/17/2015 16:36	SS





## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 15A0377-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	116 %			69-130						
460-00-4	Surrogate: p-Bromofluorobenzene	104 %			79-122						
2037-26-5	Surrogate: Toluene-d8	97.8 %			81-117						

## Sample Information

**Client Sample ID:** MW-5

**York Sample ID:** 15A0377-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS





## Sample Information

**Client Sample ID:** MW-5

**York Sample ID:** 15A0377-05

**York Project (SDG) No.**

15A0377

**Client Project ID**

#140344 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

January 13, 2015 3:00 pm

**Date Received**

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>0.39</b>	<b>J</b>	ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS





## Sample Information

**Client Sample ID:** MW-5

**York Sample ID:** 15A0377-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>5.6</b>		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
79-01-6	<b>Trichloroethylene</b>	<b>0.81</b>		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/19/2015 12:54	01/19/2015 19:02	SS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %		69-130							
460-00-4	Surrogate: p-Bromofluorobenzene	107 %		79-122							
2037-26-5	Surrogate: Toluene-d8	99.3 %		81-117							

## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 15A0377-06

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS





## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 15A0377-06

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>40</b>		ug/L	2.0	5.0	10	EPA 8260C	01/17/2015 08:21	01/19/2015 19:31	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS





## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 15A0377-06

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>86</b>		ug/L	2.0	5.0	10	EPA 8260C	01/17/2015 08:21	01/19/2015 19:31	SS
108-88-3	<b>Toluene</b>	<b>0.28</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>0.28</b>	CCV-E, J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
79-01-6	<b>Trichloroethylene</b>	<b>8.9</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
75-01-4	<b>Vinyl Chloride</b>	<b>0.42</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/17/2015 08:21	01/17/2015 17:40	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	116 %	69-130								
460-00-4	Surrogate: p-Bromofluorobenzene	102 %	79-122								
2037-26-5	Surrogate: Toluene-d8	99.8 %	81-117								





## Sample Information

**Client Sample ID:** MW-7

**York Sample ID:** 15A0377-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
67-64-1	Acetone	1.3	J	ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS





## Sample Information

**Client Sample ID:** MW-7

**York Sample ID:** 15A0377-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
67-66-3	<b>Chloroform</b>	<b>1.0</b>		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>3.7</b>		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:00	SS

**Surrogate Recoveries**

**Result**

**Acceptance Range**





## Sample Information

**Client Sample ID:** MW-7

**York Sample ID:** 15A0377-07

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %			69-130						
460-00-4	Surrogate: p-Bromofluorobenzene	106 %			79-122						
2037-26-5	Surrogate: Toluene-d8	98.3 %			81-117						

## Sample Information

**Client Sample ID:** MW-8

**York Sample ID:** 15A0377-08

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS





## Sample Information

**Client Sample ID:** MW-8

**York Sample ID:** 15A0377-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>1.1</b>		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS





## Sample Information

**Client Sample ID:** MW-8

**York Sample ID:** 15A0377-08

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>2.0</b>		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
79-01-6	<b>Trichloroethylene</b>	<b>1.2</b>		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/19/2015 12:54	01/19/2015 20:30	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	102 %	69-130								
460-00-4	Surrogate: p-Bromofluorobenzene	109 %	79-122								
2037-26-5	Surrogate: Toluene-d8	99.0 %	81-117								

## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 15A0377-09

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS





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January 13, 2015 3:00 pm

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### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS





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Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
95-47-6	<b>o-Xylene</b>	<b>0.28</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>0.53</b>		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:16	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	119 %	69-130								
460-00-4	Surrogate: p-Bromofluorobenzene	102 %	79-122								
2037-26-5	Surrogate: Toluene-d8	98.5 %	81-117								

## Sample Information

**Client Sample ID:** Trip Blank

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York Project (SDG) No.

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Matrix

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15A0377

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### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
527-53-7	1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 15A0377-10

**York Project (SDG) No.**

15A0377

**Client Project ID**

#140344 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

January 13, 2015 3:00 pm

**Date Received**

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
95-47-6	<b>o-Xylene</b>	<b>0.29</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
105-05-5	p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
622-96-8	p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
127-18-4	<b>Tetrachloroethylene</b>	<b>0.36</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
108-88-3	<b>Toluene</b>	<b>0.22</b>	J	ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	01/17/2015 08:21	01/17/2015 19:48	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	112 %	69-130								





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 15A0377-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

15A0377

#140344 11-28 31 Drive, LIC NY

Water

January 13, 2015 3:00 pm

01/14/2015

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	105 %			79-122						
2037-26-5	Surrogate: Toluene- <i>d</i> 8	98.5 %			81-117						





## Analytical Batch Summary

**Batch ID:** BA50737

**Preparation Method:** EPA 5030B

**Prepared By:** OW

YORK Sample ID	Client Sample ID	Preparation Date
15A0377-01	MW-1	01/17/15
15A0377-02	MW-2	01/17/15
15A0377-03	MW-3	01/17/15
15A0377-04	MW-4	01/17/15
15A0377-06	MW-6	01/17/15
15A0377-09	Field Blank	01/17/15
15A0377-10	Trip Blank	01/17/15
BA50737-BLK1	Blank	01/17/15
BA50737-BS1	LCS	01/17/15
BA50737-BSD1	LCS Dup	01/17/15
BA50737-MS1	Matrix Spike	01/17/15
BA50737-MSD1	Matrix Spike Dup	01/17/15

**Batch ID:** BA50787

**Preparation Method:** EPA 5030B

**Prepared By:** OW

YORK Sample ID	Client Sample ID	Preparation Date
15A0377-04RE1	MW-4	01/19/15
15A0377-05	MW-5	01/19/15
15A0377-06RE1	MW-6	01/19/15
15A0377-07	MW-7	01/19/15
15A0377-08	MW-8	01/19/15
BA50787-BLK1	Blank	01/19/15
BA50787-BS1	LCS	01/19/15
BA50787-BSD1	LCS Dup	01/19/15
BA50787-MS1	Matrix Spike	01/19/15
BA50787-MSD1	Matrix Spike Dup	01/19/15

**Batch ID:** BA50837

**Preparation Method:** EPA 5030B

**Prepared By:** OW

YORK Sample ID	Client Sample ID	Preparation Date
15A0377-04RE2	MW-4	01/20/15
BA50837-BLK1	Blank	01/20/15
BA50837-BS1	LCS	01/20/15
BA50837-BSD1	LCS Dup	01/20/15





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50737 - EPA 5030B

##### Blank (BA50737-BLK1)

Prepared & Analyzed: 01/17/2015

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L
1,1,1-Trichloroethane	ND	0.50	"
1,1,2,2-Tetrachloroethane	ND	0.50	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"
1,1,2-Trichloroethane	ND	0.50	"
1,1-Dichloroethane	ND	0.50	"
1,1-Dichloroethylene	ND	0.50	"
1,1-Dichloropropylene	ND	0.50	"
1,2,3-Trichlorobenzene	0.68	0.50	"
1,2,3-Trichloropropane	ND	0.50	"
1,2,4,5-Tetramethylbenzene	0.37	0.50	"
1,2,4-Trichlorobenzene	0.53	0.50	"
1,2,4-Trimethylbenzene	ND	0.50	"
1,2-Dibromo-3-chloropropane	ND	0.50	"
1,2-Dibromoethane	ND	0.50	"
1,2-Dichlorobenzene	ND	0.50	"
1,2-Dichloroethane	ND	0.50	"
1,2-Dichloropropane	ND	0.50	"
1,3,5-Trimethylbenzene	ND	0.50	"
1,3-Dichlorobenzene	ND	0.50	"
1,3-Dichloropropane	ND	0.50	"
1,4-Dichlorobenzene	ND	0.50	"
2,2-Dichloropropane	ND	0.50	"
2-Butanone	ND	0.50	"
2-Chlorotoluene	ND	0.50	"
2-Hexanone	ND	0.50	"
4-Chlorotoluene	ND	0.50	"
4-Methyl-2-pentanone	ND	0.50	"
Acetone	ND	2.0	"
Benzene	ND	0.50	"
Bromobenzene	ND	0.50	"
Bromochloromethane	ND	0.50	"
Bromodichloromethane	ND	0.50	"
Bromoform	ND	0.50	"
Bromomethane	ND	0.50	"
Carbon disulfide	ND	0.50	"
Carbon tetrachloride	ND	0.50	"
Chlorobenzene	ND	0.50	"
Chloroethane	ND	0.50	"
Chloroform	ND	0.50	"
Chloromethane	ND	0.50	"
cis-1,2-Dichloroethylene	ND	0.50	"
cis-1,3-Dichloropropylene	ND	0.50	"
Dibromochloromethane	ND	0.50	"
Dibromomethane	ND	0.50	"
Dichlorodifluoromethane	ND	0.50	"
Ethyl Benzene	ND	0.50	"
Hexachlorobutadiene	0.60	0.50	"
Isopropylbenzene	ND	0.50	"
Methyl tert-butyl ether (MTBE)	ND	0.50	"
Methylene chloride	ND	2.0	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50737 - EPA 5030B

##### Blank (BA50737-BLK1)

Prepared & Analyzed: 01/17/2015

Naphthalene	ND	2.0	ug/L
n-Butylbenzene	0.36	0.50	"
n-Propylbenzene	ND	0.50	"
o-Xylene	ND	0.50	"
p- & m- Xylenes	ND	1.0	"
p-Diethylbenzene	ND	0.50	"
p-Ethyltoluene	ND	0.50	"
p-Isopropyltoluene	0.23	0.50	"
sec-Butylbenzene	0.21	0.50	"
Styrene	ND	0.50	"
tert-Butylbenzene	ND	0.50	"
Tetrachloroethylene	ND	0.50	"
Toluene	ND	0.50	"
trans-1,2-Dichloroethylene	ND	0.50	"
trans-1,3-Dichloropropylene	ND	0.50	"
Trichloroethylene	ND	0.50	"
Trichlorofluoromethane	ND	0.50	"
Vinyl Chloride	ND	0.50	"
Xylenes, Total	ND	1.5	"

Surrogate: 1,2-Dichloroethane-d4	12.9	"	10.0	129	69-130
Surrogate: p-Bromofluorobenzene	10.2	"	10.0	102	79-122
Surrogate: Toluene-d8	9.78	"	10.0	97.8	81-117

##### LCS (BA50737-BS1)

Prepared & Analyzed: 01/17/2015

1,1,1,2-Tetrachloroethane	10.4	ug/L	10.0	104	82-126
1,1,1-Trichloroethane	10.9	"	10.0	109	78-136
1,1,2,2-Tetrachloroethane	9.81	"	10.0	98.1	76-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.86	"	10.0	98.6	54-165
1,1,2-Trichloroethane	9.36	"	10.0	93.6	82-123
1,1-Dichloroethane	11.7	"	10.0	117	82-129
1,1-Dichloroethylene	12.3	"	10.0	123	68-138
1,1-Dichloropropylene	11.6	"	10.0	116	83-133
1,2,3-Trichlorobenzene	11.2	"	10.0	112	76-136
1,2,3-Trichloropropane	10.4	"	10.0	104	77-128
1,2,4,5-Tetramethylbenzene	10.8	"	10.0	108	85-140
1,2,4-Trichlorobenzene	11.0	"	10.0	110	76-137
1,2,4-Trimethylbenzene	10.7	"	10.0	107	82-132
1,2-Dibromo-3-chloropropane	10.8	"	10.0	108	45-147
1,2-Dibromoethane	10.3	"	10.0	103	83-124
1,2-Dichlorobenzene	10.8	"	10.0	108	79-123
1,2-Dichloroethane	11.2	"	10.0	112	73-132
1,2-Dichloropropane	10.6	"	10.0	106	78-126
1,3,5-Trimethylbenzene	10.5	"	10.0	105	80-131
1,3-Dichlorobenzene	10.6	"	10.0	106	86-122
1,3-Dichloropropane	10.6	"	10.0	106	81-125
1,4-Dichlorobenzene	10.5	"	10.0	105	85-124
2,2-Dichloropropane	15.0	"	10.0	150	56-150
2-Butanone	11.2	"	10.0	112	49-152
2-Chlorotoluene	10.9	"	10.0	109	79-130
2-Hexanone	7.74	"	10.0	77.4	51-146
4-Chlorotoluene	10.7	"	10.0	107	79-128
4-Methyl-2-pentanone	9.78	"	10.0	97.8	57-145





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50737 - EPA 5030B

#### LCS (BA50737-BS1)

Prepared & Analyzed: 01/17/2015

Acetone	9.58		ug/L	10.0		95.8	14-150				
Benzene	11.1		"	10.0		111	85-126				
Bromobenzene	10.9		"	10.0		109	78-129				
Bromochloromethane	11.9		"	10.0		119	77-128				
Bromodichloromethane	10.0		"	10.0		100	79-128				
Bromoform	9.65		"	10.0		96.5	78-133				
Bromomethane	9.78		"	10.0		97.8	43-168				
Carbon disulfide	12.2		"	10.0		122	68-146				
Carbon tetrachloride	11.0		"	10.0		110	77-141				
Chlorobenzene	10.5		"	10.0		105	88-120				
Chloroethane	9.53		"	10.0		95.3	65-136				
Chloroform	11.0		"	10.0		110	82-128				
Chloromethane	9.50		"	10.0		95.0	43-155				
cis-1,2-Dichloroethylene	12.1		"	10.0		121	83-129				
cis-1,3-Dichloropropylene	11.5		"	10.0		115	80-131				
Dibromochloromethane	10.1		"	10.0		101	80-130				
Dibromomethane	10.1		"	10.0		101	72-134				
Dichlorodifluoromethane	8.56		"	10.0		85.6	44-144				
Ethyl Benzene	10.7		"	10.0		107	80-131				
Hexachlorobutadiene	11.3		"	10.0		113	67-146				
Isopropylbenzene	10.7		"	10.0		107	76-140				
Methyl tert-butyl ether (MTBE)	10.3		"	10.0		103	76-135				
Methylene chloride	12.1		"	10.0		121	55-137				
Naphthalene	10.3		"	10.0		103	70-147				
n-Butylbenzene	11.3		"	10.0		113	79-132				
n-Propylbenzene	11.0		"	10.0		110	78-133				
o-Xylene	10.8		"	10.0		108	78-130				
p- & m- Xylenes	21.6		"	20.0		108	77-133				
p-Diethylbenzene	10.6		"	10.0		106	84-134				
p-Ethyltoluene	10.4		"	10.0		104	88-129				
p-Isopropyltoluene	10.9		"	10.0		109	81-136				
sec-Butylbenzene	10.9		"	10.0		109	79-137				
Styrene	11.1		"	10.0		111	67-132				
tert-Butylbenzene	10.8		"	10.0		108	77-138				
Tetrachloroethylene	10.6		"	10.0		106	82-131				
Toluene	10.4		"	10.0		104	80-127				
trans-1,2-Dichloroethylene	11.8		"	10.0		118	80-132				
trans-1,3-Dichloropropylene	10.8		"	10.0		108	78-131				
Trichloroethylene	10.6		"	10.0		106	82-128				
Trichlorofluoromethane	10.2		"	10.0		102	67-139				
Vinyl Chloride	10.2		"	10.0		102	58-145				
Surrogate: 1,2-Dichloroethane-d4	10.7		"	10.0		107	69-130				
Surrogate: p-Bromofluorobenzene	9.95		"	10.0		99.5	79-122				
Surrogate: Toluene-d8	9.95		"	10.0		99.5	81-117				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BA50737 - EPA 5030B</b>											
<b>LCS Dup (BA50737-BSD1)</b>						Prepared & Analyzed: 01/17/2015					
1,1,1,2-Tetrachloroethane	10.5		ug/L	10.0		105	82-126		1.34	30	
1,1,1-Trichloroethane	12.3		"	10.0		123	78-136		12.1	30	
1,1,2,2-Tetrachloroethane	10.0		"	10.0		100	76-129		2.22	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3		"	10.0		103	54-165		4.66	30	
1,1,2-Trichloroethane	9.75		"	10.0		97.5	82-123		4.08	30	
1,1-Dichloroethane	12.5		"	10.0		125	82-129		5.95	30	
1,1-Dichloroethylene	12.6		"	10.0		126	68-138		2.25	30	
1,1-Dichloropropylene	13.2		"	10.0		132	83-133		13.1	30	
1,2,3-Trichlorobenzene	12.1		"	10.0		121	76-136		7.73	30	
1,2,3-Trichloropropane	10.8		"	10.0		108	77-128		3.57	30	
1,2,4,5-Tetramethylbenzene	10.9		"	10.0		109	85-140		1.57	30	
1,2,4-Trichlorobenzene	11.6		"	10.0		116	76-137		4.61	30	
1,2,4-Trimethylbenzene	10.6		"	10.0		106	82-132		0.848	30	
1,2-Dibromo-3-chloropropane	12.2		"	10.0		122	45-147		11.8	30	
1,2-Dibromoethane	9.97		"	10.0		99.7	83-124		3.26	30	
1,2-Dichlorobenzene	10.8		"	10.0		108	79-123		0.555	30	
1,2-Dichloroethane	12.8		"	10.0		128	73-132		13.7	30	
1,2-Dichloropropane	10.9		"	10.0		109	78-126		2.69	30	
1,3,5-Trimethylbenzene	10.6		"	10.0		106	80-131		0.190	30	
1,3-Dichlorobenzene	10.7		"	10.0		107	86-122		0.470	30	
1,3-Dichloropropane	10.7		"	10.0		107	81-125		0.936	30	
1,4-Dichlorobenzene	10.7		"	10.0		107	85-124		1.80	30	
2,2-Dichloropropane	16.5		"	10.0		165	56-150	High Bias	9.28	30	
2-Butanone	11.8		"	10.0		118	49-152		5.82	30	
2-Chlorotoluene	11.3		"	10.0		113	79-130		3.15	30	
2-Hexanone	10.3		"	10.0		103	51-146		28.8	30	
4-Chlorotoluene	11.0		"	10.0		110	79-128		2.68	30	
4-Methyl-2-pentanone	10.9		"	10.0		109	57-145		10.7	30	
Acetone	9.27		"	10.0		92.7	14-150		3.29	30	
Benzene	12.0		"	10.0		120	85-126		8.48	30	
Bromobenzene	10.2		"	10.0		102	78-129		6.55	30	
Bromochloromethane	13.9		"	10.0		139	77-128	High Bias	14.9	30	
Bromodichloromethane	10.7		"	10.0		107	79-128		7.04	30	
Bromoform	10.1		"	10.0		101	78-133		4.46	30	
Bromomethane	9.83		"	10.0		98.3	43-168		0.510	30	
Carbon disulfide	12.8		"	10.0		128	68-146		4.40	30	
Carbon tetrachloride	12.3		"	10.0		123	77-141		11.1	30	
Chlorobenzene	10.7		"	10.0		107	88-120		1.13	30	
Chloroethane	9.98		"	10.0		99.8	65-136		4.61	30	
Chloroform	12.3		"	10.0		123	82-128		11.3	30	
Chloromethane	9.57		"	10.0		95.7	43-155		0.734	30	
cis-1,2-Dichloroethylene	13.7		"	10.0		137	83-129	High Bias	12.2	30	
cis-1,3-Dichloropropylene	12.0		"	10.0		120	80-131		3.66	30	
Dibromochloromethane	10.3		"	10.0		103	80-130		1.37	30	
Dibromomethane	10.5		"	10.0		105	72-134		3.59	30	
Dichlorodifluoromethane	8.99		"	10.0		89.9	44-144		4.90	30	
Ethyl Benzene	10.8		"	10.0		108	80-131		1.21	30	
Hexachlorobutadiene	12.3		"	10.0		123	67-146		8.58	30	
Isopropylbenzene	10.9		"	10.0		109	76-140		1.76	30	
Methyl tert-butyl ether (MTBE)	10.9		"	10.0		109	76-135		5.38	30	
Methylene chloride	12.8		"	10.0		128	55-137		5.88	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50737 - EPA 5030B

##### LCS Dup (BA50737-BSD1)

Prepared & Analyzed: 01/17/2015

Naphthalene	11.3		ug/L	10.0		113	70-147		8.80	30	
n-Butylbenzene	11.4		"	10.0		114	79-132		1.59	30	
n-Propylbenzene	11.0		"	10.0		110	78-133		0.0906	30	
o-Xylene	10.8		"	10.0		108	78-130		0.0929	30	
p- & m- Xylenes	21.8		"	20.0		109	77-133		0.737	30	
p-Diethylbenzene	11.1		"	10.0		111	84-134		4.90	30	
p-Ethyltoluene	10.2		"	10.0		102	88-129		1.26	30	
p-Isopropyltoluene	10.9		"	10.0		109	81-136		0.367	30	
sec-Butylbenzene	11.2		"	10.0		112	79-137		2.63	30	
Styrene	11.2		"	10.0		112	67-132		1.16	30	
tert-Butylbenzene	10.9		"	10.0		109	77-138		0.645	30	
Tetrachloroethylene	10.6		"	10.0		106	82-131		0.943	30	
Toluene	10.7		"	10.0		107	80-127		2.64	30	
trans-1,2-Dichloroethylene	12.6		"	10.0		126	80-132		6.73	30	
trans-1,3-Dichloropropylene	11.4		"	10.0		114	78-131		5.12	30	
Trichloroethylene	11.0		"	10.0		110	82-128		3.15	30	
Trichlorofluoromethane	10.8		"	10.0		108	67-139		6.02	30	
Vinyl Chloride	10.8		"	10.0		108	58-145		4.76	30	
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Surrogate: 1,2-Dichloroethane-d4	11.6		"	10.0		116	69-130				
Surrogate: p-Bromofluorobenzene	9.91		"	10.0		99.1	79-122				
Surrogate: Toluene-d8	9.82		"	10.0		98.2	81-117				

##### Matrix Spike (BA50737-MS1)

\*Source sample: 15A0377-05 (MW-5)

Prepared & Analyzed: 01/17/2015

1,1,1,2-Tetrachloroethane	10.9		ug/L	10.0	ND	109	45-161				
1,1,1-Trichloroethane	12.9		"	10.0	ND	129	70-146				
1,1,2,2-Tetrachloroethane	9.93		"	10.0	ND	99.3	74-121				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.0		"	10.0	ND	110	21-217				
1,1,2-Trichloroethane	10.0		"	10.0	ND	100	59-146				
1,1-Dichloroethane	13.4		"	10.0	ND	134	54-146				
1,1-Dichloroethylene	13.3		"	10.0	ND	133	44-165				
1,1-Dichloropropylene	13.7		"	10.0	ND	137	82-134	High Bias			
1,2,3-Trichlorobenzene	10.9		"	10.0	ND	109	40-161				
1,2,3-Trichloropropane	10.9		"	10.0	ND	109	74-127				
1,2,4,5-Tetramethylbenzene	10.8		"	10.0	ND	108	27-190				
1,2,4-Trichlorobenzene	10.8		"	10.0	ND	108	41-161				
1,2,4-Trimethylbenzene	10.4		"	10.0	ND	104	72-129				
1,2-Dibromo-3-chloropropane	9.46		"	10.0	ND	94.6	31-151				
1,2-Dibromoethane	10.8		"	10.0	ND	108	75-125				
1,2-Dichlorobenzene	10.5		"	10.0	ND	105	63-122				
1,2-Dichloroethane	13.4		"	10.0	ND	134	68-131	High Bias			
1,2-Dichloropropane	11.7		"	10.0	ND	117	77-121				
1,3,5-Trimethylbenzene	10.4		"	10.0	ND	104	69-126				
1,3-Dichlorobenzene	10.6		"	10.0	ND	106	74-119				
1,3-Dichloropropane	11.6		"	10.0	ND	116	77-119				
1,4-Dichlorobenzene	10.4		"	10.0	ND	104	70-124				
2,2-Dichloropropane	14.4		"	10.0	ND	144	10-160				
2-Butanone	13.4		"	10.0	ND	134	10-193				
2-Chlorotoluene	11.0		"	10.0	ND	110	70-126				
2-Hexanone	9.87		"	10.0	ND	98.7	53-133				
4-Chlorotoluene	10.6		"	10.0	ND	106	69-124				
4-Methyl-2-pentanone	11.3		"	10.0	ND	113	38-150				
Acetone	10.9		"	10.0	ND	109	13-149				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50737 - EPA 5030B

Matrix Spike (BA50737-MS1)	*Source sample: 15A0377-05 (MW-5)					Prepared & Analyzed: 01/17/2015					
Benzene	12.6		ug/L	10.0	ND	126	38-155				
Bromobenzene	10.9		"	10.0	ND	109	72-122				
Bromochloromethane	14.4		"	10.0	ND	144	75-121	High Bias			
Bromodichloromethane	11.2		"	10.0	ND	112	70-129				
Bromoform	10.9		"	10.0	ND	109	66-136				
Bromomethane	10.1		"	10.0	ND	101	30-158				
Carbon disulfide	13.3		"	10.0	ND	133	10-138				
Carbon tetrachloride	12.9		"	10.0	ND	129	71-146				
Chlorobenzene	11.2		"	10.0	ND	112	81-117				
Chloroethane	10.7		"	10.0	ND	107	51-145				
Chloroform	12.7		"	10.0	ND	127	80-124	High Bias			
Chloromethane	10.7		"	10.0	ND	107	16-163				
cis-1,2-Dichloroethylene	14.4		"	10.0	ND	144	76-125	High Bias			
cis-1,3-Dichloropropylene	12.2		"	10.0	ND	122	58-131				
Dibromochloromethane	10.9		"	10.0	ND	109	71-129				
Dibromomethane	11.4		"	10.0	ND	114	76-120				
Dichlorodifluoromethane	9.07		"	10.0	ND	90.7	30-147				
Ethyl Benzene	11.4		"	10.0	ND	114	72-128				
Hexachlorobutadiene	10.9		"	10.0	ND	109	34-166				
Isopropylbenzene	10.6		"	10.0	ND	106	66-139				
Methyl tert-butyl ether (MTBE)	11.6		"	10.0	0.390	112	75-128				
Methylene chloride	13.8		"	10.0	ND	138	57-128	High Bias			
Naphthalene	10.4		"	10.0	ND	104	39-158				
n-Butylbenzene	11.1		"	10.0	ND	111	61-138				
n-Propylbenzene	11.0		"	10.0	ND	110	66-134				
o-Xylene	11.4		"	10.0	ND	114	69-126				
p- & m- Xylenes	23.0		"	20.0	ND	115	67-130				
p-Diethylbenzene	10.5		"	10.0	ND	105	52-150				
p-Ethyltoluene	10.4		"	10.0	ND	104	76-127				
p-Isopropyltoluene	10.6		"	10.0	ND	106	64-137				
sec-Butylbenzene	10.8		"	10.0	ND	108	53-155				
Styrene	11.4		"	10.0	ND	114	69-125				
tert-Butylbenzene	10.7		"	10.0	ND	107	65-139				
Tetrachloroethylene	16.0		"	10.0	5.63	104	64-139				
Toluene	11.2		"	10.0	ND	112	76-123				
trans-1,2-Dichloroethylene	13.3		"	10.0	ND	133	79-131	High Bias			
trans-1,3-Dichloropropylene	11.5		"	10.0	ND	115	55-130				
Trichloroethylene	12.1		"	10.0	0.810	113	53-145				
Trichlorofluoromethane	11.6		"	10.0	ND	116	61-142				
Vinyl Chloride	11.4		"	10.0	ND	114	31-165				
Surrogate: 1,2-Dichloroethane-d4	12.1		"	10.0		121	69-130				
Surrogate: p-Bromofluorobenzene	9.60		"	10.0		96.0	79-122				
Surrogate: Toluene-d8	10.0		"	10.0		100	81-117				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BA50737 - EPA 5030B</b>											
<b>Matrix Spike Dup (BA50737-MSD1)</b>		*Source sample: 15A0377-05 (MW-5)					Prepared & Analyzed: 01/17/2015				
1,1,1,2-Tetrachloroethane	10.6		ug/L	10.0	ND	106	45-161		2.97	30	
1,1,1-Trichloroethane	12.6		"	10.0	ND	126	70-146		2.42	30	
1,1,2,2-Tetrachloroethane	10.1		"	10.0	ND	101	74-121		1.50	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.5		"	10.0	ND	115	21-217		4.53	30	
1,1,2-Trichloroethane	10.0		"	10.0	ND	100	59-146		0.399	30	
1,1-Dichloroethane	13.3		"	10.0	ND	133	54-146		0.300	30	
1,1-Dichloroethylene	13.2		"	10.0	ND	132	44-165		0.754	30	
1,1-Dichloropropylene	13.5		"	10.0	ND	135	82-134	High Bias	1.10	30	
1,2,3-Trichlorobenzene	11.0		"	10.0	ND	110	40-161		1.37	30	
1,2,3-Trichloropropane	10.9		"	10.0	ND	109	74-127		0.0920	30	
1,2,4,5-Tetramethylbenzene	11.0		"	10.0	ND	110	27-190		1.56	30	
1,2,4-Trichlorobenzene	10.9		"	10.0	ND	109	41-161		0.735	30	
1,2,4-Trimethylbenzene	10.6		"	10.0	ND	106	72-129		2.19	30	
1,2-Dibromo-3-chloropropane	11.0		"	10.0	ND	110	31-151		15.1	30	
1,2-Dibromoethane	10.4		"	10.0	ND	104	75-125		3.95	30	
1,2-Dichlorobenzene	10.7		"	10.0	ND	107	63-122		1.99	30	
1,2-Dichloroethane	12.6		"	10.0	ND	126	68-131		5.62	30	
1,2-Dichloropropane	11.4		"	10.0	ND	114	77-121		2.94	30	
1,3,5-Trimethylbenzene	10.7		"	10.0	ND	107	69-126		2.93	30	
1,3-Dichlorobenzene	10.6		"	10.0	ND	106	74-119		0.284	30	
1,3-Dichloropropane	11.1		"	10.0	ND	111	77-119		4.23	30	
1,4-Dichlorobenzene	10.6		"	10.0	ND	106	70-124		1.71	30	
2,2-Dichloropropane	13.5		"	10.0	ND	135	10-160		6.09	30	
2-Butanone	14.1		"	10.0	ND	141	10-193		4.73	30	
2-Chlorotoluene	11.3		"	10.0	ND	113	70-126		2.97	30	
2-Hexanone	10.6		"	10.0	ND	106	53-133		7.60	30	
4-Chlorotoluene	11.0		"	10.0	ND	110	69-124		3.89	30	
4-Methyl-2-pentanone	11.1		"	10.0	ND	111	38-150		2.14	30	
Acetone	10.2		"	10.0	ND	102	13-149		6.45	30	
Benzene	12.2		"	10.0	ND	122	38-155		3.63	30	
Bromobenzene	10.8		"	10.0	ND	108	72-122		0.460	30	
Bromochloromethane	14.0		"	10.0	ND	140	75-121	High Bias	2.60	30	
Bromodichloromethane	10.8		"	10.0	ND	108	70-129		3.54	30	
Bromoform	10.6		"	10.0	ND	106	66-136		2.51	30	
Bromomethane	10.8		"	10.0	ND	108	30-158		7.19	30	
Carbon disulfide	13.4		"	10.0	ND	134	10-138		0.375	30	
Carbon tetrachloride	12.7		"	10.0	ND	127	71-146		1.65	30	
Chlorobenzene	11.0		"	10.0	ND	110	81-117		1.45	30	
Chloroethane	10.9		"	10.0	ND	109	51-145		1.95	30	
Chloroform	12.5		"	10.0	ND	125	80-124	High Bias	1.51	30	
Chloromethane	10.4		"	10.0	ND	104	16-163		2.85	30	
cis-1,2-Dichloroethylene	13.9		"	10.0	ND	139	76-125	High Bias	3.32	30	
cis-1,3-Dichloropropylene	11.8		"	10.0	ND	118	58-131		3.41	30	
Dibromochloromethane	10.8		"	10.0	ND	108	71-129		1.20	30	
Dibromomethane	10.7		"	10.0	ND	107	76-120		6.22	30	
Dichlorodifluoromethane	9.50		"	10.0	ND	95.0	30-147		4.63	30	
Ethyl Benzene	11.2		"	10.0	ND	112	72-128		1.77	30	
Hexachlorobutadiene	11.2		"	10.0	ND	112	34-166		2.35	30	
Isopropylbenzene	10.9		"	10.0	ND	109	66-139		2.79	30	
Methyl tert-butyl ether (MTBE)	11.6		"	10.0	0.390	112	75-128		0.259	30	
Methylene chloride	13.8		"	10.0	ND	138	57-128	High Bias	0.290	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50737 - EPA 5030B

Matrix Spike Dup (BA50737-MSD1)		*Source sample: 15A0377-05 (MW-5)					Prepared & Analyzed: 01/17/2015				
Naphthalene	10.8		ug/L	10.0	ND	108	39-158		3.60	30	
n-Butylbenzene	11.4		"	10.0	ND	114	61-138		3.20	30	
n-Propylbenzene	11.2		"	10.0	ND	112	66-134		2.26	30	
o-Xylene	11.3		"	10.0	ND	113	69-126		1.06	30	
p- & m- Xylenes	22.8		"	20.0	ND	114	67-130		1.09	30	
p-Diethylbenzene	10.9		"	10.0	ND	109	52-150		3.18	30	
p-Ethyltoluene	10.7		"	10.0	ND	107	76-127		2.84	30	
p-Isopropyltoluene	10.9		"	10.0	ND	109	64-137		2.78	30	
sec-Butylbenzene	11.3		"	10.0	ND	113	53-155		4.24	30	
Styrene	11.2		"	10.0	ND	112	69-125		2.04	30	
tert-Butylbenzene	10.9		"	10.0	ND	109	65-139		2.12	30	
Tetrachloroethylene	16.0		"	10.0	5.63	104	64-139		0.125	30	
Toluene	11.0		"	10.0	ND	110	76-123		1.89	30	
trans-1,2-Dichloroethylene	13.2		"	10.0	ND	132	79-131	High Bias	0.677	30	
trans-1,3-Dichloropropylene	11.2		"	10.0	ND	112	55-130		2.29	30	
Trichloroethylene	11.8		"	10.0	0.810	110	53-145		2.60	30	
Trichlorofluoromethane	11.6		"	10.0	ND	116	61-142		0.345	30	
Vinyl Chloride	12.0		"	10.0	ND	120	31-165		5.31	30	
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Surrogate: 1,2-Dichloroethane-d4	11.5		"	10.0		115	69-130				
Surrogate: p-Bromofluorobenzene	9.74		"	10.0		97.4	79-122				
Surrogate: Toluene-d8	9.89		"	10.0		98.9	81-117				

#### Batch BA50787 - EPA 5030B

Blank (BA50787-BLK1)		Prepared & Analyzed: 01/19/2015									
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
1,1-Dichloropropylene	ND	0.50	"								
1,2,3-Trichlorobenzene	0.81	0.50	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,2,4,5-Tetramethylbenzene	0.43	0.50	"								
1,2,4-Trichlorobenzene	0.65	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
1,2-Dibromo-3-chloropropane	ND	0.50	"								
1,2-Dibromoethane	ND	0.50	"								
1,2-Dichlorobenzene	0.22	0.50	"								
1,2-Dichloroethane	ND	0.50	"								
1,2-Dichloropropane	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
1,3-Dichlorobenzene	0.25	0.50	"								
1,3-Dichloropropane	ND	0.50	"								
1,4-Dichlorobenzene	0.23	0.50	"								
2,2-Dichloropropane	ND	0.50	"								
2-Butanone	ND	0.50	"								
2-Chlorotoluene	ND	0.50	"								
2-Hexanone	ND	0.50	"								
4-Chlorotoluene	ND	0.50	"								





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50787 - EPA 5030B

#### Blank (BA50787-BLK1)

Prepared & Analyzed: 01/19/2015

4-Methyl-2-pentanone	ND	0.50	ug/L								
Acetone	ND	2.0	"								
Benzene	ND	0.50	"								
Bromobenzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon disulfide	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	0.64	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylene chloride	ND	2.0	"								
Naphthalene	ND	2.0	"								
n-Butylbenzene	0.38	0.50	"								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Diethylbenzene	0.31	0.50	"								
p-Ethyltoluene	ND	0.50	"								
p-Isopropyltoluene	0.25	0.50	"								
sec-Butylbenzene	0.24	0.50	"								
Styrene	ND	0.50	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: 1,2-Dichloroethane-d4	8.96		"	10.0		89.6	69-130				
Surrogate: p-Bromofluorobenzene	11.3		"	10.0		113	79-122				
Surrogate: Toluene-d8	9.95		"	10.0		99.5	81-117				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BA50787 - EPA 5030B</b>											
<b>LCS (BA50787-BS1)</b>						Prepared & Analyzed: 01/19/2015					
1,1,1,2-Tetrachloroethane	10.8		ug/L	10.0		108	82-126				
1,1,1-Trichloroethane	11.3		"	10.0		113	78-136				
1,1,2,2-Tetrachloroethane	10.5		"	10.0		105	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.80		"	10.0		98.0	54-165				
1,1,2-Trichloroethane	9.88		"	10.0		98.8	82-123				
1,1-Dichloroethane	11.9		"	10.0		119	82-129				
1,1-Dichloroethylene	11.9		"	10.0		119	68-138				
1,1-Dichloropropylene	11.7		"	10.0		117	83-133				
1,2,3-Trichlorobenzene	10.2		"	10.0		102	76-136				
1,2,3-Trichloropropane	11.4		"	10.0		114	77-128				
1,2,4,5-Tetramethylbenzene	10.7		"	10.0		107	85-140				
1,2,4-Trichlorobenzene	10.4		"	10.0		104	76-137				
1,2,4-Trimethylbenzene	11.2		"	10.0		112	82-132				
1,2-Dibromo-3-chloropropane	9.84		"	10.0		98.4	45-147				
1,2-Dibromoethane	10.4		"	10.0		104	83-124				
1,2-Dichlorobenzene	11.0		"	10.0		110	79-123				
1,2-Dichloroethane	11.4		"	10.0		114	73-132				
1,2-Dichloropropane	11.3		"	10.0		113	78-126				
1,3,5-Trimethylbenzene	11.2		"	10.0		112	80-131				
1,3-Dichlorobenzene	11.0		"	10.0		110	86-122				
1,3-Dichloropropane	11.0		"	10.0		110	81-125				
1,4-Dichlorobenzene	11.0		"	10.0		110	85-124				
2,2-Dichloropropane	13.7		"	10.0		137	56-150				
2-Butanone	12.8		"	10.0		128	49-152				
2-Chlorotoluene	11.5		"	10.0		115	79-130				
2-Hexanone	10.4		"	10.0		104	51-146				
4-Chlorotoluene	11.3		"	10.0		113	79-128				
4-Methyl-2-pentanone	11.3		"	10.0		113	57-145				
Acetone	9.24		"	10.0		92.4	14-150				
Benzene	11.4		"	10.0		114	85-126				
Bromobenzene	11.5		"	10.0		115	78-129				
Bromochloromethane	11.8		"	10.0		118	77-128				
Bromodichloromethane	11.0		"	10.0		110	79-128				
Bromoform	11.1		"	10.0		111	78-133				
Bromomethane	10.8		"	10.0		108	43-168				
Carbon disulfide	12.8		"	10.0		128	68-146				
Carbon tetrachloride	11.8		"	10.0		118	77-141				
Chlorobenzene	10.9		"	10.0		109	88-120				
Chloroethane	10.1		"	10.0		101	65-136				
Chloroform	11.3		"	10.0		113	82-128				
Chloromethane	10.9		"	10.0		109	43-155				
cis-1,2-Dichloroethylene	11.9		"	10.0		119	83-129				
cis-1,3-Dichloropropylene	12.0		"	10.0		120	80-131				
Dibromochloromethane	10.8		"	10.0		108	80-130				
Dibromomethane	10.9		"	10.0		109	72-134				
Dichlorodifluoromethane	11.6		"	10.0		116	44-144				
Ethyl Benzene	11.0		"	10.0		110	80-131				
Hexachlorobutadiene	10.8		"	10.0		108	67-146				
Isopropylbenzene	11.5		"	10.0		115	76-140				
Methyl tert-butyl ether (MTBE)	10.8		"	10.0		108	76-135				
Methylene chloride	12.0		"	10.0		120	55-137				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50787 - EPA 5030B

##### LCS (BA50787-BS1)

Prepared & Analyzed: 01/19/2015

Naphthalene	9.51		ug/L	10.0		95.1	70-147				
n-Butylbenzene	11.2		"	10.0		112	79-132				
n-Propylbenzene	11.5		"	10.0		115	78-133				
o-Xylene	11.1		"	10.0		111	78-130				
p- & m- Xylenes	22.3		"	20.0		112	77-133				
p-Diethylbenzene	10.7		"	10.0		107	84-134				
p-Ethyltoluene	11.0		"	10.0		110	88-129				
p-Isopropyltoluene	11.1		"	10.0		111	81-136				
sec-Butylbenzene	11.4		"	10.0		114	79-137				
Styrene	11.4		"	10.0		114	67-132				
tert-Butylbenzene	11.4		"	10.0		114	77-138				
Tetrachloroethylene	10.8		"	10.0		108	82-131				
Toluene	10.9		"	10.0		109	80-127				
trans-1,2-Dichloroethylene	12.1		"	10.0		121	80-132				
trans-1,3-Dichloropropylene	11.4		"	10.0		114	78-131				
Trichloroethylene	11.1		"	10.0		111	82-128				
Trichlorofluoromethane	9.92		"	10.0		99.2	67-139				
Vinyl Chloride	10.9		"	10.0		109	58-145				
Surrogate: 1,2-Dichloroethane-d4	9.67		"	10.0		96.7	69-130				
Surrogate: p-Bromofluorobenzene	10.4		"	10.0		104	79-122				
Surrogate: Toluene-d8	9.96		"	10.0		99.6	81-117				

##### LCS Dup (BA50787-BSD1)

Prepared & Analyzed: 01/19/2015

1,1,1,2-Tetrachloroethane	10.6		ug/L	10.0		106	82-126		1.78	30	
1,1,1-Trichloroethane	11.5		"	10.0		115	78-136		1.75	30	
1,1,2,2-Tetrachloroethane	9.98		"	10.0		99.8	76-129		5.46	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1		"	10.0		101	54-165		2.92	30	
1,1,2-Trichloroethane	9.47		"	10.0		94.7	82-123		4.24	30	
1,1-Dichloroethane	11.8		"	10.0		118	82-129		0.337	30	
1,1-Dichloroethylene	12.5		"	10.0		125	68-138		4.91	30	
1,1-Dichloropropylene	11.8		"	10.0		118	83-133		0.679	30	
1,2,3-Trichlorobenzene	9.68		"	10.0		96.8	76-136		5.13	30	
1,2,3-Trichloropropane	10.9		"	10.0		109	77-128		4.31	30	
1,2,4,5-Tetramethylbenzene	10.8		"	10.0		108	85-140		1.02	30	
1,2,4-Trichlorobenzene	10.0		"	10.0		100	76-137		3.34	30	
1,2,4-Trimethylbenzene	11.1		"	10.0		111	82-132		0.629	30	
1,2-Dibromo-3-chloropropane	8.26		"	10.0		82.6	45-147		17.5	30	
1,2-Dibromoethane	10.2		"	10.0		102	83-124		2.62	30	
1,2-Dichlorobenzene	10.6		"	10.0		106	79-123		3.43	30	
1,2-Dichloroethane	11.3		"	10.0		113	73-132		0.883	30	
1,2-Dichloropropane	11.0		"	10.0		110	78-126		2.61	30	
1,3,5-Trimethylbenzene	11.2		"	10.0		112	80-131		0.0896	30	
1,3-Dichlorobenzene	11.0		"	10.0		110	86-122		0.636	30	
1,3-Dichloropropane	10.8		"	10.0		108	81-125		2.48	30	
1,4-Dichlorobenzene	10.9		"	10.0		109	85-124		1.09	30	
2,2-Dichloropropane	13.4		"	10.0		134	56-150		2.21	30	
2-Butanone	10.8		"	10.0		108	49-152		17.4	30	
2-Chlorotoluene	11.5		"	10.0		115	79-130		0.435	30	
2-Hexanone	10.5		"	10.0		105	51-146		0.574	30	
4-Chlorotoluene	11.4		"	10.0		114	79-128		0.440	30	
4-Methyl-2-pentanone	10.8		"	10.0		108	57-145		5.34	30	
Acetone	9.83		"	10.0		98.3	14-150		6.19	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BA50787 - EPA 5030B</b>											
<b>LCS Dup (BA50787-BSD1)</b>						Prepared & Analyzed: 01/19/2015					
Benzene	11.4		ug/L	10.0		114	85-126		0.00	30	
Bromobenzene	11.1		"	10.0		111	78-129		3.62	30	
Bromochloromethane	11.5		"	10.0		115	77-128		2.40	30	
Bromodichloromethane	11.0		"	10.0		110	79-128		0.0910	30	
Bromoform	10.0		"	10.0		100	78-133		10.3	30	
Bromomethane	10.4		"	10.0		104	43-168		4.44	30	
Carbon disulfide	12.6		"	10.0		126	68-146		1.81	30	
Carbon tetrachloride	11.7		"	10.0		117	77-141		0.598	30	
Chlorobenzene	10.8		"	10.0		108	88-120		0.646	30	
Chloroethane	9.88		"	10.0		98.8	65-136		2.10	30	
Chloroform	11.2		"	10.0		112	82-128		0.622	30	
Chloromethane	10.9		"	10.0		109	43-155		0.275	30	
cis-1,2-Dichloroethylene	11.7		"	10.0		117	83-129		1.36	30	
cis-1,3-Dichloropropylene	12.2		"	10.0		122	80-131		1.32	30	
Dibromochloromethane	10.6		"	10.0		106	80-130		1.21	30	
Dibromomethane	10.8		"	10.0		108	72-134		0.460	30	
Dichlorodifluoromethane	11.9		"	10.0		119	44-144		2.89	30	
Ethyl Benzene	11.1		"	10.0		111	80-131		0.272	30	
Hexachlorobutadiene	10.6		"	10.0		106	67-146		1.49	30	
Isopropylbenzene	11.5		"	10.0		115	76-140		0.609	30	
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	76-135		3.20	30	
Methylene chloride	11.8		"	10.0		118	55-137		2.35	30	
Naphthalene	8.91		"	10.0		89.1	70-147		6.51	30	
n-Butylbenzene	11.5		"	10.0		115	79-132		2.65	30	
n-Propylbenzene	11.6		"	10.0		116	78-133		0.867	30	
o-Xylene	11.1		"	10.0		111	78-130		0.180	30	
p- & m- Xylenes	22.6		"	20.0		113	77-133		1.11	30	
p-Diethylbenzene	10.9		"	10.0		109	84-134		1.76	30	
p-Ethyltoluene	11.2		"	10.0		112	88-129		0.991	30	
p-Isopropyltoluene	11.4		"	10.0		114	81-136		2.05	30	
sec-Butylbenzene	11.6		"	10.0		116	79-137		2.09	30	
Styrene	11.3		"	10.0		113	67-132		0.441	30	
tert-Butylbenzene	11.6		"	10.0		116	77-138		1.13	30	
Tetrachloroethylene	11.1		"	10.0		111	82-131		2.38	30	
Toluene	10.9		"	10.0		109	80-127		0.183	30	
trans-1,2-Dichloroethylene	12.2		"	10.0		122	80-132		0.412	30	
trans-1,3-Dichloropropylene	11.6		"	10.0		116	78-131		2.34	30	
Trichloroethylene	11.1		"	10.0		111	82-128		0.361	30	
Trichlorofluoromethane	10.2		"	10.0		102	67-139		2.39	30	
Vinyl Chloride	11.1		"	10.0		111	58-145		1.45	30	
Surrogate: 1,2-Dichloroethane-d4	9.82		"	10.0		98.2	69-130				
Surrogate: p-Bromofluorobenzene	10.5		"	10.0		105	79-122				
Surrogate: Toluene-d8	9.90		"	10.0		99.0	81-117				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BA50787 - EPA 5030B</b>											
<b>Matrix Spike (BA50787-MS1)</b>	<b>*Source sample: 15A0377-05 (MW-5)</b>						<b>Prepared &amp; Analyzed: 01/19/2015</b>				
1,1,1,2-Tetrachloroethane	10.1		ug/L	10.0	ND	101	45-161				
1,1,1-Trichloroethane	10.7		"	10.0	ND	107	70-146				
1,1,2,2-Tetrachloroethane	9.31		"	10.0	ND	93.1	74-121				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.92		"	10.0	ND	99.2	21-217				
1,1,2-Trichloroethane	9.23		"	10.0	ND	92.3	59-146				
1,1-Dichloroethane	10.6		"	10.0	ND	106	54-146				
1,1-Dichloroethylene	10.6		"	10.0	ND	106	44-165				
1,1-Dichloropropylene	10.9		"	10.0	ND	109	82-134				
1,2,3-Trichlorobenzene	9.49		"	10.0	ND	94.9	40-161				
1,2,3-Trichloropropane	10.4		"	10.0	ND	104	74-127				
1,2,4,5-Tetramethylbenzene	9.57		"	10.0	ND	95.7	27-190				
1,2,4-Trichlorobenzene	9.45		"	10.0	ND	94.5	41-161				
1,2,4-Trimethylbenzene	9.99		"	10.0	ND	99.9	72-129				
1,2-Dibromo-3-chloropropane	7.92		"	10.0	ND	79.2	31-151				
1,2-Dibromoethane	9.87		"	10.0	ND	98.7	75-125				
1,2-Dichlorobenzene	9.68		"	10.0	ND	96.8	63-122				
1,2-Dichloroethane	10.7		"	10.0	ND	107	68-131				
1,2-Dichloropropane	10.4		"	10.0	ND	104	77-121				
1,3,5-Trimethylbenzene	10.0		"	10.0	ND	100	69-126				
1,3-Dichlorobenzene	9.64		"	10.0	ND	96.4	74-119				
1,3-Dichloropropane	10.5		"	10.0	ND	105	77-119				
1,4-Dichlorobenzene	9.70		"	10.0	ND	97.0	70-124				
2,2-Dichloropropane	10.8		"	10.0	ND	108	10-160				
2-Butanone	11.2		"	10.0	ND	112	10-193				
2-Chlorotoluene	10.1		"	10.0	ND	101	70-126				
2-Hexanone	10.2		"	10.0	ND	102	53-133				
4-Chlorotoluene	9.93		"	10.0	ND	99.3	69-124				
4-Methyl-2-pentanone	10.7		"	10.0	ND	107	38-150				
Acetone	9.54		"	10.0	ND	95.4	13-149				
Benzene	10.6		"	10.0	ND	106	38-155				
Bromobenzene	10.0		"	10.0	ND	100	72-122				
Bromochloromethane	11.3		"	10.0	ND	113	75-121				
Bromodichloromethane	10.4		"	10.0	ND	104	70-129				
Bromoform	10.3		"	10.0	ND	103	66-136				
Bromomethane	8.24		"	10.0	ND	82.4	30-158				
Carbon disulfide	10.7		"	10.0	ND	107	10-138				
Carbon tetrachloride	11.3		"	10.0	ND	113	71-146				
Chlorobenzene	10.1		"	10.0	ND	101	81-117				
Chloroethane	9.40		"	10.0	ND	94.0	51-145				
Chloroform	10.7		"	10.0	ND	107	80-124				
Chloromethane	9.57		"	10.0	ND	95.7	16-163				
cis-1,2-Dichloroethylene	11.2		"	10.0	ND	112	76-125				
cis-1,3-Dichloropropylene	10.6		"	10.0	ND	106	58-131				
Dibromochloromethane	10.4		"	10.0	ND	104	71-129				
Dibromomethane	10.4		"	10.0	ND	104	76-120				
Dichlorodifluoromethane	7.85		"	10.0	ND	78.5	30-147				
Ethyl Benzene	10.5		"	10.0	ND	105	72-128				
Hexachlorobutadiene	10.1		"	10.0	ND	101	34-166				
Isopropylbenzene	10.2		"	10.0	ND	102	66-139				
Methyl tert-butyl ether (MTBE)	10.3		"	10.0	0.390	99.2	75-128				
Methylene chloride	10.8		"	10.0	ND	108	57-128				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50787 - EPA 5030B

Matrix Spike (BA50787-MS1)		*Source sample: 15A0377-05 (MW-5)					Prepared & Analyzed: 01/19/2015				
Naphthalene	8.58		ug/L	10.0	ND	85.8	39-158				
n-Butylbenzene	10.6		"	10.0	ND	106	61-138				
n-Propylbenzene	10.3		"	10.0	ND	103	66-134				
o-Xylene	10.3		"	10.0	ND	103	69-126				
p- & m- Xylenes	21.1		"	20.0	ND	105	67-130				
p-Diethylbenzene	9.76		"	10.0	ND	97.6	52-150				
p-Ethyltoluene	9.73		"	10.0	ND	97.3	76-127				
p-Isopropyltoluene	10.4		"	10.0	ND	104	64-137				
sec-Butylbenzene	10.5		"	10.0	ND	105	53-155				
Styrene	9.91		"	10.0	ND	99.1	69-125				
tert-Butylbenzene	10.3		"	10.0	ND	103	65-139				
Tetrachloroethylene	15.0		"	10.0	5.63	94.1	64-139				
Toluene	10.2		"	10.0	ND	102	76-123				
trans-1,2-Dichloroethylene	10.6		"	10.0	ND	106	79-131				
trans-1,3-Dichloropropylene	10.3		"	10.0	ND	103	55-130				
Trichloroethylene	11.2		"	10.0	0.810	103	53-145				
Trichlorofluoromethane	10.0		"	10.0	ND	100	61-142				
Vinyl Chloride	9.87		"	10.0	ND	98.7	31-165				
Surrogate: 1,2-Dichloroethane-d4	10.1		"	10.0		101	69-130				
Surrogate: p-Bromofluorobenzene	9.90		"	10.0		99.0	79-122				
Surrogate: Toluene-d8	9.92		"	10.0		99.2	81-117				

Matrix Spike Dup (BA50787-MSD1)		*Source sample: 15A0377-05 (MW-5)					Prepared & Analyzed: 01/19/2015				
1,1,1,2-Tetrachloroethane	10.1		ug/L	10.0	ND	101	45-161	0.00	30		
1,1,1-Trichloroethane	11.0		"	10.0	ND	110	70-146	1.94	30		
1,1,2,2-Tetrachloroethane	9.54		"	10.0	ND	95.4	74-121	2.44	30		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1		"	10.0	ND	101	21-217	2.19	30		
1,1,2-Trichloroethane	9.14		"	10.0	ND	91.4	59-146	0.980	30		
1,1-Dichloroethane	10.8		"	10.0	ND	108	54-146	2.34	30		
1,1-Dichloroethylene	10.8		"	10.0	ND	108	44-165	1.59	30		
1,1-Dichloropropylene	11.1		"	10.0	ND	111	82-134	1.45	30		
1,2,3-Trichlorobenzene	10.2		"	10.0	ND	102	40-161	7.31	30		
1,2,3-Trichloropropane	10.2		"	10.0	ND	102	74-127	2.14	30		
1,2,4,5-Tetramethylbenzene	9.83		"	10.0	ND	98.3	27-190	2.68	30		
1,2,4-Trichlorobenzene	9.86		"	10.0	ND	98.6	41-161	4.25	30		
1,2,4-Trimethylbenzene	10.0		"	10.0	ND	100	72-129	0.499	30		
1,2-Dibromo-3-chloropropane	7.97		"	10.0	ND	79.7	31-151	0.629	30		
1,2-Dibromoethane	10.1		"	10.0	ND	101	75-125	2.11	30		
1,2-Dichlorobenzene	9.74		"	10.0	ND	97.4	63-122	0.618	30		
1,2-Dichloroethane	10.7		"	10.0	ND	107	68-131	0.375	30		
1,2-Dichloropropane	10.4		"	10.0	ND	104	77-121	0.0961	30		
1,3,5-Trimethylbenzene	10.2		"	10.0	ND	102	69-126	1.87	30		
1,3-Dichlorobenzene	9.81		"	10.0	ND	98.1	74-119	1.75	30		
1,3-Dichloropropane	10.6		"	10.0	ND	106	77-119	0.760	30		
1,4-Dichlorobenzene	9.84		"	10.0	ND	98.4	70-124	1.43	30		
2,2-Dichloropropane	10.6		"	10.0	ND	106	10-160	2.53	30		
2-Butanone	10.1		"	10.0	ND	101	10-193	10.3	30		
2-Chlorotoluene	10.1		"	10.0	ND	101	70-126	0.00	30		
2-Hexanone	9.29		"	10.0	ND	92.9	53-133	9.83	30		
4-Chlorotoluene	10.2		"	10.0	ND	102	69-124	2.19	30		
4-Methyl-2-pentanone	10.7		"	10.0	ND	107	38-150	0.654	30		
Acetone	8.32		"	10.0	ND	83.2	13-149	13.7	30		





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BA50787 - EPA 5030B</b>											
<b>Matrix Spike Dup (BA50787-MSD1)</b>	<b>*Source sample: 15A0377-05 (MW-5)</b>						<b>Prepared &amp; Analyzed: 01/19/2015</b>				
Benzene	10.6		ug/L	10.0	ND	106	38-155		0.661	30	
Bromobenzene	10.2		"	10.0	ND	102	72-122		2.17	30	
Bromochloromethane	11.3		"	10.0	ND	113	75-121		0.0884	30	
Bromodichloromethane	10.6		"	10.0	ND	106	70-129		2.19	30	
Bromoform	10.2		"	10.0	ND	102	66-136		1.07	30	
Bromomethane	8.53		"	10.0	ND	85.3	30-158		3.46	30	
Carbon disulfide	10.7		"	10.0	ND	107	10-138		0.187	30	
Carbon tetrachloride	11.4		"	10.0	ND	114	71-146		0.796	30	
Chlorobenzene	10.2		"	10.0	ND	102	81-117		1.09	30	
Chloroethane	9.17		"	10.0	ND	91.7	51-145		2.48	30	
Chloroform	11.0		"	10.0	ND	110	80-124		3.13	30	
Chloromethane	9.70		"	10.0	ND	97.0	16-163		1.35	30	
cis-1,2-Dichloroethylene	10.9		"	10.0	ND	109	76-125		2.72	30	
cis-1,3-Dichloropropylene	10.7		"	10.0	ND	107	58-131		0.942	30	
Dibromochloromethane	10.7		"	10.0	ND	107	71-129		2.76	30	
Dibromomethane	10.3		"	10.0	ND	103	76-120		0.872	30	
Dichlorodifluoromethane	7.85		"	10.0	ND	78.5	30-147		0.00	30	
Ethyl Benzene	10.5		"	10.0	ND	105	72-128		0.476	30	
Hexachlorobutadiene	10.4		"	10.0	ND	104	34-166		3.31	30	
Isopropylbenzene	10.4		"	10.0	ND	104	66-139		2.14	30	
Methyl tert-butyl ether (MTBE)	10.5		"	10.0	0.390	101	75-128		2.11	30	
Methylene chloride	11.0		"	10.0	ND	110	57-128		2.30	30	
Naphthalene	9.41		"	10.0	ND	94.1	39-158		9.23	30	
n-Butylbenzene	10.7		"	10.0	ND	107	61-138		1.69	30	
n-Propylbenzene	10.4		"	10.0	ND	104	66-134		1.07	30	
o-Xylene	10.4		"	10.0	ND	104	69-126		0.483	30	
p- & m- Xylenes	21.0		"	20.0	ND	105	67-130		0.428	30	
p-Diethylbenzene	10.1		"	10.0	ND	101	52-150		3.13	30	
p-Ethyltoluene	9.90		"	10.0	ND	99.0	76-127		1.73	30	
p-Isopropyltoluene	10.5		"	10.0	ND	105	64-137		0.574	30	
sec-Butylbenzene	10.6		"	10.0	ND	106	53-155		0.664	30	
Styrene	10.0		"	10.0	ND	100	69-125		1.20	30	
tert-Butylbenzene	10.4		"	10.0	ND	104	65-139		1.06	30	
Tetrachloroethylene	14.8		"	10.0	5.63	92.2	64-139		1.27	30	
Toluene	10.2		"	10.0	ND	102	76-123		0.393	30	
trans-1,2-Dichloroethylene	10.9		"	10.0	ND	109	79-131		3.26	30	
trans-1,3-Dichloropropylene	10.5		"	10.0	ND	105	55-130		1.54	30	
Trichloroethylene	11.3		"	10.0	0.810	104	53-145		0.982	30	
Trichlorofluoromethane	9.84		"	10.0	ND	98.4	61-142		1.61	30	
Vinyl Chloride	9.93		"	10.0	ND	99.3	31-165		0.606	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.3</i>		<i>"</i>	<i>10.0</i>		<i>103</i>	<i>69-130</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>9.86</i>		<i>"</i>	<i>10.0</i>		<i>98.6</i>	<i>79-122</i>				
<i>Surrogate: Toluene-d8</i>	<i>9.70</i>		<i>"</i>	<i>10.0</i>		<i>97.0</i>	<i>81-117</i>				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50837 - EPA 5030B

##### Blank (BA50837-BLK1)

Prepared & Analyzed: 01/20/2015

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L
1,1,1-Trichloroethane	ND	0.50	"
1,1,2,2-Tetrachloroethane	ND	0.50	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"
1,1,2-Trichloroethane	ND	0.50	"
1,1-Dichloroethane	ND	0.50	"
1,1-Dichloroethylene	ND	0.50	"
1,1-Dichloropropylene	ND	0.50	"
1,2,3-Trichlorobenzene	0.50	0.50	"
1,2,3-Trichloropropane	ND	0.50	"
1,2,4,5-Tetramethylbenzene	0.21	0.50	"
1,2,4-Trichlorobenzene	0.38	0.50	"
1,2,4-Trimethylbenzene	ND	0.50	"
1,2-Dibromo-3-chloropropane	ND	0.50	"
1,2-Dibromoethane	ND	0.50	"
1,2-Dichlorobenzene	ND	0.50	"
1,2-Dichloroethane	ND	0.50	"
1,2-Dichloropropane	ND	0.50	"
1,3,5-Trimethylbenzene	ND	0.50	"
1,3-Dichlorobenzene	ND	0.50	"
1,3-Dichloropropane	ND	0.50	"
1,4-Dichlorobenzene	ND	0.50	"
2,2-Dichloropropane	ND	0.50	"
2-Butanone	ND	0.50	"
2-Chlorotoluene	ND	0.50	"
2-Hexanone	ND	0.50	"
4-Chlorotoluene	ND	0.50	"
4-Methyl-2-pentanone	ND	0.50	"
Acetone	ND	2.0	"
Benzene	ND	0.50	"
Bromobenzene	ND	0.50	"
Bromochloromethane	ND	0.50	"
Bromodichloromethane	ND	0.50	"
Bromoform	ND	0.50	"
Bromomethane	ND	0.50	"
Carbon disulfide	ND	0.50	"
Carbon tetrachloride	ND	0.50	"
Chlorobenzene	ND	0.50	"
Chloroethane	ND	0.50	"
Chloroform	ND	0.50	"
Chloromethane	ND	0.50	"
cis-1,2-Dichloroethylene	ND	0.50	"
cis-1,3-Dichloropropylene	ND	0.50	"
Dibromochloromethane	ND	0.50	"
Dibromomethane	ND	0.50	"
Dichlorodifluoromethane	ND	0.50	"
Ethyl Benzene	ND	0.50	"
Hexachlorobutadiene	0.22	0.50	"
Isopropylbenzene	ND	0.50	"
Methyl tert-butyl ether (MTBE)	ND	0.50	"
Methylene chloride	ND	2.0	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50837 - EPA 5030B

##### Blank (BA50837-BLK1)

Prepared & Analyzed: 01/20/2015

Naphthalene	ND	2.0	ug/L
n-Butylbenzene	ND	0.50	"
n-Propylbenzene	ND	0.50	"
o-Xylene	ND	0.50	"
p- & m- Xylenes	ND	1.0	"
p-Diethylbenzene	ND	0.50	"
p-Ethyltoluene	ND	0.50	"
p-Isopropyltoluene	ND	0.50	"
sec-Butylbenzene	ND	0.50	"
Styrene	ND	0.50	"
tert-Butylbenzene	ND	0.50	"
Tetrachloroethylene	ND	0.50	"
Toluene	ND	0.50	"
trans-1,2-Dichloroethylene	ND	0.50	"
trans-1,3-Dichloropropylene	ND	0.50	"
Trichloroethylene	ND	0.50	"
Trichlorofluoromethane	ND	0.50	"
Vinyl Chloride	ND	0.50	"
Xylenes, Total	ND	1.5	"

<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>11.0</i>		<i>"</i>	<i>10.0</i>		<i>110</i>	<i>69-130</i>
<i>Surrogate: p-Bromofluorobenzene</i>	<i>9.69</i>		<i>"</i>	<i>10.0</i>		<i>96.9</i>	<i>79-122</i>
<i>Surrogate: Toluene-d8</i>	<i>9.80</i>		<i>"</i>	<i>10.0</i>		<i>98.0</i>	<i>81-117</i>

##### LCS (BA50837-BS1)

Prepared & Analyzed: 01/20/2015

1,1,1,2-Tetrachloroethane	10.2		ug/L	10.0		102	82-126
1,1,1-Trichloroethane	11.3		"	10.0		113	78-136
1,1,2,2-Tetrachloroethane	8.89		"	10.0		88.9	76-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.50		"	10.0		95.0	54-165
1,1,2-Trichloroethane	9.51		"	10.0		95.1	82-123
1,1-Dichloroethane	11.3		"	10.0		113	82-129
1,1-Dichloroethylene	11.2		"	10.0		112	68-138
1,1-Dichloropropylene	11.1		"	10.0		111	83-133
1,2,3-Trichlorobenzene	10.6		"	10.0		106	76-136
1,2,3-Trichloropropane	9.66		"	10.0		96.6	77-128
1,2,4,5-Tetramethylbenzene	11.1		"	10.0		111	85-140
1,2,4-Trichlorobenzene	11.1		"	10.0		111	76-137
1,2,4-Trimethylbenzene	10.6		"	10.0		106	82-132
1,2-Dibromo-3-chloropropane	9.56		"	10.0		95.6	45-147
1,2-Dibromoethane	9.86		"	10.0		98.6	83-124
1,2-Dichlorobenzene	10.2		"	10.0		102	79-123
1,2-Dichloroethane	10.7		"	10.0		107	73-132
1,2-Dichloropropane	10.5		"	10.0		105	78-126
1,3,5-Trimethylbenzene	10.5		"	10.0		105	80-131
1,3-Dichlorobenzene	10.5		"	10.0		105	86-122
1,3-Dichloropropane	10.2		"	10.0		102	81-125
1,4-Dichlorobenzene	10.4		"	10.0		104	85-124
2,2-Dichloropropane	15.2		"	10.0		152	56-150
2-Butanone	10.1		"	10.0		101	49-152
2-Chlorotoluene	10.7		"	10.0		107	79-130
2-Hexanone	9.33		"	10.0		93.3	51-146
4-Chlorotoluene	10.6		"	10.0		106	79-128
4-Methyl-2-pentanone	7.26		"	10.0		72.6	57-145

High Bias





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50837 - EPA 5030B

#### LCS (BA50837-BS1)

Prepared & Analyzed: 01/20/2015

Acetone	7.78		ug/L	10.0		77.8	14-150				
Benzene	11.1		"	10.0		111	85-126				
Bromobenzene	10.3		"	10.0		103	78-129				
Bromochloromethane	10.9		"	10.0		109	77-128				
Bromodichloromethane	10.5		"	10.0		105	79-128				
Bromoform	10.4		"	10.0		104	78-133				
Bromomethane	9.14		"	10.0		91.4	43-168				
Carbon disulfide	12.5		"	10.0		125	68-146				
Carbon tetrachloride	11.5		"	10.0		115	77-141				
Chlorobenzene	10.3		"	10.0		103	88-120				
Chloroethane	10.1		"	10.0		101	65-136				
Chloroform	11.2		"	10.0		112	82-128				
Chloromethane	8.94		"	10.0		89.4	43-155				
cis-1,2-Dichloroethylene	11.8		"	10.0		118	83-129				
cis-1,3-Dichloropropylene	11.9		"	10.0		119	80-131				
Dibromochloromethane	10.3		"	10.0		103	80-130				
Dibromomethane	10.2		"	10.0		102	72-134				
Dichlorodifluoromethane	10.1		"	10.0		101	44-144				
Ethyl Benzene	10.5		"	10.0		105	80-131				
Hexachlorobutadiene	11.6		"	10.0		116	67-146				
Isopropylbenzene	10.7		"	10.0		107	76-140				
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	76-135				
Methylene chloride	11.3		"	10.0		113	55-137				
Naphthalene	9.90		"	10.0		99.0	70-147				
n-Butylbenzene	11.2		"	10.0		112	79-132				
n-Propylbenzene	10.8		"	10.0		108	78-133				
o-Xylene	10.5		"	10.0		105	78-130				
p- & m- Xylenes	21.5		"	20.0		108	77-133				
p-Diethylbenzene	10.8		"	10.0		108	84-134				
p-Ethyltoluene	10.4		"	10.0		104	88-129				
p-Isopropyltoluene	10.9		"	10.0		109	81-136				
sec-Butylbenzene	10.8		"	10.0		108	79-137				
Styrene	10.8		"	10.0		108	67-132				
tert-Butylbenzene	10.7		"	10.0		107	77-138				
Tetrachloroethylene	10.4		"	10.0		104	82-131				
Toluene	10.4		"	10.0		104	80-127				
trans-1,2-Dichloroethylene	11.4		"	10.0		114	80-132				
trans-1,3-Dichloropropylene	11.2		"	10.0		112	78-131				
Trichloroethylene	10.6		"	10.0		106	82-128				
Trichlorofluoromethane	10.9		"	10.0		109	67-139				
Vinyl Chloride	10.6		"	10.0		106	58-145				
Surrogate: 1,2-Dichloroethane-d4	9.79		"	10.0		97.9	69-130				
Surrogate: p-Bromofluorobenzene	9.73		"	10.0		97.3	79-122				
Surrogate: Toluene-d8	9.94		"	10.0		99.4	81-117				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BA50837 - EPA 5030B</b>											
<b>LCS Dup (BA50837-BSD1)</b>						Prepared & Analyzed: 01/20/2015					
1,1,1,2-Tetrachloroethane	10.7		ug/L	10.0		107	82-126		4.79	30	
1,1,1-Trichloroethane	11.1		"	10.0		111	78-136		1.25	30	
1,1,2,2-Tetrachloroethane	9.35		"	10.0		93.5	76-129		5.04	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.60		"	10.0		96.0	54-165		1.05	30	
1,1,2-Trichloroethane	9.79		"	10.0		97.9	82-123		2.90	30	
1,1-Dichloroethane	11.3		"	10.0		113	82-129		0.00	30	
1,1-Dichloroethylene	11.4		"	10.0		114	68-138		2.30	30	
1,1-Dichloropropylene	11.0		"	10.0		110	83-133		1.36	30	
1,2,3-Trichlorobenzene	11.2		"	10.0		112	76-136		6.06	30	
1,2,3-Trichloropropane	10.5		"	10.0		105	77-128		8.43	30	
1,2,4,5-Tetramethylbenzene	11.4		"	10.0		114	85-140		2.59	30	
1,2,4-Trichlorobenzene	11.2		"	10.0		112	76-137		0.716	30	
1,2,4-Trimethylbenzene	10.6		"	10.0		106	82-132		0.0945	30	
1,2-Dibromo-3-chloropropane	9.02		"	10.0		90.2	45-147		5.81	30	
1,2-Dibromoethane	10.0		"	10.0		100	83-124		1.51	30	
1,2-Dichlorobenzene	10.6		"	10.0		106	79-123		3.66	30	
1,2-Dichloroethane	10.8		"	10.0		108	73-132		1.02	30	
1,2-Dichloropropane	10.8		"	10.0		108	78-126		2.64	30	
1,3,5-Trimethylbenzene	10.8		"	10.0		108	80-131		2.45	30	
1,3-Dichlorobenzene	10.8		"	10.0		108	86-122		2.53	30	
1,3-Dichloropropane	10.4		"	10.0		104	81-125		1.55	30	
1,4-Dichlorobenzene	10.6		"	10.0		106	85-124		1.80	30	
2,2-Dichloropropane	14.8		"	10.0		148	56-150		2.40	30	
2-Butanone	10.6		"	10.0		106	49-152		4.65	30	
2-Chlorotoluene	10.9		"	10.0		109	79-130		1.39	30	
2-Hexanone	9.59		"	10.0		95.9	51-146		2.75	30	
4-Chlorotoluene	10.7		"	10.0		107	79-128		0.843	30	
4-Methyl-2-pentanone	9.66		"	10.0		96.6	57-145		28.4	30	
Acetone	6.20		"	10.0		62.0	14-150		22.6	30	
Benzene	11.0		"	10.0		110	85-126		0.908	30	
Bromobenzene	10.6		"	10.0		106	78-129		2.78	30	
Bromochloromethane	10.8		"	10.0		108	77-128		1.47	30	
Bromodichloromethane	10.9		"	10.0		109	79-128		4.11	30	
Bromoform	10.4		"	10.0		104	78-133		0.386	30	
Bromomethane	9.87		"	10.0		98.7	43-168		7.68	30	
Carbon disulfide	12.3		"	10.0		123	68-146		1.37	30	
Carbon tetrachloride	11.1		"	10.0		111	77-141		3.55	30	
Chlorobenzene	10.5		"	10.0		105	88-120		1.92	30	
Chloroethane	10.0		"	10.0		100	65-136		0.695	30	
Chloroform	11.1		"	10.0		111	82-128		0.807	30	
Chloromethane	8.46		"	10.0		84.6	43-155		5.52	30	
cis-1,2-Dichloroethylene	11.7		"	10.0		117	83-129		0.597	30	
cis-1,3-Dichloropropylene	12.2		"	10.0		122	80-131		1.74	30	
Dibromochloromethane	10.5		"	10.0		105	80-130		1.82	30	
Dibromomethane	10.3		"	10.0		103	72-134		1.66	30	
Dichlorodifluoromethane	9.53		"	10.0		95.3	44-144		5.41	30	
Ethyl Benzene	10.7		"	10.0		107	80-131		1.51	30	
Hexachlorobutadiene	12.0		"	10.0		120	67-146		3.06	30	
Isopropylbenzene	10.8		"	10.0		108	76-140		0.743	30	
Methyl tert-butyl ether (MTBE)	10.2		"	10.0		102	76-135		1.07	30	
Methylene chloride	11.4		"	10.0		114	55-137		0.883	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BA50837 - EPA 5030B

#### LCS Dup (BA50837-BSD1)

Prepared & Analyzed: 01/20/2015

Naphthalene	10.3		ug/L	10.0		103	70-147		3.86	30	
n-Butylbenzene	11.3		"	10.0		113	79-132		1.16	30	
n-Propylbenzene	10.8		"	10.0		108	78-133		0.462	30	
o-Xylene	10.8		"	10.0		108	78-130		2.91	30	
p- & m- Xylenes	21.7		"	20.0		109	77-133		1.11	30	
p-Diethylbenzene	11.0		"	10.0		110	84-134		1.66	30	
p-Ethyltoluene	10.6		"	10.0		106	88-129		1.24	30	
p-Isopropyltoluene	11.1		"	10.0		111	81-136		1.82	30	
sec-Butylbenzene	11.0		"	10.0		110	79-137		1.56	30	
Styrene	11.1		"	10.0		111	67-132		1.92	30	
tert-Butylbenzene	10.9		"	10.0		109	77-138		1.48	30	
Tetrachloroethylene	10.5		"	10.0		105	82-131		0.959	30	
Toluene	10.6		"	10.0		106	80-127		1.62	30	
trans-1,2-Dichloroethylene	11.4		"	10.0		114	80-132		0.264	30	
trans-1,3-Dichloropropylene	11.5		"	10.0		115	78-131		2.21	30	
Trichloroethylene	10.8		"	10.0		108	82-128		1.77	30	
Trichlorofluoromethane	11.0		"	10.0		110	67-139		1.28	30	
Vinyl Chloride	10.5		"	10.0		105	58-145		0.568	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>9.56</i>		<i>"</i>	<i>10.0</i>		<i>95.6</i>	<i>69-130</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>10.1</i>		<i>"</i>	<i>10.0</i>		<i>101</i>	<i>79-122</i>				
<i>Surrogate: Toluene-d8</i>	<i>9.98</i>		<i>"</i>	<i>10.0</i>		<i>99.8</i>	<i>81-117</i>				





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15A0377-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-04	MW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-05	MW-5	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-06	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-07	MW-7	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-08	MW-8	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-09	Field Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15A0377-10	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C





## Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.

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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.





Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

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**YORK**ANALYTICAL LABORATORIES, INC.  
120 RESEARCH DR. STRATFORD, CT 06615  
(203) 325-1371 FAX (203) 357-0166**Field Chain-of-Custody Record**Page 1 of 1NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.York Project No. 15A0377**Report to:**



**ATTACHMENT N**  
**UST Endpoint Sampling Lab Report**





# Technical Report

prepared for:

## **Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 10/20/2017

**Client Project ID: #170154 11-28 31 Drive, LIC NY**

York Project (SDG) No.: 17J0671

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
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132-02 89th AVENUE  
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RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)



Report Date: 10/20/2017  
Client Project ID: #170154 11-28 31 Drive, LIC NY  
York Project (SDG) No.: 17J0671

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

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**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on October 16, 2017 and listed below. The project was identified as your project: **#170154 11-28 31 Drive, LIC NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
17J0671-01	EP-1 (5 ft)	Soil	10/16/2017	10/16/2017
17J0671-02	EP-2 (5 ft)	Soil	10/16/2017	10/16/2017
17J0671-03	EP-3 (5 ft)	Soil	10/16/2017	10/16/2017
17J0671-04	EP-4 (5 ft)	Soil	10/16/2017	10/16/2017
17J0671-05	EP-5 (6.5 ft)	Soil	10/16/2017	10/16/2017
17J0671-06	Trip Blank	Water	10/16/2017	10/16/2017



## **General Notes for York Project (SDG) No.: 17J0671**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 10/20/2017







## Sample Information

**Client Sample ID:** EP-1 (5 ft)

**York Sample ID:** 17J0671-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
123-91-1	1,4-Dioxane	ND		ug/kg dry	53	110	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR





## Sample Information

**Client Sample ID:** EP-1 (5 ft)

**York Sample ID:** 17J0671-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:13	SR
78-93-3	2-Butanone	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
67-64-1	Acetone	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
71-43-2	Benzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
108-86-1	Bromobenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:13	SR
74-97-5	Bromochloromethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:13	SR
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
75-25-2	Bromoform	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
74-83-9	Bromomethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
108-90-7	Chlorobenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
75-00-3	Chloroethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
67-66-3	Chloroform	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
74-87-3	Chloromethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:13	SR
74-95-3	Dibromomethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:13	SR
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:13	SR
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:13	SR





## Sample Information

**Client Sample ID:** EP-1 (5 ft)

**York Sample ID:** 17J0671-01

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
75-09-2	Methylene chloride	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
91-20-3	Naphthalene	ND		ug/kg dry	2.7	11	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
95-47-6	o-Xylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 16:13	SR
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 16:13	SR
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
100-42-5	Styrene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
108-88-3	Toluene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
79-01-6	Trichloroethylene	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
108-05-4	Vinyl acetate	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.7	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.0	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:13	SR

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %	77-125
2037-26-5	Surrogate: Toluene-d8	100 %	85-120
460-00-4	Surrogate: p-Bromofluorobenzene	98.0 %	76-130





## Sample Information

**Client Sample ID:** EP-1 (5 ft)

**York Sample ID:** 17J0671-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

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**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.0		ug/kg dry			1	EPA 8260C Certifications:	10/18/2017 07:30	10/18/2017 16:13	SR

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	98.4	197	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	98.4	197	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	98.4	197	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR





## Sample Information

**Client Sample ID:** EP-1 (5 ft)

**York Sample ID:** 17J0671-01

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	98.4	197	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	98.4	197	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	98.4	197	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
83-32-9	Acenaphthene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
62-53-3	Aniline	ND		ug/kg dry	197	394	2	EPA 8270D Certifications:	10/19/2017 07:38 NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
120-12-7	Anthracene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>88.9</b>	J	ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
50-32-8	<b>Benzo(a)pyrene</b>	<b>97.5</b>	J	ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
205-99-2	<b>Benzo(b)fluoranthene</b>	<b>84.1</b>	J	ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
191-24-2	<b>Benzo(g,h,i)perylene</b>	<b>70.0</b>	J	ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
207-08-9	<b>Benzo(k)fluoranthene</b>	<b>97.5</b>	J	ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR
218-01-9	<b>Chrysene</b>	<b>101</b>		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications:	10/19/2017 07:38 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 20:46	SR





## Sample Information

**Client Sample ID:** EP-1 (5 ft)

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17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

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October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
206-44-0	<b>Fluoranthene</b>	<b>158</b>		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
86-73-7	Fluorene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
193-39-5	<b>Indeno(1,2,3-cd)pyrene</b>	<b>66.1</b>	J	ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
78-59-1	Isophorone	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
91-20-3	Naphthalene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
85-01-8	<b>Phenanthrene</b>	<b>62.1</b>	J	ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
108-95-2	Phenol	ND		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
129-00-0	<b>Pyrene</b>	<b>143</b>		ug/kg dry	49.3	98.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR





## Sample Information

**Client Sample ID:** EP-1 (5 ft)

**York Sample ID:** 17J0671-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
110-86-1	Pyridine	ND		ug/kg dry	197	394	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 20:46	SR
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
367-12-4	Surrogate: 2-Fluorophenol	56.4 %			20-108						
4165-62-2	Surrogate: Phenol-d5	73.5 %			23-114						
4165-60-0	Surrogate: Nitrobenzene-d5	58.6 %			22-108						
321-60-8	Surrogate: 2-Fluorobiphenyl	62.7 %			21-113						
118-79-6	Surrogate: 2,4,6-Tribromophenol	62.9 %			19-110						
1718-51-0	Surrogate: Terphenyl-d14	53.3 %			24-116						

### Semi-Volatiles, Tentatively Identified Cmpds.

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	10/19/2017 07:38	10/19/2017 20:46	SR

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	84.8		%	0.100	1	SM 2540G Certifications: CTDOH	10/20/2017 10:10	10/20/2017 14:23	TAJ

## Sample Information

**Client Sample ID:** EP-2 (5 ft)

**York Sample ID:** 17J0671-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR





## Sample Information

**Client Sample ID:** EP-2 (5 ft)

**York Sample ID:** 17J0671-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
123-91-1	1,4-Dioxane	ND		ug/kg dry	40	81	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
78-93-3	2-Butanone	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR





## Sample Information

**Client Sample ID:** EP-2 (5 ft)

**York Sample ID:** 17J0671-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/kg dry	4.0	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
71-43-2	Benzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
108-86-1	Bromobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:47	SR
74-97-5	Bromochloromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:47	SR
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
75-25-2	Bromoform	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
74-83-9	Bromomethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
108-90-7	Chlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
75-00-3	Chloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
67-66-3	Chloroform	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
74-87-3	Chloromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:47	SR
74-95-3	Dibromomethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:47	SR
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:47	SR
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:47	SR
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
75-09-2	Methylene chloride	ND		ug/kg dry	4.0	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
91-20-3	Naphthalene	ND		ug/kg dry	2.0	8.1	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 16:47	SR





## Sample Information

**Client Sample ID:** EP-2 (5 ft)

**York Sample ID:** 17J0671-02

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
95-47-6	o-Xylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	4.0	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
100-42-5	Styrene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
108-88-3	Toluene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
79-01-6	Trichloroethylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
108-05-4	Vinyl acetate	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-4	10/18/2017 07:30	10/18/2017 16:47	SR
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
1330-20-7	Xylenes, Total	ND		ug/kg dry	6.1	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 16:47	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %	77-125								
2037-26-5	Surrogate: Toluene-d8	102 %	85-120								
460-00-4	Surrogate: p-Bromofluorobenzene	104 %	76-130								

### Volatile Organics, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.0		ug/kg dry			1	EPA 8260C Certifications:	10/18/2017 07:30	10/18/2017 16:47	SR





## Sample Information

**Client Sample ID:** EP-2 (5 ft)

**York Sample ID:** 17J0671-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	95.3	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	95.3	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	95.3	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	95.3	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR





## Sample Information

**Client Sample ID:** EP-2 (5 ft)

**York Sample ID:** 17J0671-02

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-47-8	4-Chloroaniline	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	95.3	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	95.3	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
83-32-9	Acenaphthene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
62-53-3	Aniline	ND		ug/kg dry	191	382	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
120-12-7	Anthracene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>109</b>		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
50-32-8	<b>Benzo(a)pyrene</b>	<b>93.7</b>	J	ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
205-99-2	<b>Benzo(b)fluoranthene</b>	<b>76.2</b>	J	ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
191-24-2	<b>Benzo(g,h,i)perylene</b>	<b>60.9</b>	J	ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
207-08-9	<b>Benzo(k)fluoranthene</b>	<b>90.6</b>	J	ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
218-01-9	<b>Chrysene</b>	<b>114</b>		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR





## Sample Information

**Client Sample ID:** EP-2 (5 ft)

**York Sample ID:** 17J0671-02

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
131-11-3	Dimethyl phthalate	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
206-44-0	<b>Fluoranthene</b>	<b>240</b>		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
86-73-7	Fluorene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
193-39-5	<b>Indeno(1,2,3-cd)pyrene</b>	<b>54.8</b>	J	ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
78-59-1	Isophorone	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
91-20-3	Naphthalene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
85-01-8	<b>Phenanthrene</b>	<b>171</b>		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
108-95-2	Phenol	ND		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
129-00-0	<b>Pyrene</b>	<b>201</b>		ug/kg dry	47.8	95.3	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
110-86-1	Pyridine	ND		ug/kg dry	191	382	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 21:34	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
367-12-4	Surrogate: 2-Fluorophenol	63.3 %	20-108								
4165-62-2	Surrogate: Phenol-d5	78.8 %	23-114								
4165-60-0	Surrogate: Nitrobenzene-d5	67.0 %	22-108								





## Sample Information

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17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
321-60-8	Surrogate: 2-Fluorobiphenyl	69.4 %			21-113						
118-79-6	Surrogate: 2,4,6-Tribromophenol	60.7 %			19-110						
1718-51-0	Surrogate: Terphenyl-d14	52.2 %			24-116						

### Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	10/19/2017 07:38	10/19/2017 21:34	SR

### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.5		%	0.100	1	SM 2540G Certifications: CTDOH	10/20/2017 10:10	10/20/2017 14:23	TAJ

## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR





## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

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10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
123-91-1	1,4-Dioxane	ND		ug/kg dry	34	68	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
78-93-3	2-Butanone	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
95-49-8	2-Chlorotoluene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
106-43-4	4-Chlorotoluene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
67-64-1	Acetone	ND		ug/kg dry	3.4	6.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
71-43-2	Benzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
108-86-1	Bromobenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR





## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-97-5	Bromochloromethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
75-27-4	Bromodichloromethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
75-25-2	Bromoform	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
74-83-9	Bromomethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
56-23-5	Carbon tetrachloride	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
108-90-7	Chlorobenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
75-00-3	Chloroethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
67-66-3	Chloroform	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
74-87-3	Chloromethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
124-48-1	Dibromochloromethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
74-95-3	Dibromomethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
100-41-4	Ethyl Benzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
98-82-8	Isopropylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
75-09-2	Methylene chloride	ND		ug/kg dry	3.4	6.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
91-20-3	Naphthalene	ND		ug/kg dry	1.7	6.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:01	SR
104-51-8	n-Butylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
103-65-1	n-Propylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
95-47-6	o-Xylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 19:01	SR





## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	3.4	6.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 19:01	SR
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
135-98-8	sec-Butylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
100-42-5	Styrene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
98-06-6	tert-Butylbenzene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
127-18-4	Tetrachloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
108-88-3	Toluene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
79-01-6	Trichloroethylene	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
108-05-4	Vinyl acetate	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT	10/18/2017 07:30	10/18/2017 19:01	SR
75-01-4	Vinyl Chloride	ND		ug/kg dry	1.7	3.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR
1330-20-7	Xylenes, Total	ND		ug/kg dry	5.1	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:01	SR

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	110 %	77-125
2037-26-5	Surrogate: Toluene-d8	100 %	85-120
460-00-4	Surrogate: p-Bromofluorobenzene	94.5 %	76-130

### Volatile Organics, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.0		ug/kg dry			1	EPA 8260C Certifications:	10/18/2017 07:30	10/18/2017 19:01	SR

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	96.4	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	96.4	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	96.4	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	96.4	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR





## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-47-8	4-Chloroaniline	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	96.4	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	96.4	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
83-32-9	Acenaphthene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
62-53-3	Aniline	ND		ug/kg dry	193	386	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
120-12-7	Anthracene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>219</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
50-32-8	<b>Benzo(a)pyrene</b>	<b>224</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
205-99-2	<b>Benzo(b)fluoranthene</b>	<b>204</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
191-24-2	<b>Benzo(g,h,i)perylene</b>	<b>156</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
207-08-9	<b>Benzo(k)fluoranthene</b>	<b>222</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
218-01-9	<b>Chrysene</b>	<b>266</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
53-70-3	<b>Dibenzo(a,h)anthracene</b>	<b>50.9</b>	J	ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR





## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
131-11-3	Dimethyl phthalate	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
206-44-0	<b>Fluoranthene</b>	<b>350</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
86-73-7	Fluorene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
193-39-5	<b>Indeno(1,2,3-cd)pyrene</b>	<b>143</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
78-59-1	Isophorone	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
91-20-3	Naphthalene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
85-01-8	<b>Phenanthrene</b>	<b>143</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
108-95-2	Phenol	ND		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
129-00-0	<b>Pyrene</b>	<b>303</b>		ug/kg dry	48.3	96.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
110-86-1	Pyridine	ND		ug/kg dry	193	386	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 18:20	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
367-12-4	Surrogate: 2-Fluorophenol	48.0 %	20-108								
4165-62-2	Surrogate: Phenol-d5	60.8 %	23-114								
4165-60-0	Surrogate: Nitrobenzene-d5	50.3 %	22-108								





## Sample Information

**Client Sample ID:** EP-3 (5 ft)

**York Sample ID:** 17J0671-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
321-60-8	Surrogate: 2-Fluorobiphenyl	55.6 %			21-113						
118-79-6	Surrogate: 2,4,6-Tribromophenol	51.7 %			19-110						
1718-51-0	Surrogate: Terphenyl-d14	44.6 %			24-116						

### Semi-Volatiles, Tentatively Identified Cmpds.

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	10/19/2017 07:38	10/19/2017 18:20	SR

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.5		%	0.100	1	SM 2540G Certifications: CTDOH	10/20/2017 10:10	10/20/2017 14:23	TAJ

## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR





## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
123-91-1	1,4-Dioxane	ND		ug/kg dry	48	97	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
78-93-3	2-Butanone	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
67-64-1	Acetone	ND		ug/kg dry	4.8	9.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
71-43-2	Benzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
108-86-1	Bromobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR





## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-97-5	Bromochloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
75-25-2	Bromoform	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
74-83-9	Bromomethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
108-90-7	Chlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
75-00-3	Chloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
67-66-3	Chloroform	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
74-87-3	Chloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
74-95-3	Dibromomethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
75-09-2	Methylene chloride	ND		ug/kg dry	4.8	9.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
91-20-3	Naphthalene	ND		ug/kg dry	2.4	9.7	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 19:35	SR
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
95-47-6	o-Xylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 19:35	SR





## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	4.8	9.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 19:35	SR
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
100-42-5	Styrene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
108-88-3	Toluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
79-01-6	Trichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
108-05-4	Vinyl acetate	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT	10/18/2017 07:30	10/18/2017 19:35	SR
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.3	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 19:35	SR

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	103 %	77-125
2037-26-5	Surrogate: Toluene-d8	105 %	85-120
460-00-4	Surrogate: p-Bromofluorobenzene	98.1 %	76-130

### Volatile Organics, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.0		ug/kg dry			1	EPA 8260C Certifications:	10/18/2017 07:30	10/18/2017 19:35	SR

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	96.5	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	96.5	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	96.5	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	96.5	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR





## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-47-8	4-Chloroaniline	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	96.5	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	96.5	193	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
83-32-9	Acenaphthene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
62-53-3	Aniline	ND		ug/kg dry	193	386	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
120-12-7	Anthracene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>57.8</b>	J	ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
50-32-8	<b>Benzo(a)pyrene</b>	<b>55.5</b>	J	ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
207-08-9	<b>Benzo(k)fluoranthene</b>	<b>54.0</b>	J	ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
218-01-9	<b>Chrysene</b>	<b>69.4</b>	J	ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR





## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
131-11-3	Dimethyl phthalate	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
206-44-0	<b>Fluoranthene</b>	<b>116</b>		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
86-73-7	Fluorene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
78-59-1	Isophorone	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
91-20-3	Naphthalene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
85-01-8	<b>Phenanthrene</b>	<b>57.8</b>	J	ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
108-95-2	Phenol	ND		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
129-00-0	<b>Pyrene</b>	<b>103</b>		ug/kg dry	48.3	96.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
110-86-1	Pyridine	ND		ug/kg dry	193	386	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 22:23	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
367-12-4	Surrogate: 2-Fluorophenol	44.3 %	20-108								
4165-62-2	Surrogate: Phenol-d5	57.4 %	23-114								
4165-60-0	Surrogate: Nitrobenzene-d5	46.1 %	22-108								





## Sample Information

**Client Sample ID:** EP-4 (5 ft)

**York Sample ID:** 17J0671-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
321-60-8	Surrogate: 2-Fluorobiphenyl	48.9 %			21-113						
118-79-6	Surrogate: 2,4,6-Tribromophenol	43.1 %			19-110						
1718-51-0	Surrogate: Terphenyl-d14	37.1 %			24-116						

### Semi-Volatiles, Tentatively Identified Cmpds.

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	10/19/2017 07:38	10/19/2017 22:23	SR

### Total Solids

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.5		%	0.100	1	SM 2540G Certifications: CTDOH	10/20/2017 10:10	10/20/2017 14:23	TAJ

## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR





## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
123-91-1	1,4-Dioxane	ND		ug/kg dry	50	99	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
78-93-3	2-Butanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
95-49-8	2-Chlorotoluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
106-43-4	4-Chlorotoluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
67-64-1	Acetone	ND		ug/kg dry	5.0	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
71-43-2	Benzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
108-86-1	Bromobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR





## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-97-5	Bromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
75-25-2	Bromoform	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
74-83-9	Bromomethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
108-90-7	Chlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
75-00-3	Chloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
67-66-3	Chloroform	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
74-87-3	Chloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
74-95-3	Dibromomethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
75-09-2	Methylene chloride	ND		ug/kg dry	5.0	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
91-20-3	Naphthalene	ND		ug/kg dry	2.5	9.9	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/18/2017 07:30	10/18/2017 20:09	SR
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
95-47-6	o-Xylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 20:09	SR





## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.0	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/18/2017 07:30	10/18/2017 20:09	SR
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
100-42-5	Styrene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
108-88-3	Toluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
79-01-6	Trichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
108-05-4	Vinyl acetate	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT	10/18/2017 07:30	10/18/2017 20:09	SR
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.4	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/18/2017 07:30	10/18/2017 20:09	SR

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	107 %	77-125
2037-26-5	Surrogate: Toluene-d8	102 %	85-120
460-00-4	Surrogate: p-Bromofluorobenzene	95.8 %	76-130

### Volatile Organics, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.0		ug/kg dry			1	EPA 8260C Certifications:	10/18/2017 07:30	10/18/2017 20:09	SR

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR





## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-47-8	4-Chloroaniline	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
83-32-9	Acenaphthene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
62-53-3	Aniline	ND		ug/kg dry	203	406	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
120-12-7	Anthracene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>51.0</b>	J	ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
218-01-9	<b>Chrysene</b>	<b>57.5</b>	J	ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR





## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
131-11-3	Dimethyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
206-44-0	<b>Fluoranthene</b>	<b>98.0</b>	J	ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
86-73-7	Fluorene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
78-59-1	Isophorone	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
91-20-3	Naphthalene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
85-01-8	<b>Phenanthrene</b>	<b>51.9</b>	J	ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
108-95-2	Phenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
129-00-0	<b>Pyrene</b>	<b>84.3</b>	J	ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
110-86-1	Pyridine	ND		ug/kg dry	203	406	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/19/2017 07:38	10/19/2017 23:12	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
367-12-4	Surrogate: 2-Fluorophenol	57.7 %	20-108								
4165-62-2	Surrogate: Phenol-d5	74.2 %	23-114								
4165-60-0	Surrogate: Nitrobenzene-d5	56.6 %	22-108								





## Sample Information

**Client Sample ID:** EP-5 (6.5 ft)

**York Sample ID:** 17J0671-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17J0671

#170154 11-28 31 Drive, LIC NY

Soil

October 16, 2017 12:00 pm

10/16/2017

### Semi-Volatiles, 8270 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
321-60-8	Surrogate: 2-Fluorobiphenyl	59.3 %			21-113						
118-79-6	Surrogate: 2,4,6-Tribromophenol	51.2 %			19-110						
1718-51-0	Surrogate: Terphenyl-d14	43.4 %			24-116						

### Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	10/19/2017 07:38	10/19/2017 23:12	SR

### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	82.3		%	0.100	1	SM 2540G Certifications: CTDOH	10/20/2017 10:10	10/20/2017 14:23	TAJ

## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 17J0671-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

17J0671

#170154 11-28 31 Drive, LIC NY

Water

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
75-34-3	1,1-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 17J0671-06

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
563-58-6	1,1-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
106-93-4	1,2-Dibromoethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
107-06-2	1,2-Dichloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
78-87-5	1,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
142-28-9	1,3-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
594-20-7	2,2-Dichloropropane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR
78-93-3	2-Butanone	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
95-49-8	2-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
106-43-4	4-Chlorotoluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
67-64-1	Acetone	ND		ug/L	5.0	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
71-43-2	Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
108-86-1	Bromobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR
74-97-5	Bromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 07:30	10/17/2017 12:50	SR





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 17J0671-06

**York Project (SDG) No.**

17J0671

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

October 16, 2017 12:00 pm

**Date Received**

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-27-4	Bromodichloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
75-25-2	Bromoform	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
74-83-9	Bromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
56-23-5	Carbon tetrachloride	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
108-90-7	Chlorobenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
75-00-3	Chloroethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
67-66-3	Chloroform	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
74-87-3	Chloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
124-48-1	Dibromochloromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
74-95-3	Dibromomethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 12:50	SR
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 12:50	SR
100-41-4	Ethyl Benzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
87-68-3	Hexachlorobutadiene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 12:50	SR
98-82-8	Isopropylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
75-09-2	Methylene chloride	ND		ug/L	2.5	10	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
91-20-3	Naphthalene	ND		ug/L	2.5	10	1	EPA 8260C Certifications:	10/17/2017 07:30 NELAC-NY10854-CT,NJDEP,NELAC-NY10854-I	10/17/2017 12:50	SR
104-51-8	n-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
103-65-1	n-Propylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 12:50	SR
95-47-6	o-Xylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/17/2017 12:50	SR
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	1	EPA 8260C Certifications:	10/17/2017 07:30 CTDOH,NELAC-NY10854-CT,NELAC-NY10854	10/17/2017 12:50	SR





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 17J0671-06

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J0671

#170154 11-28 31 Drive, LIC NY

Water

October 16, 2017 12:00 pm

10/16/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-87-6	p-Isopropyltoluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
135-98-8	sec-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
100-42-5	Styrene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
98-06-6	tert-Butylbenzene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
127-18-4	Tetrachloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
108-88-3	Toluene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
79-01-6	Trichloroethylene	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
75-69-4	Trichlorofluoromethane	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
108-05-4	Vinyl acetate	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
75-01-4	Vinyl Chloride	ND		ug/L	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR
1330-20-7	Xylenes, Total	ND		ug/L	7.5	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	10/17/2017 07:30	10/17/2017 12:50	SR

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	105 %	69-130
2037-26-5	Surrogate: Toluene-d8	99.0 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	95.2 %	79-122

### Volatile Organics, Tentatively Identified Cmpds.

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.0		ug/L		1	EPA 8260C Certifications:	10/17/2017 07:30	10/17/2017 12:50	SR





## Analytical Batch Summary

**Batch ID:** BJ70847

**Preparation Method:** EPA 5030B

**Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17J0671-06	Trip Blank	10/17/17
BJ70847-BLK1	Blank	10/17/17
BJ70847-BS1	LCS	10/17/17
BJ70847-BSD1	LCS Dup	10/17/17

**Batch ID:** BJ70939

**Preparation Method:** EPA 5035A

**Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17J0671-01	EP-1 (5 ft)	10/18/17
17J0671-02	EP-2 (5 ft)	10/18/17
17J0671-03	EP-3 (5 ft)	10/18/17
17J0671-04	EP-4 (5 ft)	10/18/17
17J0671-05	EP-5 (6.5 ft)	10/18/17
BJ70939-BLK1	Blank	10/18/17
BJ70939-BLK2	Blank	10/18/17
BJ70939-BS1	LCS	10/18/17
BJ70939-BSD1	LCS Dup	10/18/17
BJ70939-MS1	Matrix Spike	10/18/17
BJ70939-MSD1	Matrix Spike Dup	10/18/17

**Batch ID:** BJ71019

**Preparation Method:** EPA 3550C

**Prepared By:** SGM

YORK Sample ID	Client Sample ID	Preparation Date
17J0671-01	EP-1 (5 ft)	10/19/17
17J0671-02	EP-2 (5 ft)	10/19/17
17J0671-03	EP-3 (5 ft)	10/19/17
17J0671-04	EP-4 (5 ft)	10/19/17
17J0671-05	EP-5 (6.5 ft)	10/19/17
BJ71019-BLK1	Blank	10/19/17
BJ71019-BS1	LCS	10/19/17
BJ71019-MS1	Matrix Spike	10/19/17
BJ71019-MSD1	Matrix Spike Dup	10/19/17

**Batch ID:** BJ71125

**Preparation Method:** % Solids Prep

**Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17J0671-01	EP-1 (5 ft)	10/20/17
17J0671-02	EP-2 (5 ft)	10/20/17
17J0671-03	EP-3 (5 ft)	10/20/17
17J0671-04	EP-4 (5 ft)	10/20/17
17J0671-05	EP-5 (6.5 ft)	10/20/17
BJ71125-DUP1	Duplicate	10/20/17





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70847 - EPA 5030B

##### Blank (BJ70847-BLK1)

Prepared & Analyzed: 10/17/2017

1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,1-Dichloropropylene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,3-Trichloropropane	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"
1,2,4-Trimethylbenzene	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	5.0	"
1,2-Dibromoethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
2-Butanone	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Acetone	ND	10	"
Benzene	ND	5.0	"
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
cis-1,2-Dichloroethylene	ND	5.0	"
cis-1,3-Dichloropropylene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
Dibromomethane	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
Ethyl Benzene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
Methyl tert-butyl ether (MTBE)	ND	5.0	"
Methylene chloride	ND	10	"
Naphthalene	ND	10	"
n-Butylbenzene	ND	5.0	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70847 - EPA 5030B

##### Blank (BJ70847-BLK1)

Prepared & Analyzed: 10/17/2017

n-Propylbenzene	ND	5.0	ug/L
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
Trichloroethylene	ND	5.0	"
Trichlorofluoromethane	ND	5.0	"
Vinyl acetate	ND	5.0	"
Vinyl Chloride	ND	5.0	"
Xylenes, Total	ND	15	"

Surrogate: 1,2-Dichloroethane-d4	11.0	"	10.0	110	69-130
Surrogate: Toluene-d8	9.71	"	10.0	97.1	81-117
Surrogate: p-Bromofluorobenzene	9.16	"	10.0	91.6	79-122

##### LCS (BJ70847-BS1)

Prepared & Analyzed: 10/17/2017

1,1,1,2-Tetrachloroethane	10.8	ug/L	10.0	108	70-132	High Bias
1,1,1-Trichloroethane	11.9	"	10.0	119	68-138	
1,1,2,2-Tetrachloroethane	8.89	"	10.0	88.9	73-132	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.6	"	10.0	126	67-136	
1,1,2-Trichloroethane	9.36	"	10.0	93.6	79-125	
1,1-Dichloroethane	10.8	"	10.0	108	78-128	
1,1-Dichloroethylene	11.1	"	5.00	222	68-134	
1,1-Dichloropropylene	11.0	"	10.0	110	74-130	
1,2,3-Trichlorobenzene	9.54	"	10.0	95.4	77-140	
1,2,3-Trichloropropane	9.26	"	10.0	92.6	79-127	
1,2,4-Trichlorobenzene	10.1	"	10.0	101	75-141	
1,2,4-Trimethylbenzene	10.6	"	10.0	106	78-127	
1,2-Dibromo-3-chloropropane	9.24	"	10.0	92.4	60-150	
1,2-Dibromoethane	9.42	"	10.0	94.2	86-123	
1,2-Dichlorobenzene	9.74	"	10.0	97.4	79-125	
1,2-Dichloroethane	10.9	"	10.0	109	69-133	
1,2-Dichloropropane	9.48	"	10.0	94.8	76-124	
1,3,5-Trimethylbenzene	10.3	"	10.0	103	78-128	
1,3-Dichlorobenzene	10.4	"	10.0	104	81-124	
1,3-Dichloropropane	9.32	"	10.0	93.2	79-125	
1,4-Dichlorobenzene	10.1	"	10.0	101	82-124	
2,2-Dichloropropane	11.9	"	10.0	119	61-139	
2-Butanone	6.22	"	10.0	62.2	44-169	
2-Chlorotoluene	10.4	"	10.0	104	74-130	
4-Chlorotoluene	9.82	"	10.0	98.2	75-127	
Acetone	10.3	"	10.0	103	29-163	
Benzene	10.3	"	10.0	103	72-134	
Bromobenzene	9.48	"	10.0	94.8	74-129	
Bromochloromethane	11.1	"	10.0	111	69-134	
Bromodichloromethane	10.0	"	10.0	100	76-127	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70847 - EPA 5030B

##### LCS (BJ70847-BS1)

Prepared & Analyzed: 10/17/2017

Bromoform	9.63		ug/L	10.0		96.3	77-137				
Bromomethane	6.06		"	10.0		60.6	50-156				
Carbon tetrachloride	12.4		"	10.0		124	62-145				
Chlorobenzene	10.2		"	10.0		102	85-119				
Chloroethane	12.6		"	10.0		126	49-143				
Chloroform	10.5		"	10.0		105	74-131				
Chloromethane	10.7		"	10.0		107	43-134				
cis-1,2-Dichloroethylene	10.6		"	10.0		106	73-134				
cis-1,3-Dichloropropylene	9.78		"	10.0		97.8	77-128				
Dibromochloromethane	9.98		"	10.0		99.8	79-130				
Dibromomethane	9.38		"	10.0		93.8	78-128				
Dichlorodifluoromethane	18.0		"	10.0		180	38-139	High Bias			
Ethyl Benzene	11.0		"	10.0		110	80-129				
Hexachlorobutadiene	13.5		"	10.0		135	72-141				
Isopropylbenzene	11.1		"	10.0		111	76-128				
Methyl tert-butyl ether (MTBE)	9.82		"	10.0		98.2	64-142				
Methylene chloride	10.3		"	10.0		103	56-142				
Naphthalene	9.23		"	10.0		92.3	79-144				
n-Butylbenzene	11.5		"	10.0		115	74-132				
n-Propylbenzene	11.1		"	10.0		111	72-135				
o-Xylene	10.7		"	10.0		107	81-123				
p- & m- Xylenes	22.7		"	20.0		114	79-130				
p-Isopropyltoluene	11.2		"	10.0		112	80-127				
sec-Butylbenzene	10.8		"	10.0		108	78-127				
Styrene	10.5		"	10.0		105	82-124				
tert-Butylbenzene	10.6		"	10.0		106	75-131				
Tetrachloroethylene	11.0		"	10.0		110	78-133				
Toluene	10.3		"	10.0		103	83-122				
trans-1,2-Dichloroethylene	10.6		"	10.0		106	59-145				
trans-1,3-Dichloropropylene	9.77		"	10.0		97.7	74-131				
Trichloroethylene	10.1		"	10.0		101	81-125				
Trichlorofluoromethane	14.4		"	10.0		144	61-144				
Vinyl acetate	16.6		"	10.0		166	32-165	High Bias			
Vinyl Chloride	13.0		"	10.0		130	42-136				
Surrogate: 1,2-Dichloroethane-d4	10.6		"	10.0		106	69-130				
Surrogate: Toluene-d8	9.88		"	10.0		98.8	81-117				
Surrogate: p-Bromofluorobenzene	9.45		"	10.0		94.5	79-122				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BJ70847 - EPA 5030B</b>											
<b>LCS Dup (BJ70847-BSD1)</b>						Prepared & Analyzed: 10/17/2017					
1,1,1,2-Tetrachloroethane	10.8		ug/L	10.0		108	70-132		0.371	30	
1,1,1-Trichloroethane	2.22		"	10.0		22.2	68-138	Low Bias	137	30	Non-dir.
1,1,2,2-Tetrachloroethane	9.01		"	10.0		90.1	73-132		1.34	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.8		"	10.0		128	67-136		1.18	30	
1,1,2-Trichloroethane	9.75		"	10.0		97.5	79-125		4.08	30	
1,1-Dichloroethane	10.9		"	10.0		109	78-128		1.01	30	
1,1-Dichloroethylene	11.2		"	5.00		224	68-134	High Bias	0.717	30	
1,1-Dichloropropylene	11.2		"	10.0		112	74-130		2.25	30	
1,2,3-Trichlorobenzene	12.4		"	10.0		124	77-140		25.9	30	
1,2,3-Trichloropropane	9.31		"	10.0		93.1	79-127		0.539	30	
1,2,4-Trichlorobenzene	11.2		"	10.0		112	75-141		10.4	30	
1,2,4-Trimethylbenzene	10.0		"	10.0		100	78-127		5.35	30	
1,2-Dibromo-3-chloropropane	9.26		"	10.0		92.6	60-150		0.216	30	
1,2-Dibromoethane	9.79		"	10.0		97.9	86-123		3.85	30	
1,2-Dichlorobenzene	9.67		"	10.0		96.7	79-125		0.721	30	
1,2-Dichloroethane	11.5		"	10.0		115	69-133		4.82	30	
1,2-Dichloropropane	9.62		"	10.0		96.2	76-124		1.47	30	
1,3,5-Trimethylbenzene	9.83		"	10.0		98.3	78-128		4.86	30	
1,3-Dichlorobenzene	10.0		"	10.0		100	81-124		3.53	30	
1,3-Dichloropropane	9.76		"	10.0		97.6	79-125		4.61	30	
1,4-Dichlorobenzene	9.97		"	10.0		99.7	82-124		0.899	30	
2,2-Dichloropropane	11.8		"	10.0		118	61-139		0.677	30	
2-Butanone	7.06		"	10.0		70.6	44-169		12.7	30	
2-Chlorotoluene	9.84		"	10.0		98.4	74-130		5.15	30	
4-Chlorotoluene	9.44		"	10.0		94.4	75-127		3.95	30	
Acetone	11.0		"	10.0		110	29-163		6.46	30	
Benzene	10.5		"	10.0		105	72-134		1.93	30	
Bromobenzene	9.20		"	10.0		92.0	74-129		3.00	30	
Bromochloromethane	11.6		"	10.0		116	69-134		3.97	30	
Bromodichloromethane	10.2		"	10.0		102	76-127		1.48	30	
Bromoform	10.2		"	10.0		102	77-137		6.24	30	
Bromomethane	6.85		"	10.0		68.5	50-156		12.2	30	
Carbon tetrachloride	12.4		"	10.0		124	62-145		0.564	30	
Chlorobenzene	10.1		"	10.0		101	85-119		0.197	30	
Chloroethane	12.5		"	10.0		125	49-143		0.557	30	
Chloroform	10.9		"	10.0		109	74-131		4.03	30	
Chloromethane	10.3		"	10.0		103	43-134		3.14	30	
cis-1,2-Dichloroethylene	9.50		"	10.0		95.0	73-134		11.4	30	
cis-1,3-Dichloropropylene	10.0		"	10.0		100	77-128		2.42	30	
Dibromochloromethane	10.4		"	10.0		104	79-130		4.03	30	
Dibromomethane	9.79		"	10.0		97.9	78-128		4.28	30	
Dichlorodifluoromethane	18.0		"	10.0		180	38-139	High Bias	0.0556	30	
Ethyl Benzene	10.8		"	10.0		108	80-129		1.46	30	
Hexachlorobutadiene	16.1		"	10.0		161	72-141	High Bias	17.5	30	
Isopropylbenzene	10.4		"	10.0		104	76-128		6.61	30	
Methyl tert-butyl ether (MTBE)	10.7		"	10.0		107	64-142		8.67	30	
Methylene chloride	10.6		"	10.0		106	56-142		3.45	30	
Naphthalene	10.4		"	10.0		104	79-144		12.4	30	
n-Butylbenzene	11.1		"	10.0		111	74-132		3.64	30	
n-Propylbenzene	10.4		"	10.0		104	72-135		6.88	30	
o-Xylene	10.7		"	10.0		107	81-123		0.00	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70847 - EPA 5030B

##### LCS Dup (BJ70847-BSD1)

Prepared & Analyzed: 10/17/2017

p- & m- Xylenes	22.3		ug/L	20.0		112	79-130		1.73	30
p-Isopropyltoluene	10.7		"	10.0		107	80-127		4.49	30
sec-Butylbenzene	10.2		"	10.0		102	78-127		5.62	30
Styrene	10.6		"	10.0		106	82-124		0.852	30
tert-Butylbenzene	10.0		"	10.0		100	75-131		6.11	30
Tetrachloroethylene	10.7		"	10.0		107	78-133		2.49	30
Toluene	10.2		"	10.0		102	83-122		0.878	30
trans-1,2-Dichloroethylene	10.8		"	10.0		108	59-145		1.77	30
trans-1,3-Dichloropropylene	10.1		"	10.0		101	74-131		3.02	30
Trichloroethylene	9.96		"	10.0		99.6	81-125		1.79	30
Trichlorofluoromethane	14.2		"	10.0		142	61-144		1.33	30
Vinyl acetate	17.1		"	10.0		171	32-165	High Bias	3.27	30
Vinyl Chloride	13.0		"	10.0		130	42-136		0.154	30
Surrogate: 1,2-Dichloroethane-d4	11.1		"	10.0		111	69-130			
Surrogate: Toluene-d8	9.68		"	10.0		96.8	81-117			
Surrogate: p-Bromofluorobenzene	9.13		"	10.0		91.3	79-122			

#### Batch BJ70939 - EPA 5035A

##### Blank (BJ70939-BLK1)

Prepared & Analyzed: 10/18/2017

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,1-Dichloropropylene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,3-Trichloropropane	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"
1,2,4-Trimethylbenzene	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	5.0	"
1,2-Dibromoethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
1,4-Dioxane	ND	100	"
2,2-Dichloropropane	ND	5.0	"
2-Butanone	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Acetone	ND	10	"
Benzene	ND	5.0	"
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70939 - EPA 5035A

##### Blank (BJ70939-BLK1)

Prepared & Analyzed: 10/18/2017

Bromodichloromethane	ND	5.0	ug/kg wet								
Bromoform	ND	5.0	"								
Bromomethane	ND	5.0	"								
Carbon tetrachloride	ND	5.0	"								
Chlorobenzene	ND	5.0	"								
Chloroethane	ND	5.0	"								
Chloroform	ND	5.0	"								
Chloromethane	ND	5.0	"								
cis-1,2-Dichloroethylene	ND	5.0	"								
cis-1,3-Dichloropropylene	ND	5.0	"								
Dibromochloromethane	ND	5.0	"								
Dibromomethane	ND	5.0	"								
Dichlorodifluoromethane	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Hexachlorobutadiene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Methylene chloride	ND	10	"								
Naphthalene	ND	10	"								
n-Butylbenzene	ND	5.0	"								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
Styrene	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl acetate	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	53.0		ug/L	50.0		106	77-125				
Surrogate: Toluene-d8	49.0		"	50.0		98.0	85-120				
Surrogate: p-Bromofluorobenzene	48.8		"	50.0		97.7	76-130				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70939 - EPA 5035A

##### Blank (BJ70939-BLK2)

Prepared & Analyzed: 10/18/2017

1,1,1,2-Tetrachloroethane	ND	500	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	500	"
1,1,2,2-Tetrachloroethane	ND	500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	"
1,1,2-Trichloroethane	ND	500	"
1,1-Dichloroethane	ND	500	"
1,1-Dichloroethylene	ND	500	"
1,1-Dichloropropylene	ND	500	"
1,2,3-Trichlorobenzene	ND	500	"
1,2,3-Trichloropropane	ND	500	"
1,2,4-Trichlorobenzene	ND	500	"
1,2,4-Trimethylbenzene	ND	500	"
1,2-Dibromo-3-chloropropane	ND	500	"
1,2-Dibromoethane	ND	500	"
1,2-Dichlorobenzene	ND	500	"
1,2-Dichloroethane	ND	500	"
1,2-Dichloropropane	ND	500	"
1,3,5-Trimethylbenzene	ND	500	"
1,3-Dichlorobenzene	ND	500	"
1,3-Dichloropropane	ND	500	"
1,4-Dichlorobenzene	ND	500	"
1,4-Dioxane	ND	10000	"
2,2-Dichloropropane	ND	500	"
2-Butanone	ND	500	"
2-Chlorotoluene	ND	500	"
4-Chlorotoluene	ND	500	"
Acetone	ND	1000	"
Benzene	ND	500	"
Bromobenzene	ND	500	"
Bromochloromethane	ND	500	"
Bromodichloromethane	ND	500	"
Bromoform	ND	500	"
Bromomethane	ND	500	"
Carbon tetrachloride	ND	500	"
Chlorobenzene	ND	500	"
Chloroethane	ND	500	"
Chloroform	ND	500	"
Chloromethane	ND	500	"
cis-1,2-Dichloroethylene	ND	500	"
cis-1,3-Dichloropropylene	ND	500	"
Dibromochloromethane	ND	500	"
Dibromomethane	ND	500	"
Dichlorodifluoromethane	ND	500	"
Ethyl Benzene	ND	500	"
Hexachlorobutadiene	ND	500	"
Isopropylbenzene	ND	500	"
Methyl tert-butyl ether (MTBE)	ND	500	"
Methylene chloride	ND	1000	"
Naphthalene	ND	1000	"
n-Butylbenzene	ND	500	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70939 - EPA 5035A

##### Blank (BJ70939-BLK2)

Prepared & Analyzed: 10/18/2017

n-Propylbenzene	ND	500	ug/kg wet
o-Xylene	ND	500	"
p- & m- Xylenes	ND	1000	"
p-Isopropyltoluene	ND	500	"
sec-Butylbenzene	ND	500	"
Styrene	ND	500	"
tert-Butylbenzene	ND	500	"
Tetrachloroethylene	ND	500	"
Toluene	ND	500	"
trans-1,2-Dichloroethylene	ND	500	"
trans-1,3-Dichloropropylene	ND	500	"
Trichloroethylene	ND	500	"
Trichlorofluoromethane	ND	500	"
Vinyl acetate	ND	500	"
Vinyl Chloride	ND	500	"
Xylenes, Total	ND	1500	"

Surrogate: 1,2-Dichloroethane-d4	55.1	ug/L	50.0	110	77-125
Surrogate: Toluene-d8	47.3	"	50.0	94.5	85-120
Surrogate: p-Bromofluorobenzene	46.7	"	50.0	93.3	76-130

##### LCS (BJ70939-BS1)

Prepared & Analyzed: 10/18/2017

1,1,1,2-Tetrachloroethane	54.4	ug/L	50.0	109	75-129	High Bias
1,1,1-Trichloroethane	54.3	"	50.0	109	71-137	
1,1,2,2-Tetrachloroethane	54.8	"	50.0	110	79-129	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	53.3	"	50.0	107	58-146	
1,1,2-Trichloroethane	53.1	"	50.0	106	83-123	
1,1-Dichloroethane	52.3	"	50.0	105	75-130	
1,1-Dichloroethylene	52.3	"	25.0	209	64-137	
1,1-Dichloropropylene	52.1	"	50.0	104	77-127	
1,2,3-Trichlorobenzene	55.6	"	50.0	111	81-140	
1,2,3-Trichloropropane	57.3	"	50.0	115	81-126	
1,2,4-Trichlorobenzene	61.3	"	50.0	123	80-141	
1,2,4-Trimethylbenzene	53.9	"	50.0	108	84-125	
1,2-Dibromo-3-chloropropane	54.5	"	50.0	109	74-142	
1,2-Dibromoethane	53.3	"	50.0	107	86-123	
1,2-Dichlorobenzene	55.3	"	50.0	111	85-122	
1,2-Dichloroethane	50.9	"	50.0	102	71-133	
1,2-Dichloropropane	52.2	"	50.0	104	81-122	
1,3,5-Trimethylbenzene	52.4	"	50.0	105	82-126	
1,3-Dichlorobenzene	55.9	"	50.0	112	84-124	
1,3-Dichloropropane	49.0	"	50.0	98.0	83-123	
1,4-Dichlorobenzene	55.6	"	50.0	111	84-124	
1,4-Dioxane	1010	"	1000	101	10-228	
2,2-Dichloropropane	52.3	"	50.0	105	67-136	
2-Butanone	74.6	"	50.0	149	58-147	High Bias
2-Chlorotoluene	53.9	"	50.0	108	78-127	
4-Chlorotoluene	53.2	"	50.0	106	79-125	
Acetone	39.3	"	50.0	78.6	36-155	
Benzene	48.5	"	50.0	96.9	77-127	
Bromobenzene	52.7	"	50.0	105	77-129	
Bromochloromethane	51.6	"	50.0	103	74-129	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70939 - EPA 5035A

#### LCS (BJ70939-BS1)

Prepared & Analyzed: 10/18/2017

Bromodichloromethane	53.6		ug/L	50.0		107	81-124				
Bromoform	57.0		"	50.0		114	80-136				
Bromomethane	45.4		"	50.0		90.8	32-177				
Carbon tetrachloride	54.6		"	50.0		109	66-143				
Chlorobenzene	54.0		"	50.0		108	86-120				
Chloroethane	49.8		"	50.0		99.6	51-142				
Chloroform	51.3		"	50.0		103	76-131				
Chloromethane	50.4		"	50.0		101	49-132				
cis-1,2-Dichloroethylene	49.4		"	50.0		98.8	74-132				
cis-1,3-Dichloropropylene	53.9		"	50.0		108	81-129				
Dibromochloromethane	55.5		"	50.0		111	10-200				
Dibromomethane	53.1		"	50.0		106	83-124				
Dichlorodifluoromethane	52.4		"	50.0		105	28-158				
Ethyl Benzene	53.7		"	50.0		107	84-125				
Hexachlorobutadiene	51.4		"	50.0		103	83-133				
Isopropylbenzene	52.8		"	50.0		106	81-127				
Methyl tert-butyl ether (MTBE)	49.1		"	50.0		98.2	74-131				
Methylene chloride	48.9		"	50.0		97.8	57-141				
Naphthalene	56.0		"	50.0		112	86-141				
n-Butylbenzene	57.7		"	50.0		115	80-130				
n-Propylbenzene	54.0		"	50.0		108	74-136				
o-Xylene	54.0		"	50.0		108	83-123				
p- & m- Xylenes	105		"	100		105	82-128				
p-Isopropyltoluene	55.5		"	50.0		111	85-125				
sec-Butylbenzene	55.4		"	50.0		111	83-125				
Styrene	52.4		"	50.0		105	86-126				
tert-Butylbenzene	53.3		"	50.0		107	80-127				
Tetrachloroethylene	49.2		"	50.0		98.4	80-129				
Toluene	54.2		"	50.0		108	85-121				
trans-1,2-Dichloroethylene	48.0		"	50.0		96.1	72-132				
trans-1,3-Dichloropropylene	55.4		"	50.0		111	78-132				
Trichloroethylene	52.1		"	50.0		104	84-123				
Trichlorofluoromethane	49.8		"	50.0		99.7	62-140				
Vinyl acetate	57.0		"	50.0		114	67-136				
Vinyl Chloride	46.4		"	50.0		92.9	52-130				
Surrogate: 1,2-Dichloroethane-d4	52.0		"	50.0		104	77-125				
Surrogate: Toluene-d8	49.4		"	50.0		98.9	85-120				
Surrogate: p-Bromofluorobenzene	48.7		"	50.0		97.3	76-130				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BJ70939 - EPA 5035A</b>											
<b>LCS Dup (BJ70939-BSD1)</b>						Prepared & Analyzed: 10/18/2017					
1,1,1,2-Tetrachloroethane	53.3		ug/L	50.0		107	75-129		2.12	30	
1,1,1-Trichloroethane	49.4		"	50.0		98.9	71-137		9.32	30	
1,1,2,2-Tetrachloroethane	52.6		"	50.0		105	79-129		4.13	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	51.9		"	50.0		104	58-146		2.72	30	
1,1,2-Trichloroethane	53.3		"	50.0		107	83-123		0.433	30	
1,1-Dichloroethane	50.6		"	50.0		101	75-130		3.46	30	
1,1-Dichloroethylene	44.4		"	25.0		177	64-137	High Bias	16.4	30	
1,1-Dichloropropylene	51.5		"	50.0		103	77-127		1.10	30	
1,2,3-Trichlorobenzene	55.5		"	50.0		111	81-140		0.108	30	
1,2,3-Trichloropropane	58.4		"	50.0		117	81-126		1.97	30	
1,2,4-Trichlorobenzene	58.3		"	50.0		117	80-141		5.15	30	
1,2,4-Trimethylbenzene	50.4		"	50.0		101	84-125		6.71	30	
1,2-Dibromo-3-chloropropane	54.3		"	50.0		109	74-142		0.367	30	
1,2-Dibromoethane	51.3		"	50.0		103	86-123		3.75	30	
1,2-Dichlorobenzene	54.7		"	50.0		109	85-122		1.11	30	
1,2-Dichloroethane	51.9		"	50.0		104	71-133		2.00	30	
1,2-Dichloropropane	49.4		"	50.0		98.7	81-122		5.61	30	
1,3,5-Trimethylbenzene	54.0		"	50.0		108	82-126		2.93	30	
1,3-Dichlorobenzene	57.9		"	50.0		116	84-124		3.55	30	
1,3-Dichloropropane	50.5		"	50.0		101	83-123		3.14	30	
1,4-Dichlorobenzene	57.0		"	50.0		114	84-124		2.43	30	
1,4-Dioxane	1010		"	1000		101	10-228		0.0287	30	
2,2-Dichloropropane	51.2		"	50.0		102	67-136		2.01	30	
2-Butanone	72.3		"	50.0		145	58-147		3.20	30	
2-Chlorotoluene	55.9		"	50.0		112	78-127		3.72	30	
4-Chlorotoluene	56.4		"	50.0		113	79-125		5.88	30	
Acetone	30.7		"	50.0		61.5	36-155		24.5	30	
Benzene	49.8		"	50.0		99.5	77-127		2.67	30	
Bromobenzene	51.6		"	50.0		103	77-129		2.11	30	
Bromochloromethane	48.1		"	50.0		96.3	74-129		6.96	30	
Bromodichloromethane	54.3		"	50.0		109	81-124		1.30	30	
Bromoform	54.8		"	50.0		110	80-136		3.92	30	
Bromomethane	48.3		"	50.0		96.7	32-177		6.25	30	
Carbon tetrachloride	53.6		"	50.0		107	66-143		1.88	30	
Chlorobenzene	53.1		"	50.0		106	86-120		1.72	30	
Chloroethane	49.2		"	50.0		98.5	51-142		1.17	30	
Chloroform	50.9		"	50.0		102	76-131		0.783	30	
Chloromethane	50.6		"	50.0		101	49-132		0.356	30	
cis-1,2-Dichloroethylene	49.8		"	50.0		99.6	74-132		0.847	30	
cis-1,3-Dichloropropylene	53.4		"	50.0		107	81-129		0.839	30	
Dibromochloromethane	57.3		"	50.0		115	10-200		3.21	30	
Dibromomethane	52.3		"	50.0		105	83-124		1.56	30	
Dichlorodifluoromethane	49.8		"	50.0		99.7	28-158		5.03	30	
Ethyl Benzene	54.8		"	50.0		110	84-125		1.94	30	
Hexachlorobutadiene	53.8		"	50.0		108	83-133		4.47	30	
Isopropylbenzene	52.4		"	50.0		105	81-127		0.627	30	
Methyl tert-butyl ether (MTBE)	49.2		"	50.0		98.4	74-131		0.203	30	
Methylene chloride	43.4		"	50.0		86.9	57-141		11.8	30	
Naphthalene	52.2		"	50.0		104	86-141		7.08	30	
n-Butylbenzene	57.8		"	50.0		116	80-130		0.156	30	
n-Propylbenzene	55.2		"	50.0		110	74-136		2.23	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70939 - EPA 5035A

##### LCS Dup (BJ70939-BSD1)

Prepared & Analyzed: 10/18/2017

o-Xylene	50.5		ug/L	50.0		101	83-123		6.62	30	
p- & m- Xylenes	107		"	100		107	82-128		2.06	30	
p-Isopropyltoluene	55.8		"	50.0		112	85-125		0.557	30	
sec-Butylbenzene	56.5		"	50.0		113	83-125		1.93	30	
Styrene	52.3		"	50.0		105	86-126		0.172	30	
tert-Butylbenzene	56.3		"	50.0		113	80-127		5.49	30	
Tetrachloroethylene	52.3		"	50.0		105	80-129		6.07	30	
Toluene	53.1		"	50.0		106	85-121		2.05	30	
trans-1,2-Dichloroethylene	47.8		"	50.0		95.6	72-132		0.501	30	
trans-1,3-Dichloropropylene	55.2		"	50.0		110	78-132		0.235	30	
Trichloroethylene	52.4		"	50.0		105	84-123		0.536	30	
Trichlorofluoromethane	50.3		"	50.0		101	62-140		0.998	30	
Vinyl acetate	56.9		"	50.0		114	67-136		0.211	30	
Vinyl Chloride	47.4		"	50.0		94.8	52-130		2.00	30	
Surrogate: 1,2-Dichloroethane-d4	52.9		"	50.0		106	77-125				
Surrogate: Toluene-d8	49.8		"	50.0		99.6	85-120				
Surrogate: p-Bromofluorobenzene	47.8		"	50.0		95.6	76-130				

##### Matrix Spike (BJ70939-MS1)

\*Source sample: 17J0671-03 (EP-3 (5 ft))

Prepared & Analyzed: 10/18/2017

1,1,1,2-Tetrachloroethane	52.7		ug/L	50.0	ND	105	15-161				
1,1,1-Trichloroethane	48.7		"	50.0	ND	97.3	42-145				
1,1,2,2-Tetrachloroethane	56.3		"	50.0	ND	113	16-167				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	48.9		"	50.0	ND	97.7	11-160				
1,1,2-Trichloroethane	51.7		"	50.0	ND	103	44-145				
1,1-Dichloroethane	48.9		"	50.0	ND	97.7	46-142				
1,1-Dichloroethylene	44.8		"	25.0	ND	179	30-153	High Bias			
1,1-Dichloropropylene	47.1		"	50.0	ND	94.3	40-133				
1,2,3-Trichlorobenzene	31.8		"	50.0	ND	63.7	10-157				
1,2,3-Trichloropropane	61.7		"	50.0	ND	123	38-155				
1,2,4-Trichlorobenzene	34.1		"	50.0	ND	68.1	10-151				
1,2,4-Trimethylbenzene	54.4		"	50.0	ND	109	10-170				
1,2-Dibromo-3-chloropropane	44.6		"	50.0	ND	89.3	36-138				
1,2-Dibromoethane	44.8		"	50.0	ND	89.5	40-142				
1,2-Dichlorobenzene	46.6		"	50.0	ND	93.3	10-147				
1,2-Dichloroethane	49.9		"	50.0	ND	99.8	48-133				
1,2-Dichloropropane	52.8		"	50.0	ND	106	47-141				
1,3,5-Trimethylbenzene	52.2		"	50.0	ND	104	10-150				
1,3-Dichlorobenzene	46.2		"	50.0	ND	92.5	10-144				
1,3-Dichloropropane	47.9		"	50.0	ND	95.7	43-142				
1,4-Dichlorobenzene	44.7		"	50.0	ND	89.3	10-160				
1,4-Dioxane	952		"	1000	ND	95.2	10-191				
2,2-Dichloropropane	50.2		"	50.0	ND	100	38-130				
2-Butanone	72.9		"	50.0	ND	146	10-189				
2-Chlorotoluene	52.8		"	50.0	ND	106	14-144				
4-Chlorotoluene	49.3		"	50.0	ND	98.6	15-138				
Acetone	58.9		"	50.0	2.47	113	10-196				
Benzene	47.2		"	50.0	ND	94.5	43-139				
Bromobenzene	49.7		"	50.0	ND	99.4	23-142				
Bromochloromethane	47.8		"	50.0	ND	95.6	38-145				
Bromodichloromethane	50.8		"	50.0	ND	102	38-147				
Bromoform	55.1		"	50.0	ND	110	29-156				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70939 - EPA 5035A

<b>Matrix Spike (BJ70939-MS1)</b>		*Source sample: 17J0671-03 (EP-3 (5 ft))					Prepared & Analyzed: 10/18/2017				
Bromomethane	47.6		ug/L	50.0	ND	95.2	10-166				
Carbon tetrachloride	50.5		"	50.0	ND	101	35-145				
Chlorobenzene	46.9		"	50.0	ND	93.9	21-154				
Chloroethane	51.2		"	50.0	ND	102	15-160				
Chloroform	51.1		"	50.0	ND	102	47-142				
Chloromethane	45.5		"	50.0	ND	90.9	10-159				
cis-1,2-Dichloroethylene	48.5		"	50.0	ND	97.0	42-144				
cis-1,3-Dichloropropylene	48.8		"	50.0	ND	97.5	18-159				
Dibromochloromethane	50.7		"	50.0	ND	101	10-179				
Dibromomethane	48.6		"	50.0	ND	97.2	47-143				
Dichlorodifluoromethane	42.3		"	50.0	ND	84.6	10-145				
Ethyl Benzene	49.0		"	50.0	ND	98.1	11-158				
Hexachlorobutadiene	35.2		"	50.0	ND	70.4	10-158				
Isopropylbenzene	56.6		"	50.0	ND	113	10-162				
Methyl tert-butyl ether (MTBE)	50.0		"	50.0	ND	100	42-152				
Methylene chloride	47.8		"	50.0	ND	95.5	28-151				
Naphthalene	33.6		"	50.0	ND	67.1	10-158				
n-Butylbenzene	47.7		"	50.0	ND	95.4	10-162				
n-Propylbenzene	54.3		"	50.0	ND	109	10-155				
o-Xylene	47.3		"	50.0	ND	94.7	10-158				
p- & m- Xylenes	99.2		"	100	ND	99.2	10-156				
p-Isopropyltoluene	51.7		"	50.0	ND	103	10-147				
sec-Butylbenzene	55.1		"	50.0	ND	110	10-157				
Styrene	42.6		"	50.0	ND	85.2	13-171				
tert-Butylbenzene	59.4		"	50.0	ND	119	10-160				
Tetrachloroethylene	54.7		"	50.0	ND	109	30-167				
Toluene	48.5		"	50.0	ND	97.1	21-160				
trans-1,2-Dichloroethylene	46.2		"	50.0	ND	92.4	29-153				
trans-1,3-Dichloropropylene	46.7		"	50.0	ND	93.3	18-155				
Trichloroethylene	48.0		"	50.0	ND	96.0	24-169				
Trichlorofluoromethane	46.3		"	50.0	ND	92.6	35-142				
Vinyl acetate	34.0		"	50.0	ND	68.1	10-119				
Vinyl Chloride	43.7		"	50.0	ND	87.4	12-160				
Surrogate: 1,2-Dichloroethane-d4	49.6		"	50.0		99.1	77-125				
Surrogate: Toluene-d8	48.8		"	50.0		97.6	85-120				
Surrogate: p-Bromofluorobenzene	52.5		"	50.0		105	76-130				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag
<b>Batch BJ70939 - EPA 5035A</b>											
<b>Matrix Spike Dup (BJ70939-MSD1)</b>		*Source sample: 17J0671-03 (EP-3 (5 ft))					Prepared & Analyzed: 10/18/2017				
1,1,1,2-Tetrachloroethane	43.0		ug/L	50.0	ND	86.0	15-161		20.3	33	
1,1,1-Trichloroethane	36.0		"	50.0	ND	72.1	42-145		29.8	30	
1,1,2,2-Tetrachloroethane	49.1		"	50.0	ND	98.3	16-167		13.6	56	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	34.3		"	50.0	ND	68.7	11-160		34.9	31	Non-dir.
1,1,2-Trichloroethane	48.2		"	50.0	ND	96.3	44-145		7.03	40	
1,1-Dichloroethane	41.3		"	50.0	ND	82.6	46-142		16.8	36	
1,1-Dichloroethylene	34.5		"	25.0	ND	138	30-153		25.8	31	
1,1-Dichloropropylene	37.7		"	50.0	ND	75.4	40-133		22.3	28	
1,2,3-Trichlorobenzene	26.7		"	50.0	ND	53.5	10-157		17.4	47	
1,2,3-Trichloropropane	56.4		"	50.0	ND	113	38-155		9.06	48	
1,2,4-Trichlorobenzene	27.9		"	50.0	ND	55.8	10-151		19.9	52	
1,2,4-Trimethylbenzene	40.0		"	50.0	ND	80.1	10-170		30.3	242	
1,2-Dibromo-3-chloropropane	48.3		"	50.0	ND	96.6	36-138		7.94	54	
1,2-Dibromoethane	44.5		"	50.0	ND	89.0	40-142		0.538	39	
1,2-Dichlorobenzene	38.0		"	50.0	ND	75.9	10-147		20.6	52	
1,2-Dichloroethane	47.0		"	50.0	ND	93.9	48-133		6.11	32	
1,2-Dichloropropane	44.3		"	50.0	ND	88.5	47-141		17.6	37	
1,3,5-Trimethylbenzene	39.7		"	50.0	ND	79.5	10-150		27.1	62	
1,3-Dichlorobenzene	37.0		"	50.0	ND	73.9	10-144		22.3	51	
1,3-Dichloropropane	47.0		"	50.0	ND	94.1	43-142		1.73	36	
1,4-Dichlorobenzene	36.8		"	50.0	ND	73.7	10-160		19.2	52	
1,4-Dioxane	1200		"	1000	ND	120	10-191		22.7	196	
2,2-Dichloropropane	36.6		"	50.0	ND	73.2	38-130		31.3	31	Non-dir.
2-Butanone	81.9		"	50.0	ND	164	10-189		11.6	67	
2-Chlorotoluene	39.7		"	50.0	ND	79.4	14-144		28.3	49	
4-Chlorotoluene	39.4		"	50.0	ND	78.8	15-138		22.3	39	
Acetone	61.8		"	50.0	2.46	119	10-196		4.77	150	
Benzene	39.4		"	50.0	ND	78.9	43-139		18.0	64	
Bromobenzene	38.8		"	50.0	ND	77.7	23-142		24.5	44	
Bromochloromethane	44.1		"	50.0	ND	88.2	38-145		8.01	30	
Bromodichloromethane	43.2		"	50.0	ND	86.4	38-147		16.2	37	
Bromoform	47.7		"	50.0	ND	95.5	29-156		14.3	51	
Bromomethane	38.3		"	50.0	ND	76.6	10-166		21.7	42	
Carbon tetrachloride	36.5		"	50.0	ND	73.0	35-145		32.2	31	Non-dir.
Chlorobenzene	38.1		"	50.0	ND	76.3	21-154		20.7	32	
Chloroethane	34.9		"	50.0	ND	69.8	15-160		37.9	40	
Chloroform	40.6		"	50.0	ND	81.2	47-142		22.8	29	
Chloromethane	37.3		"	50.0	ND	74.5	10-159		19.8	31	
cis-1,2-Dichloroethylene	37.9		"	50.0	ND	75.9	42-144		24.4	30	
cis-1,3-Dichloropropylene	43.6		"	50.0	ND	87.1	18-159		11.3	39	
Dibromochloromethane	46.1		"	50.0	ND	92.1	10-179		9.65	41	
Dibromomethane	44.1		"	50.0	ND	88.2	47-143		9.66	41	
Dichlorodifluoromethane	29.1		"	50.0	ND	58.2	10-145		37.0	34	Non-dir.
Ethyl Benzene	37.7		"	50.0	ND	75.4	11-158		26.1	42	
Hexachlorobutadiene	30.8		"	50.0	ND	61.5	10-158		13.6	45	
Isopropylbenzene	38.8		"	50.0	ND	77.5	10-162		37.4	57	
Methyl tert-butyl ether (MTBE)	46.6		"	50.0	ND	93.2	42-152		7.06	47	
Methylene chloride	40.8		"	50.0	ND	81.6	28-151		15.7	49	
Naphthalene	29.7		"	50.0	ND	59.4	10-158		12.1	95	
n-Butylbenzene	38.0		"	50.0	ND	75.9	10-162		22.7	96	
n-Propylbenzene	39.3		"	50.0	ND	78.6	10-155		32.1	56	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ70939 - EPA 5035A

Matrix Spike Dup (BJ70939-MSD1)		*Source sample: 17J0671-03 (EP-3 (5 ft))					Prepared & Analyzed: 10/18/2017				
o-Xylene	39.9		ug/L	50.0	ND	79.9	10-158		17.0	51	
p- & m- Xylenes	78.7		"	100	ND	78.7	10-156		23.0	47	
p-Isopropyltoluene	39.6		"	50.0	ND	79.1	10-147		26.6	60	
sec-Butylbenzene	39.7		"	50.0	ND	79.4	10-157		32.4	56	
Styrene	37.6		"	50.0	ND	75.1	13-171		12.6	39	
tert-Butylbenzene	41.8		"	50.0	ND	83.5	10-160		34.9	79	
Tetrachloroethylene	44.1		"	50.0	ND	88.1	30-167		21.5	33	
Toluene	39.7		"	50.0	ND	79.4	21-160		20.1	50	
trans-1,2-Dichloroethylene	35.1		"	50.0	ND	70.2	29-153		27.4	30	
trans-1,3-Dichloropropylene	41.6		"	50.0	ND	83.1	18-155		11.6	30	
Trichloroethylene	37.1		"	50.0	ND	74.2	24-169		25.7	30	
Trichlorofluoromethane	33.3		"	50.0	ND	66.5	35-142		32.7	30	Non-dir.
Vinyl acetate	28.7		"	50.0	ND	57.4	10-119		17.0	82	
Vinyl Chloride	35.3		"	50.0	ND	70.5	12-160		21.4	35	
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Surrogate: 1,2-Dichloroethane-d4	55.1		"	50.0		110	77-125				
Surrogate: Toluene-d8	51.9		"	50.0		104	85-120				
Surrogate: p-Bromofluorobenzene	50.7		"	50.0		101	76-130				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71019 - EPA 3550C

##### Blank (BJ71019-BLK1)

Prepared & Analyzed: 10/19/2017

Tentatively Identified Compounds	0.00		ug/kg wet
1,2,4-Trichlorobenzene	ND	41.7	"
1,2-Dichlorobenzene	ND	41.7	"
1,3-Dichlorobenzene	ND	41.7	"
1,4-Dichlorobenzene	ND	41.7	"
2,4,5-Trichlorophenol	ND	41.7	"
2,4,6-Trichlorophenol	ND	41.7	"
2,4-Dichlorophenol	ND	41.7	"
2,4-Dimethylphenol	ND	41.7	"
2,4-Dinitrophenol	ND	83.3	"
2,4-Dinitrotoluene	ND	41.7	"
2,6-Dinitrotoluene	ND	41.7	"
2-Chloronaphthalene	ND	41.7	"
2-Chlorophenol	ND	41.7	"
2-Methylnaphthalene	ND	41.7	"
2-Methylphenol	ND	41.7	"
2-Nitroaniline	ND	83.3	"
2-Nitrophenol	ND	41.7	"
3- & 4-Methylphenols	ND	41.7	"
3,3-Dichlorobenzidine	ND	41.7	"
3-Nitroaniline	ND	83.3	"
4,6-Dinitro-2-methylphenol	ND	83.3	"
4-Bromophenyl phenyl ether	ND	41.7	"
4-Chloro-3-methylphenol	ND	41.7	"
4-Chloroaniline	ND	41.7	"
4-Chlorophenyl phenyl ether	ND	41.7	"
4-Nitroaniline	ND	83.3	"
4-Nitrophenol	ND	83.3	"
Acenaphthene	ND	41.7	"
Acenaphthylene	ND	41.7	"
Aniline	ND	167	"
Anthracene	ND	41.7	"
Benzo(a)anthracene	ND	41.7	"
Benzo(a)pyrene	ND	41.7	"
Benzo(b)fluoranthene	ND	41.7	"
Benzo(g,h,i)perylene	ND	41.7	"
Benzo(k)fluoranthene	ND	41.7	"
Benzyl alcohol	ND	41.7	"
Benzyl butyl phthalate	ND	41.7	"
Bis(2-chloroethoxy)methane	ND	41.7	"
Bis(2-chloroethyl)ether	ND	41.7	"
Bis(2-chloroisopropyl)ether	ND	41.7	"
Bis(2-ethylhexyl)phthalate	ND	41.7	"
Chrysene	ND	41.7	"
Dibenzo(a,h)anthracene	ND	41.7	"
Dibenzofuran	ND	41.7	"
Diethyl phthalate	ND	41.7	"
Dimethyl phthalate	ND	41.7	"
Di-n-butyl phthalate	ND	41.7	"
Di-n-octyl phthalate	ND	41.7	"
Fluoranthene	ND	41.7	"





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71019 - EPA 3550C

##### Blank (BJ71019-BLK1)

Prepared & Analyzed: 10/19/2017

Fluorene	ND	41.7	ug/kg wet
Hexachlorobenzene	ND	41.7	"
Hexachlorobutadiene	ND	41.7	"
Hexachlorocyclopentadiene	ND	41.7	"
Hexachloroethane	ND	41.7	"
Indeno(1,2,3-cd)pyrene	ND	41.7	"
Isophorone	ND	41.7	"
Naphthalene	ND	41.7	"
Nitrobenzene	ND	41.7	"
N-Nitrosodimethylamine	ND	41.7	"
N-nitroso-di-n-propylamine	ND	41.7	"
N-Nitrosodiphenylamine	ND	41.7	"
Pentachlorophenol	ND	41.7	"
Phenanthrene	ND	41.7	"
Phenol	ND	41.7	"
Pyrene	ND	41.7	"
Pyridine	ND	167	"

Surrogate: 2-Fluorophenol	1460	"	2510	58.1	20-108
Surrogate: Phenol-d5	1790	"	2570	69.7	23-114
Surrogate: Nitrobenzene-d5	1080	"	1730	62.4	22-108
Surrogate: 2-Fluorobiphenyl	1090	"	1730	63.3	21-113
Surrogate: 2,4,6-Tribromophenol	1550	"	2570	60.2	19-110
Surrogate: Terphenyl-d14	911	"	1680	54.3	24-116

##### LCS (BJ71019-BS1)

Prepared & Analyzed: 10/19/2017

1,2,4-Trichlorobenzene	506	41.7	ug/kg wet	833	60.7	23-130
1,2-Dichlorobenzene	524	41.7	"	833	62.8	26-113
1,3-Dichlorobenzene	524	41.7	"	833	62.9	32-113
1,4-Dichlorobenzene	508	41.7	"	833	60.9	28-111
2,4,5-Trichlorophenol	536	41.7	"	833	64.4	14-138
2,4,6-Trichlorophenol	564	41.7	"	833	67.7	27-122
2,4-Dichlorophenol	605	41.7	"	833	72.6	23-133
2,4-Dimethylphenol	577	41.7	"	833	69.2	15-131
2,4-Dinitrophenol	505	83.3	"	833	60.6	10-149
2,4-Dinitrotoluene	594	41.7	"	833	71.3	30-123
2,6-Dinitrotoluene	592	41.7	"	833	71.0	30-125
2-Chloronaphthalene	556	41.7	"	833	66.7	22-115
2-Chlorophenol	561	41.7	"	833	67.4	25-121
2-Methylnaphthalene	599	41.7	"	833	71.9	16-127
2-Methylphenol	539	41.7	"	833	64.7	10-146
2-Nitroaniline	585	83.3	"	833	70.2	24-126
2-Nitrophenol	554	41.7	"	833	66.5	17-129
3- & 4-Methylphenols	543	41.7	"	833	65.1	20-109
3,3-Dichlorobenzidine	655	41.7	"	833	78.6	10-147
3-Nitroaniline	529	83.3	"	833	63.4	23-123
4,6-Dinitro-2-methylphenol	482	83.3	"	833	57.9	10-149
4-Bromophenyl phenyl ether	556	41.7	"	833	66.8	30-138
4-Chloro-3-methylphenol	609	41.7	"	833	73.1	16-138
4-Chloroaniline	473	41.7	"	833	56.8	10-117
4-Chlorophenyl phenyl ether	559	41.7	"	833	67.1	18-132
4-Nitroaniline	621	83.3	"	833	74.6	14-125





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BJ71019 - EPA 3550C</b>											
<b>LCS (BJ71019-BS1)</b>						Prepared & Analyzed: 10/19/2017					
4-Nitrophenol	538	83.3	ug/kg wet	833		64.5	10-136				
Acenaphthene	566	41.7	"	833		67.9	17-124				
Acenaphthylene	529	41.7	"	833		63.5	16-124				
Aniline	404	167	"	833		48.4	10-111				
Anthracene	593	41.7	"	833		71.2	24-124				
Benzo(a)anthracene	545	41.7	"	833		65.4	25-134				
Benzo(a)pyrene	539	41.7	"	833		64.6	29-144				
Benzo(b)fluoranthene	538	41.7	"	833		64.6	20-151				
Benzo(g,h,i)perylene	601	41.7	"	833		72.1	10-153				
Benzo(k)fluoranthene	576	41.7	"	833		69.2	10-148				
Benzyl alcohol	540	41.7	"	833		64.8	17-128				
Benzyl butyl phthalate	558	41.7	"	833		67.0	10-132				
Bis(2-chloroethoxy)methane	619	41.7	"	833		74.2	10-129				
Bis(2-chloroethyl)ether	521	41.7	"	833		62.5	14-125				
Bis(2-chloroisopropyl)ether	627	41.7	"	833		75.3	14-122				
Bis(2-ethylhexyl)phthalate	552	41.7	"	833		66.2	10-141				
Chrysene	569	41.7	"	833		68.3	24-116				
Dibenzo(a,h)anthracene	585	41.7	"	833		70.2	17-147				
Dibenzofuran	574	41.7	"	833		68.8	23-123				
Diethyl phthalate	551	41.7	"	833		66.2	23-122				
Dimethyl phthalate	557	41.7	"	833		66.9	28-127				
Di-n-butyl phthalate	582	41.7	"	833		69.9	19-123				
Di-n-octyl phthalate	564	41.7	"	833		67.7	10-132				
Fluoranthene	597	41.7	"	833		71.6	36-125				
Fluorene	562	41.7	"	833		67.4	16-130				
Hexachlorobenzene	560	41.7	"	833		67.2	10-129				
Hexachlorobutadiene	513	41.7	"	833		61.6	22-153				
Hexachlorocyclopentadiene	473	41.7	"	833		56.7	10-134				
Hexachloroethane	535	41.7	"	833		64.2	20-112				
Indeno(1,2,3-cd)pyrene	562	41.7	"	833		67.5	10-155				
Isophorone	572	41.7	"	833		68.6	14-131				
Naphthalene	598	41.7	"	833		71.8	20-121				
Nitrobenzene	529	41.7	"	833		63.4	20-121				
N-Nitrosodimethylamine	541	41.7	"	833		64.9	10-124				
N-nitroso-di-n-propylamine	531	41.7	"	833		63.8	21-119				
N-Nitrosodiphenylamine	634	41.7	"	833		76.0	10-163				
Pentachlorophenol	588	41.7	"	833		70.6	10-143				
Phenanthrene	605	41.7	"	833		72.6	24-123				
Phenol	475	41.7	"	833		57.0	15-123				
Pyrene	580	41.7	"	833		69.6	24-132				
Pyridine	458	167	"	833		55.0	10-92				
Surrogate: 2-Fluorophenol	1340		"	2510		53.4	20-108				
Surrogate: Phenol-d5	1580		"	2570		61.3	23-114				
Surrogate: Nitrobenzene-d5	998		"	1730		57.8	22-108				
Surrogate: 2-Fluorobiphenyl	925		"	1730		53.6	21-113				
Surrogate: 2,4,6-Tribromophenol	1510		"	2570		58.8	30-130				
Surrogate: Terphenyl-d14	806		"	1680		48.1	24-116				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71019 - EPA 3550C

Matrix Spike (BJ71019-MS1)		*Source sample: 17J0671-03 (EP-3 (5 ft))					Prepared & Analyzed: 10/19/2017				
1,2,4-Trichlorobenzene	685	96.4	ug/kg dry	963	ND	71.1	15-139				
1,2-Dichlorobenzene	662	96.4	"	963	ND	68.7	29-106				
1,3-Dichlorobenzene	601	96.4	"	963	ND	62.4	34-100				
1,4-Dichlorobenzene	621	96.4	"	963	ND	64.5	26-107				
2,4,5-Trichlorophenol	718	96.4	"	963	ND	74.6	10-148				
2,4,6-Trichlorophenol	707	96.4	"	963	ND	73.4	12-138				
2,4-Dichlorophenol	785	96.4	"	963	ND	81.5	16-144				
2,4-Dimethylphenol	761	96.4	"	963	ND	79.0	11-133				
2,4-Dinitrophenol	387	193	"	963	ND	40.2	10-132				
2,4-Dinitrotoluene	697	96.4	"	963	ND	72.4	42-113				
2,6-Dinitrotoluene	770	96.4	"	963	ND	79.9	36-124				
2-Chloronaphthalene	726	96.4	"	963	ND	75.4	31-116				
2-Chlorophenol	732	96.4	"	963	ND	76.0	28-114				
2-Methylnaphthalene	832	96.4	"	963	ND	86.4	10-143				
2-Methylphenol	699	96.4	"	963	ND	72.6	10-160				
2-Nitroaniline	702	193	"	963	ND	72.9	33-122				
2-Nitrophenol	733	96.4	"	963	ND	76.1	12-127				
3- & 4-Methylphenols	701	96.4	"	963	ND	72.8	16-115				
3,3-Dichlorobenzidine	446	96.4	"	963	ND	46.3	10-134				
3-Nitroaniline	657	193	"	963	ND	68.2	24-128				
4,6-Dinitro-2-methylphenol	429	193	"	963	ND	44.6	10-149				
4-Bromophenyl phenyl ether	675	96.4	"	963	ND	70.1	32-148				
4-Chloro-3-methylphenol	794	96.4	"	963	ND	82.5	14-138				
4-Chloroaniline	657	96.4	"	963	ND	68.2	10-124				
4-Chlorophenyl phenyl ether	699	96.4	"	963	ND	72.6	10-153				
4-Nitroaniline	681	193	"	963	ND	70.7	10-151				
4-Nitrophenol	757	193	"	963	ND	78.6	10-141				
Acenaphthene	737	96.4	"	963	ND	76.5	13-133				
Acenaphthylene	703	96.4	"	963	ND	73.0	25-125				
Aniline	602	386	"	963	ND	62.5	10-112				
Anthracene	798	96.4	"	963	ND	82.9	27-128				
Benzo(a)anthracene	904	96.4	"	963	219	71.1	20-147				
Benzo(a)pyrene	915	96.4	"	963	224	71.8	18-153				
Benzo(b)fluoranthene	921	96.4	"	963	204	74.4	10-163				
Benzo(g,h,i)perylene	880	96.4	"	963	156	75.2	10-157				
Benzo(k)fluoranthene	910	96.4	"	963	222	71.4	10-157				
Benzyl alcohol	732	96.4	"	963	ND	76.0	20-122				
Benzyl butyl phthalate	689	96.4	"	963	ND	71.5	10-129				
Bis(2-chloroethoxy)methane	843	96.4	"	963	ND	87.5	12-128				
Bis(2-chloroethyl)ether	729	96.4	"	963	ND	75.7	18-113				
Bis(2-chloroisopropyl)ether	787	96.4	"	963	ND	81.7	10-130				
Bis(2-ethylhexyl)phthalate	695	96.4	"	963	ND	72.2	10-138				
Chrysene	979	96.4	"	963	266	74.1	18-133				
Dibenzo(a,h)anthracene	793	96.4	"	963	50.9	77.0	10-146				
Dibenzofuran	741	96.4	"	963	ND	77.0	26-134				
Diethyl phthalate	699	96.4	"	963	ND	72.6	30-119				
Dimethyl phthalate	707	96.4	"	963	ND	73.4	34-120				
Di-n-butyl phthalate	741	96.4	"	963	ND	76.9	20-128				
Di-n-octyl phthalate	702	96.4	"	963	ND	72.9	10-133				
Fluoranthene	1140	96.4	"	963	350	82.4	10-155				
Fluorene	744	96.4	"	963	ND	77.3	12-150				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71019 - EPA 3550C

Matrix Spike (BJ71019-MS1)		*Source sample: 17J0671-03 (EP-3 (5 ft))					Prepared & Analyzed: 10/19/2017				
Hexachlorobenzene	710	96.4	ug/kg dry	963	ND	73.8	16-142				
Hexachlorobutadiene	667	96.4	"	963	ND	69.2	11-150				
Hexachlorocyclopentadiene	398	96.4	"	963	ND	41.3	10-115				
Hexachloroethane	647	96.4	"	963	ND	67.2	14-106				
Indeno(1,2,3-cd)pyrene	813	96.4	"	963	143	69.6	10-155				
Isophorone	767	96.4	"	963	ND	79.6	14-127				
Naphthalene	841	96.4	"	963	ND	87.3	15-132				
Nitrobenzene	724	96.4	"	963	ND	75.1	18-125				
N-Nitrosodimethylamine	565	96.4	"	963	ND	58.6	10-123				
N-nitroso-di-n-propylamine	686	96.4	"	963	ND	71.2	23-115				
N-Nitrosodiphenylamine	797	96.4	"	963	ND	82.7	16-166				
Pentachlorophenol	718	96.4	"	963	ND	74.6	10-160				
Phenanthrene	983	96.4	"	963	143	87.3	10-151				
Phenol	674	96.4	"	963	ND	70.0	11-124				
Pyrene	1080	96.4	"	963	303	80.3	13-148				
Pyridine	527	386	"	963	ND	54.7	10-125				
Surrogate: 2-Fluorophenol	1910		"	2900		66.0	20-108				
Surrogate: Phenol-d5	2300		"	2970		77.4	23-114				
Surrogate: Nitrobenzene-d5	1420		"	2000		71.0	22-108				
Surrogate: 2-Fluorobiphenyl	1350		"	2000		67.5	21-113				
Surrogate: 2,4,6-Tribromophenol	1970		"	2970		66.6	30-130				
Surrogate: Terphenyl-d14	1050		"	1940		54.4	24-116				

Matrix Spike Dup (BJ71019-MSD1)		*Source sample: 17J0671-03 (EP-3 (5 ft))					Prepared & Analyzed: 10/19/2017				
1,2,4-Trichlorobenzene	431	96.4	ug/kg dry	963	ND	44.7	15-139	45.6	30	Non-dir.	
1,2-Dichlorobenzene	418	96.4	"	963	ND	43.4	29-106	45.1	30	Non-dir.	
1,3-Dichlorobenzene	384	96.4	"	963	ND	39.8	34-100	44.1	30	Non-dir.	
1,4-Dichlorobenzene	394	96.4	"	963	ND	40.9	26-107	44.8	30	Non-dir.	
2,4,5-Trichlorophenol	647	96.4	"	963	ND	67.2	10-148	10.4	30		
2,4,6-Trichlorophenol	603	96.4	"	963	ND	62.6	12-138	16.0	30		
2,4-Dichlorophenol	553	96.4	"	963	ND	57.4	16-144	34.7	30	Non-dir.	
2,4-Dimethylphenol	552	96.4	"	963	ND	57.3	11-133	31.9	30	Non-dir.	
2,4-Dinitrophenol	272	193	"	963	ND	28.2	10-132	34.9	30	Non-dir.	
2,4-Dinitrotoluene	687	96.4	"	963	ND	71.4	42-113	1.45	30		
2,6-Dinitrotoluene	693	96.4	"	963	ND	71.9	36-124	10.5	30		
2-Chloronaphthalene	528	96.4	"	963	ND	54.8	31-116	31.6	30	Non-dir.	
2-Chlorophenol	491	96.4	"	963	ND	51.0	28-114	39.4	30	Non-dir.	
2-Methylnaphthalene	573	96.4	"	963	ND	59.4	10-143	37.0	30	Non-dir.	
2-Methylphenol	490	96.4	"	963	ND	50.9	10-160	35.1	30	Non-dir.	
2-Nitroaniline	642	193	"	963	ND	66.6	33-122	8.94	30		
2-Nitrophenol	465	96.4	"	963	ND	48.3	12-127	44.6	30	Non-dir.	
3- & 4-Methylphenols	505	96.4	"	963	ND	52.5	16-115	32.4	30	Non-dir.	
3,3-Dichlorobenzidine	530	96.4	"	963	ND	55.0	10-134	17.2	30		
3-Nitroaniline	636	193	"	963	ND	66.1	24-128	3.22	30		
4,6-Dinitro-2-methylphenol	367	193	"	963	ND	38.1	10-149	15.7	30		
4-Bromophenyl phenyl ether	633	96.4	"	963	ND	65.8	32-148	6.36	30		
4-Chloro-3-methylphenol	680	96.4	"	963	ND	70.6	14-138	15.5	30		
4-Chloroaniline	574	96.4	"	963	ND	59.6	10-124	13.4	30		
4-Chlorophenyl phenyl ether	630	96.4	"	963	ND	65.4	10-153	10.4	30		
4-Nitroaniline	677	193	"	963	ND	70.3	10-151	0.567	30		
4-Nitrophenol	838	193	"	963	ND	87.0	10-141	10.1	30		





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71019 - EPA 3550C

Matrix Spike Dup (BJ71019-MSD1)	*Source sample: 17J0671-03 (EP-3 (5 ft))					Prepared & Analyzed: 10/19/2017					
Acenaphthene	589	96.4	ug/kg dry	963	ND	61.1	13-133		22.3	30	
Acenaphthylene	560	96.4	"	963	ND	58.2	25-125		22.6	30	
Aniline	439	386	"	963	ND	45.6	10-112		31.2	30	Non-dir.
Anthracene	746	96.4	"	963	ND	77.4	27-128		6.79	30	
Benzo(a)anthracene	805	96.4	"	963	219	60.9	20-147		11.5	30	
Benzo(a)pyrene	814	96.4	"	963	224	61.2	18-153		11.8	30	
Benzo(b)fluoranthene	816	96.4	"	963	204	63.5	10-163		12.1	30	
Benzo(g,h,i)perylene	790	96.4	"	963	156	65.8	10-157		10.8	30	
Benzo(k)fluoranthene	810	96.4	"	963	222	61.0	10-157		11.6	30	
Benzyl alcohol	514	96.4	"	963	ND	53.4	20-122		35.0	30	Non-dir.
Benzyl butyl phthalate	669	96.4	"	963	ND	69.4	10-129		2.95	30	
Bis(2-chloroethoxy)methane	568	96.4	"	963	ND	59.0	12-128		39.0	30	Non-dir.
Bis(2-chloroethyl)ether	473	96.4	"	963	ND	49.1	18-113		42.6	30	Non-dir.
Bis(2-chloroisopropyl)ether	497	96.4	"	963	ND	51.6	10-130		45.1	30	Non-dir.
Bis(2-ethylhexyl)phthalate	677	96.4	"	963	ND	70.3	10-138		2.58	30	
Chrysene	874	96.4	"	963	266	63.1	18-133		11.4	30	
Dibenzo(a,h)anthracene	737	96.4	"	963	50.9	71.2	10-146		7.36	30	
Dibenzofuran	623	96.4	"	963	ND	64.7	26-134		17.3	30	
Diethyl phthalate	672	96.4	"	963	ND	69.8	30-119		3.93	30	
Dimethyl phthalate	645	96.4	"	963	ND	67.0	34-120		9.12	30	
Di-n-butyl phthalate	729	96.4	"	963	ND	75.7	20-128		1.57	30	
Di-n-octyl phthalate	679	96.4	"	963	ND	70.5	10-133		3.35	30	
Fluoranthene	986	96.4	"	963	350	66.1	10-155		14.8	30	
Fluorene	653	96.4	"	963	ND	67.8	12-150		13.1	30	
Hexachlorobenzene	672	96.4	"	963	ND	69.8	16-142		5.57	30	
Hexachlorobutadiene	417	96.4	"	963	ND	43.3	11-150		46.1	30	Non-dir.
Hexachlorocyclopentadiene	193	96.4	"	963	ND	20.0	10-115		69.5	30	Non-dir.
Hexachloroethane	405	96.4	"	963	ND	42.0	14-106		46.2	30	Non-dir.
Indeno(1,2,3-cd)pyrene	619	96.4	"	963	143	49.4	10-155		27.1	30	
Isophorone	527	96.4	"	963	ND	54.7	14-127		37.0	30	Non-dir.
Naphthalene	540	96.4	"	963	ND	56.1	15-132		43.5	30	Non-dir.
Nitrobenzene	473	96.4	"	963	ND	49.1	18-125		41.9	30	Non-dir.
N-Nitrosodimethylamine	469	96.4	"	963	ND	48.7	10-123		18.5	30	
N-nitroso-di-n-propylamine	451	96.4	"	963	ND	46.8	23-115		41.4	30	Non-dir.
N-Nitrosodiphenylamine	748	96.4	"	963	ND	77.7	16-166		6.28	30	
Pentachlorophenol	703	96.4	"	963	ND	73.0	10-160		2.17	30	
Phenanthrene	841	96.4	"	963	143	72.5	10-151		15.6	30	
Phenol	475	96.4	"	963	ND	49.4	11-124		34.6	30	Non-dir.
Pyrene	912	96.4	"	963	303	63.2	13-148		16.6	30	
Pyridine	387	386	"	963	ND	40.2	10-125		30.7	30	Non-dir.
Surrogate: 2-Fluorophenol	1290		"	2900		44.7	20-108				
Surrogate: Phenol-d5	1680		"	2970		56.5	23-114				
Surrogate: Nitrobenzene-d5	952		"	2000		47.7	22-108				
Surrogate: 2-Fluorobiphenyl	1020		"	2000		51.0	21-113				
Surrogate: 2,4,6-Tribromophenol	1950		"	2970		65.8	30-130				
Surrogate: Terphenyl-d14	1040		"	1940		53.9	24-116				





### Miscellaneous Physical Parameters - Quality Control Data

#### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71125 - % Solids Prep

<b>Duplicate (BJ71125-DUP1)</b>		*Source sample: 17J0671-03 (EP-3 (5 ft))						Prepared & Analyzed: 10/20/2017			
% Solids	86.5	0.100	%		86.5				0.0285	20	





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17J0671-01	EP-1 (5 ft)	40mL Vial with Stir Bar-Cool 4° C
17J0671-02	EP-2 (5 ft)	40mL Vial with Stir Bar-Cool 4° C
17J0671-03	EP-3 (5 ft)	8 oz. WM Clear Glass Cool to 4° C
17J0671-04	EP-4 (5 ft)	40mL Vial with Stir Bar-Cool 4° C
17J0671-05	EP-5 (6.5 ft)	40mL Vial with Stir Bar-Cool 4° C
17J0671-06	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C





### Sample and Data Qualifiers Relating to This Work Order

QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data are acceptable.
QL-02	This LCS analyte is outside Laboratory Recovery limits due to the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.





Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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Corrective Action: The containers for samples MW-4 and MW-5 were labeled EP-4 and EP-5 (logged as EP per client instructions). The MS/MSD containers were labeled EP-3 MS and EP-3 MSD and assigned to the EP-3 parent sample.



[illegible]



# **ATTACHMENT O**

## **Data Usability Summary Reports**



## Pre-Injection Groundwater Data





Geology

Hydrology

Remediation

Water Supply

May 11, 2018

Mr. Paul I. Matli, Ph.D.  
Hydro Tech Environmental, Corp.  
15 Ocean Ave., 2<sup>nd</sup> Floor  
Brooklyn, NY 11225

Re: Data Validation Report  
February 2018 Ground Water Sampling Event  
11-28 31 Drive, LIC, NY

Dear Dr. Matli:

The data usability summary report and data validation summaries are attached to this letter for the above referenced project. The data for York Analytical Laboratories, Inc. SDG 18B0738 were acceptable with some minor issues that are identified in the validation summary. There were no data that were qualified as rejected, unusable (R) in the data pack.

We have attached lists of data validation acronyms and data qualifiers to assist you in the interpretation of the reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Hydro Tech Environmental, Corp.

Sincerely,  
Alpha Geoscience

Donald Anne  
Senior Chemist

DCA:dca  
attachments



## **Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II**

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

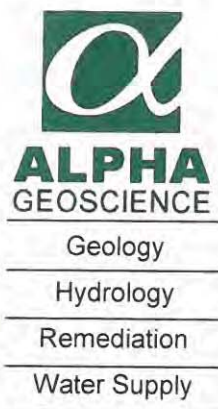
Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



## Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation





**Data Usability Summary Report for  
York Analytical Laboratories, Inc., SDG: 18B0738**

**5 Ground Water Samples,  
1 Field Blank, and 1 Trip Blank  
Collected February 19, 2018**

Prepared by: Donald Anné  
May 11, 2018

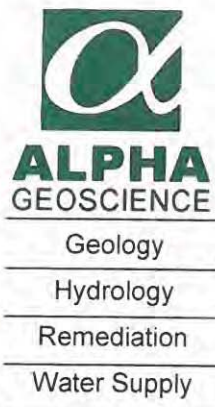
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The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile analyses for 5 ground water samples, 1 field blank, and 1 trip blank.

The overall performance of the analysis is acceptable. York Analytical Laboratories, Inc. did fulfill the requirements of the volatile method.

The data are acceptable with minor issues that are identified in the accompanying data validation reviews. There were no data qualified as either estimated (J) or rejected (R); therefore, all data are considered usable. Detailed information on data quality is included in the data validation reviews.





**QA/QC Review of Method 8260C Volatiles Data for  
York Analytical Laboratories, Inc., SDG: 18B0738**

**5 Ground Water Samples,  
1 Field Blank, and 1 Trip Blank  
Collected February 19, 2018**

Prepared by: Donald Anné  
May 11, 2018

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Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for 2-butanone and 2-hexanone were below the method minimums for VOA No.8 on 02-23-18. The %RSDs for bromomethane and methylene chloride were above the method maximum for VOA No.8 on 02-23-18. No action is taken on fewer than 20% of the compounds with method criteria outside control limits and no average RRF is less than 0.010, per calibration.

The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSD for bromomethane was above the allowable maximum (30%) for VOA No.8 on 02-23-18. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The RRFs for 2-butanone, 4-methyl-2-pentanone, and 2-hexanone were below the method minimum on 02-25-18 (V803939.D). The %D for bromomethane was above the method maximum on 02-25-18 (V803939.D). No action is taken on fewer than 20% of the compounds with method criteria outside control limits and no average RRF is less than 0.010, per calibration.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for bromomethane was above the allowable maximum (25%) on 02-25-18 (V803939.D). Positive results for bromomethane should be considered estimated (J) in associated samples.



Blanks: The analyses of the method and trip blanks reported target compounds as not detected. The field blank contained a trace of acetone (5.6 ug/L). Positive results for acetone that are less than 10 times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples, field blank, and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent difference for target compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-3.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximums and the percent recoveries (%Rs) within QC limits for aqueous samples BB81103-BS1/BSD1.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



# Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
 Method File : V8L00063.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Sun Feb 25 13:19:17 2018  
 Response Via : Initial Calibration

VOA No 8  
 2/23/18

## Calibration Files

0.5 =V803898.D 2.0 =V803899.D 4.0 =V803900.D 10.0=V803901.D 20.0=V803902.D 40.0=V803903.D  
 80.0=V803904.D 120 =V803905.D 160 =V803906.D

Compound	0.5	2.0	4.0	10.0	20.0	40.0	80.0	120	160	Avg	%RSD
-----											
1) I FLUOROBENZENE (ISTD)											
2) T Dichlorodifluo...	1.335	1.501	1.346	1.244	1.375	1.303	1.260	1.238	1.187	1.310	7.13
3) T Chloromethane	1.030	1.130	1.088	1.022	1.092	1.045	1.079	1.253	1.316	1.117	9.12
4) T Vinyl Chloride	1.203	1.335	1.253	1.236	1.370	1.309	1.228	1.278	1.223	1.271	4.47
5) T Bromomethane	0.099	0.104	0.130	0.175	0.287	0.397	0.526	0.575	0.549	0.316	63.32
6) T Chloroethane	0.770	0.830	0.748	0.699	0.753	0.702	0.673	0.650	0.612	0.715	9.35
7) T Trichlorofluor...	2.238	2.478	2.170	2.061	2.186	2.050	1.932	1.880	1.720	2.079	10.68
8) T Ethanol	0.003	0.005	0.005	0.003	0.003	0.004	0.003	0.005	0.001	0.004	33.32
9) T Freon-113	1.562	1.581	1.519	1.390	1.444	1.330	1.298	1.281	1.243	1.405	9.03
10) T 1,1-Dichloroet...	2.433	2.518	2.499	2.464	2.341	2.220	2.128	2.133	2.035	2.308	7.92
11) T Acrolein	0.006	0.005	0.006	0.006	0.007	0.007	0.007	0.006	0.007	0.006	10.45
12) T Acetone	0.154	0.124	0.130	0.130	0.109	0.118	0.094	0.089	0.096	0.114	19.01
13) T Iodomethane	0.119	0.180	0.242	0.380	0.588	0.721	0.827	0.898	0.811	0.530	57.45
14) T Methyl Acetate	0.356	0.330	0.315	0.293	0.290	0.302	0.294	0.286	0.296	0.307	7.55
15) T Carbon disulfide	3.392	3.345	3.351	3.349	3.209	3.122	3.008	3.030	2.908	3.190	5.64
16) T tert-Butyl Alc...	0.081	0.079	0.078	0.076	0.071	0.070	0.069	0.069	0.065	0.073	7.51
17) T Methylene Chlo...	2.584	2.088	1.795	1.604	1.534	1.455	1.443	1.420	1.420	1.740	23.48
18) T Acrylonitrile	0.100	0.126	0.126	0.121	0.119	0.126	0.125	0.122	0.129	0.121	7.06
19) T trans-1,2-Dich...	1.996	2.094	2.145	2.164	2.023	1.966	1.893	1.894	1.787	1.996	6.29
20) T tert-Butyl Met...	1.714	1.738	1.813	1.890	1.818	1.876	1.835	1.825	1.836	1.816	3.16
21) T 1,1-Dichloroet...	2.539	2.643	2.670	2.634	2.490	2.405	2.255	2.225	2.105	2.441	8.42
22) T Vinyl Acetate	0.770	0.771	0.810	0.917	0.918	0.917	0.936	0.943	1.026	0.890	9.78
23) T Diisopropyl et...	3.248	3.599	3.625	3.422	3.749	3.640	3.379	3.216	3.047	3.436	6.83
24) T Ethyl-tert-But...	2.372	2.664	2.683	2.606	2.893	2.924	2.812	2.828	2.797	2.731	6.28
25) T cis-1,2-Dichlo...	2.141	2.289	2.351	2.346	2.229	2.178	2.082	2.088	2.010	2.190	5.56
26) T 2-Butanone	0.036	0.042	0.045	0.043	0.041	0.040	0.039	0.037	0.040	0.040	7.01
27) T 2,2-Dichloropr...	2.160	2.340	2.311	2.311	2.199	2.124	2.053	2.083	1.960	2.171	6.02
28) T Tetrahydrofuran	0.022	0.036	0.036	0.036	0.037	0.039	0.038	0.036	0.038	0.035	14.21
29) T Bromochloromet...	0.918	0.910	0.905	0.894	0.841	0.842	0.760	0.752	0.726	0.839	8.97
30) T Chloroform	2.415	2.514	2.465	2.430	2.300	2.242	2.132	2.133	2.049	2.298	7.31



## Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
Method File : V8LO0063.M

Title : Volatile Organics EPA 8260C

31)	T	1,1,1-Trichloro...	2.426	2.620	2.616	2.620	2.497	2.356	2.253	2.191	2.035	2.401	8.76
32)	T	Cyclohexane	2.237	2.526	2.573	2.454	2.564	2.363	2.231	2.157	1.979	2.343	8.79
33)	T	1,1-Dichloropr...	1.978	2.189	2.133	2.198	2.090	1.984	1.922	1.880	1.748	2.014	7.53
34)	S	d4-1,2-Dichlor...	0.839	0.822	0.800	0.811	0.813	0.820	0.794	0.763	0.753	0.802	3.48
35)	T	Carbon Tetrach...	2.190	2.342	2.357	2.375	2.284	2.161	2.077	2.032	1.894	2.190	7.58
36)	T	tert-Amyl alco...	0.016	0.014	0.018	0.017	0.020	0.022	0.022	0.021	0.024	0.019	15.63
37)	T	1,2-Dichloroet...	1.270	1.316	1.315	1.285	1.192	1.195	1.136	1.106	1.084	1.211	7.38
38)	T	Benzene	5.337	5.455	5.472	5.366	5.076	4.871	4.560	4.440	4.149	4.970	9.87
39)	T	tert-Amyl meth...	1.868	1.947	1.995	1.900	2.134	2.174	2.107	2.103	2.079	2.034	5.39

40)	I	CHLORO BENZENE-d5	0.485	0.498	0.507	0.501	0.470	0.447	0.436	0.435	0.414	0.466	7.27
41)	T	Trichloroethylene	0.666	0.752	0.777	0.735	0.761	0.699	0.694	0.687	0.652	0.714	6.16
42)	T	Methyl Cyclohe...	0.176	0.188	0.208	0.226	0.222	0.231	0.230	0.231	0.233	0.216	9.71
43)	T	Methyl Methacr...	0.154	0.154	0.154	0.157	0.146	0.144	0.142	0.141	0.141	0.148	4.38
44)	T	Dibromomethane	0.457	0.481	0.498	0.501	0.472	0.467	0.455	0.456	0.442	0.470	4.28
45)	T	Bromodichlorom...	0.377	0.395	0.394	0.387	0.364	0.355	0.344	0.346	0.336	0.366	6.23
46)	T	1,2-Dichloropr...	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	48.96
47)	T	1,4-Dioxane	0.053	0.057	0.062	0.061	0.062	0.065	0.065	0.064	0.067	0.061	7.16
48)	T	2-Chloroethyl...	0.406	0.476	0.527	0.553	0.529	0.527	0.512	0.512	0.497	0.504	8.50
49)	T	cis-1,3-Dichlo...	0.100	0.111	0.116	0.124	0.118	0.126	0.126	0.125	0.130	0.120	7.78
50)	T	4-Methyl-2-Pen...	1.523	1.515	1.515	1.508	1.504	1.481	1.468	1.489	1.459	1.496	1.52
51)	S	Toluene-d8 (SURR)	1.900	1.961	1.943	1.915	1.775	1.649	1.548	1.482	1.355	1.725	13.05
52)	T	Toluene	0.349	0.368	0.389	0.411	0.396	0.403	0.397	0.393	0.389	0.388	4.87
53)	T	trans-1,3-Dich...	0.207	0.212	0.214	0.208	0.194	0.192	0.188	0.185	0.184	0.198	5.98
54)	T	1,1,2-Trichlor...	0.349	0.352	0.360	0.359	0.338	0.338	0.329	0.324	0.324	0.342	4.18
55)	T	1,3-Dichloropr...	0.588	0.596	0.576	0.570	0.524	0.506	0.455	0.454	0.435	0.523	12.12
56)	T	Tetrachloroeth...	0.063	0.064	0.070	0.078	0.075	0.082	0.082	0.081	0.085	0.075	10.92
57)	T	2-Hexanone	0.229	0.244	0.250	0.263	0.250	0.257	0.255	0.256	0.255	0.251	3.93
58)	T	Dibromochlorom...	0.171	0.180	0.185	0.186	0.175	0.179	0.176	0.175	0.176	0.178	2.60
59)	T	1,2-Dibromoeth...	1.114	1.147	1.133	1.126	1.041	0.991	0.948	0.929	0.880	1.034	9.76
60)	T	Chlorobenzene	0.348	0.377	0.389	0.394	0.368	0.351	0.334	0.324	0.303	0.354	8.68
61)	T	1,1,1,2-tetrac...	1.892	2.138	2.208	2.203	2.060	1.894	1.752	1.650	1.475	1.919	13.42
62)	T	Ethyl Benzene	1.461	1.700	1.737	1.714	1.575	1.437	1.285	1.162	0.993	1.452	18.06
63)	T	p- & m-Xylenes	1.226	1.476	1.596	1.629	1.532	1.460	1.394	1.352	1.245	1.434	9.97
64)	T	o-Xylene	0.803	1.041	1.108	1.132	1.070	1.029	0.987	0.953	0.891	1.002	10.56
65)	T	Styrene	0.097	0.110	0.118	0.124	0.122	0.130	0.134	0.137	0.140	0.124	11.09
66)	T	Bromoform											

67)	I	1,2-DICHLORO BENZEN	5.246	5.847	6.068	5.649	5.766	5.232	4.800	4.695	4.369	5.297	11.00
68)	T	p-Ethyltoluene											



## Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
Method File : V8L00063.M

Title : Volatile Organics EPA 8260C

69)	T	Isopropylbenzene	4.908	5.889	6.459	6.479	6.028	5.618	5.198	5.141	4.800	5.613	11.39
70)	S	p-Bromofluorob...	1.314	1.301	1.334	1.339	1.352	1.350	1.351	1.400	1.454	1.355	3.42
71)	T	1,1,2,2-Tetrac...	0.563	0.561	0.586	0.577	0.529	0.532	0.504	0.500	0.506	0.540	6.07
72)	T	Bromobenzene	1.911	1.886	1.966	1.918	1.806	1.764	1.706	1.751	1.745	1.828	5.10
73)	T	trans-1,4-Dich...	0.754	0.784	0.832	0.830	0.786	0.772	0.741	0.754	0.748	0.778	4.37
74)	T	1,2,3-Trichlor...	0.163	0.161	0.173	0.159	0.150	0.151	0.145	0.143	0.147	0.155	6.43
75)	T	n-Propylbenzene	6.855	7.530	7.946	7.910	7.333	6.735	6.185	5.923	5.427	6.872	12.97
76)	T	2-Chlorotoluene	4.660	4.944	5.174	5.026	4.721	4.409	4.044	3.945	3.687	4.512	11.59
77)	T	4-Chlorotoluene	4.163	4.378	4.594	4.491	4.218	4.006	3.777	3.774	3.618	4.113	8.35
78)	T	1,3,5-Trimethy...	4.469	4.965	5.332	4.437	4.496	4.251	4.010	3.775	3.819	4.698	9.85
79)	T	tert-Butylbenzene	3.399	4.054	4.417	4.496	4.753	4.467	4.101	4.028	3.750	4.440	9.12
80)	T	1,2,4-Trimethy...	3.876	4.779	5.112	5.090	4.753	4.467	4.101	4.028	3.750	4.440	11.73
81)	T	sec-Butylbenzene	4.789	5.793	6.263	6.383	6.012	5.610	5.227	5.162	4.825	5.563	10.71
82)	T	1,3-Dichlorobe...	2.416	2.552	2.660	2.592	2.397	2.245	2.027	1.971	1.879	2.304	12.51
83)	T	p-Isopropyltol...	4.094	5.181	5.654	5.703	5.359	4.986	4.578	4.450	4.102	4.901	12.71
84)	T	1,4-Dichlorobe...	0.158	0.166	0.176	0.172	0.166	0.158	0.151	0.152	0.152	0.161	5.77
85)	T	1,2,3-Trimethy...	3.523	4.203	4.274	4.207	4.281	4.061	3.781	3.759	3.603	3.966	7.58
86)	T	p-Diethylbenzene	2.033	2.555	2.832	2.805	2.865	2.665	2.519	2.506	2.413	2.577	10.07
87)	T	1,2-Dichlorobe...	2.146	2.127	2.142	2.109	1.970	1.916	1.815	1.823	1.816	1.985	7.46
88)	T	n-Butylbenzene	4.731	5.791	6.198	6.207	5.925	5.517	5.157	5.000	4.660	5.465	11.03
89)	T	1,2-Dibromo-3-...	0.067	0.078	0.079	0.084	0.081	0.085	0.084	0.084	0.091	0.081	8.27
90)	T	1,2,4,5-Tetram...	2.507	3.149	3.756	3.853	4.082	3.899	3.637	3.627	3.514	3.558	13.34
91)	T	1,2,4-Trichlor...	0.867	0.911	1.030	1.118	1.082	1.109	1.067	1.098	1.134	1.046	9.06
92)	T	Hexachloro-1,3...	0.440	0.479	0.519	0.544	0.524	0.508	0.516	0.543	0.553	0.514	6.96
93)	T	Naphthalene	0.933	1.083	1.280	1.485	1.449	1.545	1.484	1.517	1.605	1.376	16.68
94)	T	1,2,3-Trichlor...	0.021	0.053	0.057	0.057	0.057	0.059	0.057	0.059	0.062	0.054	22.97

(#) = Out of Range



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\V8022518\  
 Data File : V803939.D  
 Acq On : 25 Feb 2018 2:16 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8022518A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 12:25:43 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	102	0.00
2 T	Dichlorodifluoromethane	1.310	1.321	-0.9	109	0.00
3 T	Chloromethane	1.117	0.958	14.3	96	0.00
4 T	Vinyl Chloride	1.271	1.284	-1.0	106	0.00
5 T	Bromomethane	0.316	0.141	55.5#	82	0.00
6 T	Chloroethane	0.715	0.716	-0.1	105	0.00
7 T	Trichlorofluoromethane	2.079	2.118	-1.9	105	0.00
8	Ethanol	0.004	0.001	NA 62.9#	40#	0.00
9 T	Freon-113	1.405	1.434	-2.1	106	0.00
10 T	1,1-Dichloroethylene	2.308	2.200	4.7	91	0.00
11 T	Acrolein	0.006	0.046	NA 628.6#	768#	0.00
12 T	Acetone	0.114	0.124	-8.4	98	0.00
13 T	Iodomethane	0.530	0.330	NA 37.7#	89	0.00
14 T	Methyl Acetate	0.307	0.249	19.0	87	0.00
15 T	Carbon disulfide	3.191	3.084	3.3	94	0.00
16 T	tert-Butyl Alcohol (TBA)	0.073	0.065	11.7	87	0.00
17 T	Methylene Chloride	1.740	1.500	13.8	86	0.00
18 T	Acrylonitrile	0.121	0.104	14.2	88	0.00
19 T	trans-1,2-Dichloroethylene	1.996	1.925	3.6	91	0.00
20 T	tert-Butyl Methyl Ether (MT)	1.816	1.695	6.7	92	0.00
21 T	1,1-Dichloroethane	2.441	2.373	2.8	92	0.00
22 T	Vinyl Acetate	0.890	0.811	8.9	91	0.00
23 T	Diisopropyl ether (DIPE)	3.436	3.352	2.4	100	0.00
24 T	Ethyl-tert-Butyl ether (ETB)	2.731	2.635	3.5	103	0.00
25 T	cis-1,2-Dichloroethylene	2.191	2.158	1.5	94	0.00
26 T	2-Butanone	0.040	0.041	-1.7	98	0.00
27 T	2,2-Dichloropropane	2.171	2.321	-6.9	103	0.00
28 T	Tetrahydrofuran	0.035	0.030	14.7	86	0.00
29 T	Bromochloromethane	0.839	0.766	8.7	88	0.00
30 T	Chloroform	2.298	2.236	2.7	94	0.00
31 T	1,1,1-Trichloroethane	2.401	2.429	-1.1	95	0.00
32 T	Cyclohexane	2.343	2.418	-3.2	101	0.00
33 T	1,1-Dichloropropylene	2.014	2.064	-2.5	96	0.00
34 S	d4-1,2-Dichloroethane (SURR)	0.802	0.796	0.7	100	0.00
35 T	Carbon Tetrachloride	2.190	2.208	-0.8	95	0.00
36 T	tert-Amyl alcohol (TAA)	0.020	0.013	NA 33.8#	76	-0.01
37 T	1,2-Dichloroethane	1.211	1.140	5.9	91	0.00



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\V8022518\  
 Data File : V803939.D  
 Acq On : 25 Feb 2018 2:16 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8022518A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 12:25:43 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
38 T	Benzene	4.970	4.936	0.7	94	0.00
39 T	tert-Amyl methyl ether (TAM)	2.034	1.938	4.7	104	0.00
40 I	CHLOROBENZENE-d5 (ISTD)	1.000	1.000	0.0	106	0.00
41 T	Trichloroethylene	0.466	0.458	1.8	97	0.00
42 T	Methyl Cyclohexane	0.714	0.735	-2.9	106	0.00
43 T	Methyl Methacrylate	0.216	0.193	10.7	90	0.00
44 T	Dibromomethane	0.148	0.136	8.4	91	0.00
45 T	Bromodichloromethane	0.470	0.443	5.9	93	0.00
46 T	1,2-Dichloropropane	0.366	0.342	6.7	93	0.00
47 T	1,4-Dioxane	0.000	0.000	NA	66.7#	32# 0.00
48 T	2-Chloroethyl vinyl ether	0.061	0.059	3.6	103	0.00
49 T	cis-1,3-Dichloropropene	0.504	0.501	0.7	96	0.00
50 T	4-Methyl-2-Pentanone	0.120	0.097	19.0	82	0.00
51 S	Toluene-d8 (SURR)	1.496	1.498	-0.1	105	0.00
52 T	Toluene	1.726	1.717	0.5	95	0.00
53 T	trans-1,3-Dichloropropene	0.388	0.365	6.0	94	0.00
54 T	1,1,2-Trichloroethane	0.198	0.183	7.5	93	0.00
55 T	1,3-Dichloropropane	0.342	0.315	7.8	93	0.00
56 T	Tetrachloroethylene	0.523	0.514	1.7	95	-0.01
57 T	2-Hexanone	0.075	0.071	6.5	96	0.00
58 T	Dibromochloromethane	0.251	0.236	5.9	95	0.00
59 T	1,2-Dibromoethane	0.178	0.163	8.5	93	0.00
60 T	Chlorobenzene	1.034	1.017	1.7	95	0.00
61 T	1,1,1,2-tetrachloroethane	0.354	0.353	0.2	95	-0.01
62 T	Ethyl Benzene	1.919	1.987	-3.5	95	-0.01
63 T	p- & m-Xylenes	1.452	1.549	-6.7	96	-0.01
64 T	o-Xylene	1.434	1.460	-1.8	95	0.00
65 T	Styrene	1.002	1.009	-0.7	94	-0.01
66 T	Bromoform	0.124	0.112	9.3	96	0.00
67 I	1,2-DICHLOROBENZENE-d4 (IST)	1.000	1.000	0.0	106	0.00
68 T	p-Ethyltoluene	5.297	5.395	-1.9	101	-0.01
69 T	Isopropylbenzene	5.614	5.856	-4.3	95	0.00
70 S	p-Bromofluorobenzene (SURR)	1.355	1.325	2.2	104	0.00
71 T	1,1,2,2-Tetrachloroethane	0.540	0.480	11.1	88	0.00
72 T	Bromobenzene	1.828	1.694	7.3	93	-0.00



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\V8022518\  
 Data File : V803939.D  
 Acq On : 25 Feb 2018 2:16 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8022518A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 26 12:25:43 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
73 T	trans-1,4-Dichloro-2-butene	0.778	0.727	6.6	92	0.00
74 T	1,2,3-Trichloropropane	0.155	0.137	11.2	91	-0.01
75 T	n-Propylbenzene	6.872	7.052	-2.6	94	-0.01
76 T	2-Chlorotoluene	4.512	4.502	0.2	95	0.00
77 T	4-Chlorotoluene	4.113	3.999	2.8	94	-0.01
78 T	1,3,5-Trimethylbenzene	4.698	4.749	-1.1	95	-0.01
79 T	tert-Butylbenzene	3.985	4.059	-1.9	95	-0.01
80 T	1,2,4-Trimethylbenzene	4.440	4.520	-1.8	94	0.00
81 T	sec-Butylbenzene	5.563	5.682	-2.1	94	0.00
82 T	1,3-Dichlorobenzene	2.304	2.333	-1.3	95	0.00
83 T	p-Isopropyltoluene	4.901	5.102	-4.1	94	-0.01
84 T	1,4-Dichlorobenzene	0.161	0.155	4.2	95	0.00
85 T	1,2,3-Trimethylbenzene	3.966	3.935	0.8	99	0.00
86 T	p-Diethylbenzene	2.577	2.519	2.3	95	0.00
87 T	1,2-Dichlorobenzene	1.985	1.872	5.7	94	0.00
88 T	n-Butylbenzene	5.465	5.432	0.6	92	0.00
89 T	1,2-Dibromo-3-chloropropane	0.082	0.068	16.4	86	0.00
90 T	1,2,4,5-Tetramethylbenzene	3.558	3.659	-2.8	100	0.00
91 T	1,2,4-Trichlorobenzene	1.046	1.000	4.4	94	0.00
92 T	Hexachloro-1,3-Butadiene	0.514	0.460	10.6	89	0.00
93 T	Naphthalene	1.375	1.262	8.2	90	0.00
94 T	1,2,3-Trichlorobenzene	0.054	0.051	4.3	95	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



## Post-Injection Groundwater Data





Geology

Hydrology

Remediation

Water Supply

September 19, 2018

Mr. Paul I. Matli, Ph.D.  
Hydro Tech Environmental, Corp.  
15 Ocean Ave., 2<sup>nd</sup> Floor  
Brooklyn, NY 11225

Re: Data Validation Report  
July 2018 Ground Water Sampling Event  
11-28 31<sup>st</sup> Drive, LIC, NY

Dear Dr. Matli:

The data usability summary report and data validation summaries are attached to this letter for the above referenced project. The data for York Analytical Laboratories, Inc. SDG 18G1061 were acceptable with some minor issues that are identified in the validation summary. There were no data that were qualified as rejected, unusable (R) in the data pack.

We have attached lists of data validation acronyms and data qualifiers to assist you in the interpretation of the reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Hydro Tech Environmental, Corp.

Sincerely,  
Alpha Geoscience

Donald Anné  
Senior Chemist

DCA:dca  
attachments



## Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



## Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlorophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation





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**Data Usability Summary Report for  
York Analytical Laboratories, Inc., SDG: 18G1061**

**5 Ground Water Samples and 1 Trip Blank  
Collected July 24, 2018**

Prepared by: Donald Anné  
September 19, 2018

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The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile analyses for 5 ground water samples and 1 trip blank.

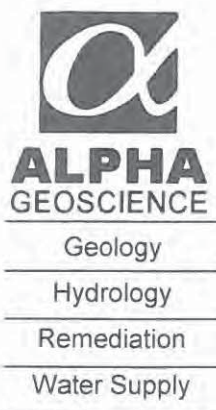
The overall performance of the analysis is acceptable. York Analytical Laboratories, Inc. did fulfill the requirements of the volatile method.

The data are acceptable with some minor issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive volatile results for tetrachloroethylene were qualified as “estimated, biased low” (J-) for all 5 ground water samples because 1 of 2 percent recoveries for tetrachloroethylene was below QC limits, but not below 30% in the associated aqueous LCS/LCSD.
- The “not detected” volatile result for tetrachloroethylene was qualified as “estimated” (UJ) for the trip blank because 1 of 2 percent recoveries for tetrachloroethylene was below QC limits, but not below 30% in the associated aqueous LCS/LCSD.

All data are considered usable with estimated (J- or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.





**QA/QC Review of Method 8260C Volatiles Data for  
York Analytical Laboratories, Inc., SDG: 18G1061**

**5 Ground Water Samples and 1 Trip Blank  
Collected July 24, 2018**

Prepared by: Donald Anné  
September 19, 2018

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Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for tetrachloroethylene and trichloroethylene were above the method minimums, as required.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for tetrachloroethylene and trichloroethylene were below the method minimum, as required.

The RRFs for tetrachloroethylene and trichloroethylene were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of the method and trip blanks reported tetrachloroethylene and trichloroethylene as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples and trip blank.



Matrix Spike/Matrix Spike Duplicate: The relative percent difference for tetrachloroethylene and trichloroethylene were below the allowable maximum, but 1 of 2 percent recoveries for tetrachloroethylene was below QC limits, but not below 30% for aqueous MS/MSD sample MW-4. The positive result for tetrachloroethylene should be considered estimated, biased low (J-) in sample MW-4.

Laboratory Control Sample: The relative percent differences tetrachloroethylene and trichloroethylene were below the allowable maximum, but 1 of 2 percent recoveries for tetrachloroethylene was below QC limits, but not below 30% for aqueous samples BG81295-BS1 and BG81295-BSD1. Positive results for tetrachloroethylene should be considered estimated, biased low (J-) and "not detected" results estimated (UJ) in associated aqueous samples.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

MW-4

Laboratory: York Analytical Laboratories, Inc.

SDG: 18G1061

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Water

Batch: BG81295

Laboratory ID: BG81295-MS1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

Source Sample Name: MW-4

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Tetrachloroethylene	10.0	12.8	18.6	58.2 *	64 - 139
Trichloroethylene	10.0	0.430	8.41	79.8	53 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

MW-4

Laboratory: York Analytical Laboratories, Inc.

SDG: 18G1061

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Water

Batch: BG81295

Laboratory ID: BG81295-MSD1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

Source Sample Name: MW-4

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Tetrachloroethylene	10.0	20.1	72.8	22.3	30	64 - 139
Trichloroethylene	10.0	9.00	85.7	7.13	30	53 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18G1061Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BG81295Laboratory ID: BG81295-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Tetrachloroethylene	10.0	8.06	80.6 *	82 - 131
Trichloroethylene	10.0	8.83	88.3	82 - 128

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18G1061Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BG81295Laboratory ID: BG81295-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Tetrachloroethylene	10.0	8.42	84.2	4.37	30	82 - 131
Trichloroethylene	10.0	9.24	92.4	4.54	30	82 - 128

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## UST Endpoint Samples





Geology

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April 30, 2018

Mr. Paul I. Matli, Ph.D.  
Hydro Tech Environmental, Corp.  
15 Ocean Ave., 2<sup>nd</sup> Floor  
Brooklyn, NY 11225

Re: Data Validation Report  
October 2017 Soil Sampling Event  
11-28 31 Drive, LIC, NY

Dear Dr. Matli:

The data usability summary report and data validation summaries are attached to this letter for the above referenced project. The data for York Analytical Laboratories, Inc. SDG 17J0671 were mostly acceptable with some issues that are identified in the validation summary. There were data that were qualified as unusable (R) in the data pack. The reasons for rejecting data are outlined in the associated DUSR and QA/QC reviews. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria.

We have attached lists of data validation acronyms and data qualifiers to assist you in the interpretation of the reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Hydro Tech Environmental, Corp.

Sincerely,  
Alpha Geoscience

Donald Anné  
Senior Chemist

DCA:dca  
attachments



## Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
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CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation



## Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.





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**Data Usability Summary Report for  
York Analytical Laboratories, Inc., SDG: 17J0671**

**5 Soil Samples and 1 Trip Blank  
Collected October 16, 2017**

Prepared by: Donald Anné  
April 30, 2018

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile and semi-volatile analyses for 5 soil samples and volatile analyses only for 1 trip blank.

The overall performance of the analysis is acceptable. York Analytical Laboratories, Inc. did not fulfill the requirements of the methods.

The data are mostly acceptable with issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The “not detected” volatile results for 1,4-dioxane were qualified as “rejected, unusable” (R) in all 5 soil samples because average RRF and RRF for 1,4-dioxane were below the allowable minimum in the associated initial and continuing calibrations.
- The “not detected” volatile result for 1,1,1-trichloroethane was qualified as “rejected, unusable” (R) in the Trip Blank because 1 of 2 percent recoveries for 1,1,1-trichloroethane was below QC limits and below 30% in the associated aqueous LCS/LCSD.
- The “not detected” semi-volatile result for hexachlorocyclopentadiene was qualified as “rejected, unusable” (R) in sample EP-3 (5 ft) because 2 of 2 percent recoveries for hexachlorocyclopentadiene were below QC limits and below 10% in soil MS/MSD sample EP-3 (5 ft).

All data that are not qualified rejected, unusable (R) are considered usable. Detailed information on data quality is included in the data validation reviews.





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**QA/QC Review of Method 8260C Volatiles Data for  
York Analytical Laboratories, Inc., SDG: 17J0671**

**5 Soil Samples and 1 Trip Blank  
Collected October 16, 2017**

Prepared by: Donald Anné  
April 30, 2018

---

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRF for 2-butanone was below the method minimums for VOA No.3 on 09-14-17. The average RRFs for 2-butanone and 2-hexanone were below the method minimums for VOA No.8 on 10-05-17. The %RSDs for methyl acetate and acetone were above the method maximum for VOA No.3 on 09-14-17. The %RSDs for bromomethane and cyclohexane were above the method maximum for VOA No.8 on 10-05-17. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration.

The %RSDs for methyl acetate and acetone were above the allowable maximum (30%) for VOA No.3 on 09-14-17. Positive results for these compounds should be considered estimated (J) in associated samples.

The average RRF for 1,4-dioxane was below the allowable minimum (0.005) for VOA No.3 on 09-14-17. Positive results for 1,4-dioxane should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated samples.

Continuing Calibration: The RRFs for 2-butanone and 2-hexanone were below the method minimums on 10-17-17 (V801633.D). The %Ds for 7 compounds (circled red on attached FORM VII) were above the method maximum on 10-17-17 (V801633.D). The %Ds for 2-butanone and 1,2,4-trichlorobenzene were above the method maximum on 10-18-17 (V3128543.D). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration.



The RRF for 1,4-dioxane was below the allowable minimum (0.005) on 10-17-17 (V801633.D). The RRF for 1,4-dioxane was below the allowable minimum (0.005) on 10-18-17 (V3128543.D). Positive results for 1,4-dioxane should be considered estimated, biased low (J-) and "not detected" results rejected, unusable (R) in associated samples.

The %Ds for dichlorodifluoromethane, bromomethane, trichlorofluoromethane, and cyclohexane were above the allowable maximum (25%) on 10-17-17 (V801633.D). The %D for 2-butanone was above the allowable maximum (25%) on 10-18-17 (V3128543.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for 5 compounds (circled red on the attached MS/MSD from) were above the allowable maximum and 1 of 2 percent recoveries for 1,1-dichloroethylene was above QC limits for soil MS/MSD sample EP-3 (5 ft). Positive results for compounds with RPDs above the allowable maximum should be considered estimated (J) and positive results for 1,1-dichloroethylene estimated, biased high (J+). Sample EP-3 (5 ft) reported these compounds as "not detected"; therefore, no action is taken.

Laboratory Control Sample: The relative percent difference (RPD) for 1,1,1-trichloroethane was above the allowable maximum; 2 of 2 percent recoveries (%Rs) for 1,1-dichloroethylene, dichlorodifluoromethane, and vinyl acetate and 1 of 2 %Rs for hexachlorobutadiene were above the QC limits; and 1 of 2 for 1,1,1-trichloroethane was below QC limits and below 30% for aqueous samples BJ70847-BS1/BSD1. Positive results for 1,1-dichloroethylene, dichlorodifluoromethane, vinyl acetate, and hexachlorobutadiene should be considered estimated, biased high (J+); positive results for 1,1,1-trichloroethane should be considered estimated, biased low (J-); and "not detected" results for 1,1,1-trichloroethane should be considered rejected, unusable (R) in associated aqueous samples.



The RPDs for target compounds were below the allowable maximum, but 2 of 2%Rs for 1,1-dichloroethylene and 1 of 2 %Rs for 2-butanone were above the QC limits for soil samples BJ70939-BS1/BSD1. Positive results for 1,1-dichloroethylene and 2-butanone should be considered estimated, biased high (J+) in associated soil samples.

Compound ID: Checked surrogates were within GC quantitation limits. The analyses of soil samples reported target compounds as not detected.



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BS1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	10.8	108	70 - 132
1,1,1-Trichloroethane	10.0	11.9	119	68 - 138
1,1,2,2-Tetrachloroethane	10.0	8.89	88.9	73 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	12.6	126	67 - 136
1,1,2-Trichloroethane	10.0	9.36	93.6	79 - 125
1,1-Dichloroethane	10.0	10.8	108	78 - 128
1,1-Dichloroethylene	5.00	11.1	222 *	68 - 134
1,1-Dichloropropylene	10.0	11.0	110	74 - 130
1,2,3-Trichlorobenzene	10.0	9.54	95.4	77 - 140
1,2,3-Trichloropropane	10.0	9.26	92.6	79 - 127
1,2,4-Trichlorobenzene	10.0	10.1	101	75 - 141
1,2,4-Trimethylbenzene	10.0	10.6	106	78 - 127
1,2-Dibromo-3-chloropropane	10.0	9.24	92.4	60 - 150
1,2-Dibromoethane	10.0	9.42	94.2	86 - 123
1,2-Dichlorobenzene	10.0	9.74	97.4	79 - 125
1,2-Dichloroethane	10.0	10.9	109	69 - 133
1,2-Dichloropropane	10.0	9.48	94.8	76 - 124
1,3,5-Trimethylbenzene	10.0	10.3	103	78 - 128
1,3-Dichlorobenzene	10.0	10.4	104	81 - 124
1,3-Dichloropropane	10.0	9.32	93.2	79 - 125
1,4-Dichlorobenzene	10.0	10.1	101	82 - 124
2,2-Dichloropropane	10.0	11.9	119	61 - 139
2-Butanone	10.0	6.22	62.2	44 - 169
2-Chlorotoluene	10.0	10.4	104	74 - 130
4-Chlorotoluene	10.0	9.82	98.2	75 - 127
Acetone	10.0	10.3	103	29 - 163
Benzene	10.0	10.3	103	72 - 134
Bromobenzene	10.0	9.48	94.8	74 - 129
Bromochloromethane	10.0	11.1	111	69 - 134
Bromodichloromethane	10.0	10.0	100	76 - 127



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BS1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Bromoform	10.0	9.63	96.3	77 - 137
Bromomethane	10.0	6.06	60.6	50 - 156
Carbon tetrachloride	10.0	12.4	124	62 - 145
Chlorobenzene	10.0	10.2	102	85 - 119
Chloroethane	10.0	12.6	126	49 - 143
Chloroform	10.0	10.5	105	74 - 131
Chloromethane	10.0	10.7	107	43 - 134
cis-1,2-Dichloroethylene	10.0	10.6	106	73 - 134
cis-1,3-Dichloropropylene	10.0	9.78	97.8	77 - 128
Dibromochloromethane	10.0	9.98	99.8	79 - 130
Dibromomethane	10.0	9.38	93.8	78 - 128
Dichlorodifluoromethane	10.0	18.0	180 *	38 - 139
Ethyl Benzene	10.0	11.0	110	80 - 129
Hexachlorobutadiene	10.0	13.5	135	72 - 141
Isopropylbenzene	10.0	11.1	111	76 - 128
Methyl tert-butyl ether (MTBE)	10.0	9.82	98.2	64 - 142
Methylene chloride	10.0	10.3	103	56 - 142
Naphthalene	10.0	9.23	92.3	79 - 144
n-Butylbenzene	10.0	11.5	115	74 - 132
n-Propylbenzene	10.0	11.1	111	72 - 135
o-Xylene	10.0	10.7	107	81 - 123
p- & m- Xylenes	20.0	22.7	114	79 - 130
p-Isopropyltoluene	10.0	11.2	112	80 - 127
sec-Butylbenzene	10.0	10.8	108	78 - 127
Styrene	10.0	10.5	105	82 - 124
tert-Butylbenzene	10.0	10.6	106	75 - 131
Tetrachloroethylene	10.0	11.0	110	78 - 133
Toluene	10.0	10.3	103	83 - 122
trans-1,2-Dichloroethylene	10.0	10.6	106	59 - 145
trans-1,3-Dichloropropylene	10.0	9.77	97.7	74 - 131



Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BS1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Trichloroethylene	10.0	10.1	101	81 - 125
Trichlorofluoromethane	10.0	14.4	144	61 - 144
Vinyl acetate	10.0	16.6	166 *	32 - 165
Vinyl Chloride	10.0	13.0	130	42 - 136

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BSD1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	10.8	108	0.371	30	70 - 132
1,1,1-Trichloroethane	10.0	2.22	22.2 *	137 *	30	68 - 138
1,1,2,2-Tetrachloroethane	10.0	9.01	90.1	1.34	30	73 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.8	128	1.18	30	67 - 136
1,1,2-Trichloroethane	10.0	9.75	97.5	4.08	30	79 - 125
1,1-Dichloroethane	10.0	10.9	109	1.01	30	78 - 128
1,1-Dichloroethylene	5.00	11.2	224 *	0.717	30	68 - 134
1,1-Dichloropropylene	10.0	11.2	112	2.25	30	74 - 130
1,2,3-Trichlorobenzene	10.0	12.4	124	25.9	30	77 - 140
1,2,3-Trichloropropane	10.0	9.31	93.1	0.539	30	79 - 127
1,2,4-Trichlorobenzene	10.0	11.2	112	10.4	30	75 - 141
1,2,4-Trimethylbenzene	10.0	10.0	100	5.35	30	78 - 127
1,2-Dibromo-3-chloropropane	10.0	9.26	92.6	0.216	30	60 - 150
1,2-Dibromoethane	10.0	9.79	97.9	3.85	30	86 - 123
1,2-Dichlorobenzene	10.0	9.67	96.7	0.721	30	79 - 125
1,2-Dichloroethane	10.0	11.5	115	4.82	30	69 - 133
1,2-Dichloropropane	10.0	9.62	96.2	1.47	30	76 - 124
1,3,5-Trimethylbenzene	10.0	9.83	98.3	4.86	30	78 - 128
1,3-Dichlorobenzene	10.0	10.0	100	3.53	30	81 - 124
1,3-Dichloropropane	10.0	9.76	97.6	4.61	30	79 - 125
1,4-Dichlorobenzene	10.0	9.97	99.7	0.899	30	82 - 124
2,2-Dichloropropane	10.0	11.8	118	0.677	30	61 - 139
2-Butanone	10.0	7.06	70.6	12.7	30	44 - 169
2-Chlorotoluene	10.0	9.84	98.4	5.15	30	74 - 130
4-Chlorotoluene	10.0	9.44	94.4	3.95	30	75 - 127
Acetone	10.0	11.0	110	6.46	30	29 - 163
Benzene	10.0	10.5	105	1.93	30	72 - 134
Bromobenzene	10.0	9.20	92.0	3.00	30	74 - 129
Bromochloromethane	10.0	11.6	116	3.97	30	69 - 134
Bromodichloromethane	10.0	10.2	102	1.48	30	76 - 127



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BSD1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	%	QC LIMITS	
					RPD	REC.
Bromoform	10.0	10.2	102	6.24	30	77 - 137
Bromomethane	10.0	6.85	68.5	12.2	30	50 - 156
Carbon tetrachloride	10.0	12.4	124	0.564	30	62 - 145
Chlorobenzene	10.0	10.1	101	0.197	30	85 - 119
Chloroethane	10.0	12.5	125	0.557	30	49 - 143
Chloroform	10.0	10.9	109	4.03	30	74 - 131
Chloromethane	10.0	10.3	103	3.14	30	43 - 134
cis-1,2-Dichloroethylene	10.0	9.50	95.0	11.4	30	73 - 134
cis-1,3-Dichloropropylene	10.0	10.0	100	2.42	30	77 - 128
Dibromochloromethane	10.0	10.4	104	4.03	30	79 - 130
Dibromomethane	10.0	9.79	97.9	4.28	30	78 - 128
Dichlorodifluoromethane	10.0	18.0	180 *	0.0556	30	38 - 139
Ethyl Benzene	10.0	10.8	108	1.46	30	80 - 129
Hexachlorobutadiene	10.0	16.1	161 *	17.5	30	72 - 141
Isopropylbenzene	10.0	10.4	104	6.61	30	76 - 128
Methyl tert-butyl ether (MTBE)	10.0	10.7	107	8.67	30	64 - 142
Methylene chloride	10.0	10.6	106	3.45	30	56 - 142
Naphthalene	10.0	10.4	104	12.4	30	79 - 144
n-Butylbenzene	10.0	11.1	111	3.64	30	74 - 132
n-Propylbenzene	10.0	10.4	104	6.88	30	72 - 135
o-Xylene	10.0	10.7	107	0.00	30	81 - 123
p- & m- Xylenes	20.0	22.3	112	1.73	30	79 - 130
p-Isopropyltoluene	10.0	10.7	107	4.49	30	80 - 127
sec-Butylbenzene	10.0	10.2	102	5.62	30	78 - 127
Styrene	10.0	10.6	106	0.852	30	82 - 124
tert-Butylbenzene	10.0	10.0	100	6.11	30	75 - 131
Tetrachloroethylene	10.0	10.7	107	2.49	30	78 - 133
Toluene	10.0	10.2	102	0.878	30	83 - 122
trans-1,2-Dichloroethylene	10.0	10.8	108	1.77	30	59 - 145
trans-1,3-Dichloropropylene	10.0	10.1	101	3.02	30	74 - 131



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: WaterBatch: BJ70847Laboratory ID: BJ70847-BSD1Preparation: EPA 5030BInitial/Final: 5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Trichloroethylene	10.0	9.96	99.6	1.79	30	81 - 125
Trichlorofluoromethane	10.0	14.2	142	1.33	30	61 - 144
Vinyl acetate	10.0	17.1	171 *	3.27	30	32 - 165
Vinyl Chloride	10.0	13.0	130	0.154	30	42 - 136

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	54.4	109	75 - 129
1,1,1-Trichloroethane	50.0	54.3	109	71 - 137
1,1,2,2-Tetrachloroethane	50.0	54.8	110	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50.0	53.3	107	58 - 146
1,1,2-Trichloroethane	50.0	53.1	106	83 - 123
1,1-Dichloroethane	50.0	52.3	105	75 - 130
1,1-Dichloroethylene	25.0	52.3	209 *	64 - 137
1,1-Dichloropropylene	50.0	52.1	104	77 - 127
1,2,3-Trichlorobenzene	50.0	55.6	111	81 - 140
1,2,3-Trichloropropane	50.0	57.3	115	81 - 126
1,2,4-Trichlorobenzene	50.0	61.3	123	80 - 141
1,2,4-Trimethylbenzene	50.0	53.9	108	84 - 125
1,2-Dibromo-3-chloropropane	50.0	54.5	109	74 - 142
1,2-Dibromoethane	50.0	53.3	107	86 - 123
1,2-Dichlorobenzene	50.0	55.3	111	85 - 122
1,2-Dichloroethane	50.0	50.9	102	71 - 133
1,2-Dichloropropane	50.0	52.2	104	81 - 122
1,3,5-Trimethylbenzene	50.0	52.4	105	82 - 126
1,3-Dichlorobenzene	50.0	55.9	112	84 - 124
1,3-Dichloropropane	50.0	49.0	98.0	83 - 123
1,4-Dichlorobenzene	50.0	55.6	111	84 - 124
1,4-Dioxane	1000	1010	101	10 - 228
2,2-Dichloropropane	50.0	52.3	105	67 - 136
2-Butanone	50.0	74.6	149 *	58 - 147
2-Chlorotoluene	50.0	53.9	108	78 - 127
4-Chlorotoluene	50.0	53.2	106	79 - 125
Acetone	50.0	39.3	78.6	36 - 155
Benzene	50.0	48.5	96.9	77 - 127
Bromobenzene	50.0	52.7	105	77 - 129
Bromochloromethane	50.0	51.6	103	74 - 129



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Bromodichloromethane	50.0	53.6	107	81 - 124
Bromoform	50.0	57.0	114	80 - 136
Bromomethane	50.0	45.4	90.8	32 - 177
Carbon tetrachloride	50.0	54.6	109	66 - 143
Chlorobenzene	50.0	54.0	108	86 - 120
Chloroethane	50.0	49.8	99.6	51 - 142
Chloroform	50.0	51.3	103	76 - 131
Chloromethane	50.0	50.4	101	49 - 132
cis-1,2-Dichloroethylene	50.0	49.4	98.8	74 - 132
cis-1,3-Dichloropropylene	50.0	53.9	108	81 - 129
Dibromochloromethane	50.0	55.5	111	10 - 200
Dibromomethane	50.0	53.1	106	83 - 124
Dichlorodifluoromethane	50.0	52.4	105	28 - 158
Ethyl Benzene	50.0	53.7	107	84 - 125
Hexachlorobutadiene	50.0	51.4	103	83 - 133
Isopropylbenzene	50.0	52.8	106	81 - 127
Methyl tert-butyl ether (MTBE)	50.0	49.1	98.2	74 - 131
Methylene chloride	50.0	48.9	97.8	57 - 141
Naphthalene	50.0	56.0	112	86 - 141
n-Butylbenzene	50.0	57.7	115	80 - 130
n-Propylbenzene	50.0	54.0	108	74 - 136
o-Xylene	50.0	54.0	108	83 - 123
p- & m- Xylenes	100	105	105	82 - 128
p-Isopropyltoluene	50.0	55.5	111	85 - 125
sec-Butylbenzene	50.0	55.4	111	83 - 125
Styrene	50.0	52.4	105	86 - 126
tert-Butylbenzene	50.0	53.3	107	80 - 127
Tetrachloroethylene	50.0	49.2	98.4	80 - 129
Toluene	50.0	54.2	108	85 - 121
trans-1,2-Dichloroethylene	50.0	48.0	96.1	72 - 132



Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
trans-1,3-Dichloropropylene	50.0	55.4	111	78 - 132
Trichloroethylene	50.0	52.1	104	84 - 123
Trichlorofluoromethane	50.0	49.8	99.7	62 - 140
Vinyl acetate	50.0	57.0	114	67 - 136
Vinyl Chloride	50.0	46.4	92.9	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	50.0	53.3	107	2.12	30	75 - 129
1,1,1-Trichloroethane	50.0	49.4	98.9	9.32	30	71 - 137
1,1,2,2-Tetrachloroethane	50.0	52.6	105	4.13	30	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.9	104	2.72	30	58 - 146
1,1,2-Trichloroethane	50.0	53.3	107	0.433	30	83 - 123
1,1-Dichloroethane	50.0	50.6	101	3.46	30	75 - 130
1,1-Dichloroethylene	25.0	44.4	177 *	16.4	30	64 - 137
1,1-Dichloropropylene	50.0	51.5	103	1.10	30	77 - 127
1,2,3-Trichlorobenzene	50.0	55.5	111	0.108	30	81 - 140
1,2,3-Trichloropropane	50.0	58.4	117	1.97	30	81 - 126
1,2,4-Trichlorobenzene	50.0	58.3	117	5.15	30	80 - 141
1,2,4-Trimethylbenzene	50.0	50.4	101	6.71	30	84 - 125
1,2-Dibromo-3-chloropropane	50.0	54.3	109	0.367	30	74 - 142
1,2-Dibromoethane	50.0	51.3	103	3.75	30	86 - 123
1,2-Dichlorobenzene	50.0	54.7	109	1.11	30	85 - 122
1,2-Dichloroethane	50.0	51.9	104	2.00	30	71 - 133
1,2-Dichloropropane	50.0	49.4	98.7	5.61	30	81 - 122
1,3,5-Trimethylbenzene	50.0	54.0	108	2.93	30	82 - 126
1,3-Dichlorobenzene	50.0	57.9	116	3.55	30	84 - 124
1,3-Dichloropropane	50.0	50.5	101	3.14	30	83 - 123
1,4-Dichlorobenzene	50.0	57.0	114	2.43	30	84 - 124
1,4-Dioxane	1000	1010	101	0.0287	30	10 - 228
2,2-Dichloropropane	50.0	51.2	102	2.01	30	67 - 136
2-Butanone	50.0	72.3	145	3.20	30	58 - 147
2-Chlorotoluene	50.0	55.9	112	3.72	30	78 - 127
4-Chlorotoluene	50.0	56.4	113	5.88	30	79 - 125
Acetone	50.0	30.7	61.5	24.5	30	36 - 155
Benzene	50.0	49.8	99.5	2.67	30	77 - 127
Bromobenzene	50.0	51.6	103	2.11	30	77 - 129
Bromochloromethane	50.0	48.1	96.3	6.96	30	74 - 129



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromodichloromethane	50.0	54.3	109	1.30	30	81 - 124
Bromoform	50.0	54.8	110	3.92	30	80 - 136
Bromomethane	50.0	48.3	96.7	6.25	30	32 - 177
Carbon tetrachloride	50.0	53.6	107	1.88	30	66 - 143
Chlorobenzene	50.0	53.1	106	1.72	30	86 - 120
Chloroethane	50.0	49.2	98.5	1.17	30	51 - 142
Chloroform	50.0	50.9	102	0.783	30	76 - 131
Chloromethane	50.0	50.6	101	0.356	30	49 - 132
cis-1,2-Dichloroethylene	50.0	49.8	99.6	0.847	30	74 - 132
cis-1,3-Dichloropropylene	50.0	53.4	107	0.839	30	81 - 129
Dibromochloromethane	50.0	57.3	115	3.21	30	10 - 200
Dibromomethane	50.0	52.3	105	1.56	30	83 - 124
Dichlorodifluoromethane	50.0	49.8	99.7	5.03	30	28 - 158
Ethyl Benzene	50.0	54.8	110	1.94	30	84 - 125
Hexachlorobutadiene	50.0	53.8	108	4.47	30	83 - 133
Isopropylbenzene	50.0	52.4	105	0.627	30	81 - 127
Methyl tert-butyl ether (MTBE)	50.0	49.2	98.4	0.203	30	74 - 131
Methylene chloride	50.0	43.4	86.9	11.8	30	57 - 141
Naphthalene	50.0	52.2	104	7.08	30	86 - 141
n-Butylbenzene	50.0	57.8	116	0.156	30	80 - 130
n-Propylbenzene	50.0	55.2	110	2.23	30	74 - 136
o-Xylene	50.0	50.5	101	6.62	30	83 - 123
p- & m- Xylenes	100	107	107	2.06	30	82 - 128
p-Isopropyltoluene	50.0	55.8	112	0.557	30	85 - 125
sec-Butylbenzene	50.0	56.5	113	1.93	30	83 - 125
Styrene	50.0	52.3	105	0.172	30	86 - 126
tert-Butylbenzene	50.0	56.3	113	5.49	30	80 - 127
Tetrachloroethylene	50.0	52.3	105	6.07	30	80 - 129
Toluene	50.0	53.1	106	2.05	30	85 - 121
trans-1,2-Dichloroethylene	50.0	47.8	95.6	0.501	30	72 - 132



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ70939Laboratory ID: BJ70939-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
trans-1,3-Dichloropropylene	50.0	55.2	110	0.235	30	78 - 132
Trichloroethylene	50.0	52.4	105	0.536	30	84 - 123
Trichlorofluoromethane	50.0	50.3	101	0.998	30	62 - 140
Vinyl acetate	50.0	56.9	114	0.211	30	67 - 136
Vinyl Chloride	50.0	47.4	94.8	2.00	30	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MS1

Preparation: EPA 5035A

Initial/Final: 5.6 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	0.00	52.7	105	15 - 161
1,1,1-Trichloroethane	50.0	0.00	48.7	97.3	42 - 145
1,1,2,2-Tetrachloroethane	50.0	0.00	56.3	113	16 - 167
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.00	48.9	97.7	11 - 160
1,1,2-Trichloroethane	50.0	0.00	51.7	103	44 - 145
1,1-Dichloroethane	50.0	0.00	48.9	97.7	46 - 142
1,1-Dichloroethylene	25.0	0.00	44.8	179 *	30 - 153
1,1-Dichloropropylene	50.0	0.00	47.1	94.3	40 - 133
1,2,3-Trichlorobenzene	50.0	0.00	31.8	63.7	10 - 157
1,2,3-Trichloropropane	50.0	0.00	61.7	123	38 - 155
1,2,4-Trichlorobenzene	50.0	0.00	34.1	68.1	10 - 151
1,2,4-Trimethylbenzene	50.0	0.00	54.4	109	10 - 170
1,2-Dibromo-3-chloropropane	50.0	0.00	44.6	89.3	36 - 138
1,2-Dibromoethane	50.0	0.00	44.8	89.5	40 - 142
1,2-Dichlorobenzene	50.0	0.00	46.6	93.3	10 - 147
1,2-Dichloroethane	50.0	0.00	49.9	99.8	48 - 133
1,2-Dichloropropane	50.0	0.00	52.8	106	47 - 141
1,3,5-Trimethylbenzene	50.0	0.00	52.2	104	10 - 150
1,3-Dichlorobenzene	50.0	0.00	46.2	92.5	10 - 144
1,3-Dichloropropane	50.0	0.00	47.9	95.7	43 - 142
1,4-Dichlorobenzene	50.0	0.00	44.7	89.3	10 - 160
1,4-Dioxane	1000	0.00	952	95.2	10 - 191
2,2-Dichloropropane	50.0	0.00	50.2	100	38 - 130
2-Butanone	50.0	0.00	72.9	146	10 - 189
2-Chlorotoluene	50.0	0.00	52.8	106	14 - 144
4-Chlorotoluene	50.0	0.00	49.3	98.6	15 - 138
Acetone	50.0	2.47	58.9	113	10 - 196
Benzene	50.0	0.00	47.2	94.5	43 - 139
Bromobenzene	50.0	0.00	49.7	99.4	23 - 142
Bromochloromethane	50.0	0.00	47.8	95.6	38 - 145
Bromodichloromethane	50.0	0.00	50.8	102	38 - 147
Bromoform	50.0	0.00	55.1	110	29 - 156



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MS1

Preparation: EPA 5035A

Initial/Final: 5.6 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Bromomethane	50.0	0.00	47.6	95.2	10 - 166
Carbon tetrachloride	50.0	0.00	50.5	101	35 - 145
Chlorobenzene	50.0	0.00	46.9	93.9	21 - 154
Chloroethane	50.0	0.00	51.2	102	15 - 160
Chloroform	50.0	0.00	51.1	102	47 - 142
Chloromethane	50.0	0.00	45.5	90.9	10 - 159
cis-1,2-Dichloroethylene	50.0	0.00	48.5	97.0	42 - 144
cis-1,3-Dichloropropylene	50.0	0.00	48.8	97.5	18 - 159
Dibromochloromethane	50.0	0.00	50.7	101	10 - 179
Dibromomethane	50.0	0.00	48.6	97.2	47 - 143
Dichlorodifluoromethane	50.0	0.00	42.3	84.6	10 - 145
Ethyl Benzene	50.0	0.00	49.0	98.1	11 - 158
Hexachlorobutadiene	50.0	0.00	35.2	70.4	10 - 158
Isopropylbenzene	50.0	0.00	56.6	113	10 - 162
Methyl tert-butyl ether (MTBE)	50.0	0.00	50.0	100	42 - 152
Methylene chloride	50.0	0.00	47.8	95.5	28 - 151
Naphthalene	50.0	0.00	33.6	67.1	10 - 158
n-Butylbenzene	50.0	0.00	47.7	95.4	10 - 162
n-Propylbenzene	50.0	0.00	54.3	109	10 - 155
o-Xylene	50.0	0.00	47.3	94.7	10 - 158
p- & m- Xylenes	100	0.00	99.2	99.2	10 - 156
p-Isopropyltoluene	50.0	0.00	51.7	103	10 - 147
sec-Butylbenzene	50.0	0.00	55.1	110	10 - 157
Styrene	50.0	0.00	42.6	85.2	13 - 171
tert-Butylbenzene	50.0	0.00	59.4	119	10 - 160
Tetrachloroethylene	50.0	0.00	54.7	109	30 - 167
Toluene	50.0	0.00	48.5	97.1	21 - 160
trans-1,2-Dichloroethylene	50.0	0.00	46.2	92.4	29 - 153
trans-1,3-Dichloropropylene	50.0	0.00	46.7	93.3	18 - 155
Trichloroethylene	50.0	0.00	48.0	96.0	24 - 169
Trichlorofluoromethane	50.0	0.00	46.3	92.6	35 - 142
Vinyl acetate	50.0	0.00	34.0	68.1	10 - 119



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MS1

Preparation: EPA 5035A

Initial/Final: 5.6 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Vinyl Chloride	50.0	0.00	43.7	87.4	12 - 160

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MSD1

Preparation: EPA 5035A

Initial/Final: 5.57 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	50.0	43.0	86.0	20.3	33	15 - 161
1,1,1-Trichloroethane	50.0	36.0	72.1	29.8	30	42 - 145
1,1,2,2-Tetrachloroethane	50.0	49.1	98.3	13.6	56	16 - 167
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	34.3	68.7	34.9 *	31	11 - 160
1,1,2-Trichloroethane	50.0	48.2	96.3	7.03	40	44 - 145
1,1-Dichloroethane	50.0	41.3	82.6	16.8	36	46 - 142
1,1-Dichloroethylene	25.0	34.5	138	25.8	31	30 - 153
1,1-Dichloropropylene	50.0	37.7	75.4	22.3	28	40 - 133
1,2,3-Trichlorobenzene	50.0	26.7	53.5	17.4	47	10 - 157
1,2,3-Trichloropropane	50.0	56.4	113	9.06	48	38 - 155
1,2,4-Trichlorobenzene	50.0	27.9	55.8	19.9	52	10 - 151
1,2,4-Trimethylbenzene	50.0	40.0	80.1	30.3	242	10 - 170
1,2-Dibromo-3-chloropropane	50.0	48.3	96.6	7.94	54	36 - 138
1,2-Dibromoethane	50.0	44.5	89.0	0.538	39	40 - 142
1,2-Dichlorobenzene	50.0	38.0	75.9	20.6	52	10 - 147
1,2-Dichloroethane	50.0	47.0	93.9	6.11	32	48 - 133
1,2-Dichloropropane	50.0	44.3	88.5	17.6	37	47 - 141
1,3,5-Trimethylbenzene	50.0	39.7	79.5	27.1	62	10 - 150
1,3-Dichlorobenzene	50.0	37.0	73.9	22.3	51	10 - 144
1,3-Dichloropropane	50.0	47.0	94.1	1.73	36	43 - 142
1,4-Dichlorobenzene	50.0	36.8	73.7	19.2	52	10 - 160
1,4-Dioxane	1000	1200	120	22.7	196	10 - 191
2,2-Dichloropropane	50.0	36.6	73.2	31.3 *	31	38 - 130
2-Butanone	50.0	81.9	164	11.6	67	10 - 189
2-Chlorotoluene	50.0	39.7	79.4	28.3	49	14 - 144
4-Chlorotoluene	50.0	39.4	78.8	22.3	39	15 - 138
Acetone	50.0	61.8	119	4.77	150	10 - 196
Benzene	50.0	39.4	78.9	18.0	64	43 - 139
Bromobenzene	50.0	38.8	77.7	24.5	44	23 - 142
Bromochloromethane	50.0	44.1	88.2	8.01	30	38 - 145
Bromodichloromethane	50.0	43.2	86.4	16.2	37	38 - 147
Bromoform	50.0	47.7	95.5	14.3	51	29 - 156
Bromomethane	50.0	38.3	76.6	21.7	42	10 - 166



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ70939

Laboratory ID: BJ70939-MSD1

Preparation: EPA 5035A

Initial/Final: 5.57 g / 5 ml

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Carbon tetrachloride	50.0	36.5	73.0	32.2 *	31	35 - 145
Chlorobenzene	50.0	38.1	76.3	20.7	32	21 - 154
Chloroethane	50.0	34.9	69.8	37.9	40	15 - 160
Chloroform	50.0	40.6	81.2	22.8	29	47 - 142
Chloromethane	50.0	37.3	74.5	19.8	31	10 - 159
cis-1,2-Dichloroethylene	50.0	37.9	75.9	24.4	30	42 - 144
cis-1,3-Dichloropropylene	50.0	43.6	87.1	11.3	39	18 - 159
Dibromochloromethane	50.0	46.1	92.1	9.65	41	10 - 179
Dibromomethane	50.0	44.1	88.2	9.66	41	47 - 143
Dichlorodifluoromethane	50.0	29.1	58.2	37.0 *	34	10 - 145
Ethyl Benzene	50.0	37.7	75.4	26.1	42	11 - 158
Hexachlorobutadiene	50.0	30.8	61.5	13.6	45	10 - 158
Isopropylbenzene	50.0	38.8	77.5	37.4	57	10 - 162
Methyl tert-butyl ether (MTBE)	50.0	46.6	93.2	7.06	47	42 - 152
Methylene chloride	50.0	40.8	81.6	15.7	49	28 - 151
Naphthalene	50.0	29.7	59.4	12.1	95	10 - 158
n-Butylbenzene	50.0	38.0	75.9	22.7	96	10 - 162
n-Propylbenzene	50.0	39.3	78.6	32.1	56	10 - 155
o-Xylene	50.0	39.9	79.9	17.0	51	10 - 158
p- & m- Xylenes	100	78.7	78.7	23.0	47	10 - 156
p-Isopropyltoluene	50.0	39.6	79.1	26.6	60	10 - 147
sec-Butylbenzene	50.0	39.7	79.4	32.4	56	10 - 157
Styrene	50.0	37.6	75.1	12.6	39	13 - 171
tert-Butylbenzene	50.0	41.8	83.5	34.9	79	10 - 160
Tetrachloroethylene	50.0	44.1	88.1	21.5	33	30 - 167
Toluene	50.0	39.7	79.4	20.1	50	21 - 160
trans-1,2-Dichloroethylene	50.0	35.1	70.2	27.4	30	29 - 153
trans-1,3-Dichloropropylene	50.0	41.6	83.1	11.6	30	18 - 155
Trichloroethylene	50.0	37.1	74.2	25.7	30	24 - 169
Trichlorofluoromethane	50.0	33.3	66.5	32.7 *	30	35 - 142
Vinyl acetate	50.0	28.7	57.4	17.0	82	10 - 119
Vinyl Chloride	50.0	35.3	70.5	21.4	35	12 - 160



# Response Factor Report VOA No. 8

October 5, 2017

Method Path : C:\msdchem\1\methods\  
 Method File : V8LO0058.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Fri Oct 06 10:28:22 2017  
 Response Via : Initial Calibration

## Calibration Files

0.5 =V801278.D 2.0 =V801279.D 4.0 =V801280.D 10.0 =V801281.D 40.0 =V801283.D 80.0 =V801284.D  
 120 =V801285.D 160 =V801286.D

Compound	0.5	2.0	4.0	10.0	40.0	80.0	120	160	Avg	%RSD
1) I FLUOROBENZENE (ISTD)										
2) T Dichlorodifluo...	0.997	0.972	0.994	0.820	1.013	0.574	0.830	0.923	0.890	16.64
3) T Chloromethane	1.647	1.310	1.293	1.201	1.329	1.343	1.518	1.536	1.397	10.86
4) T Vinyl Chloride	1.338	1.162	1.187	1.104	1.234	0.960	1.094	1.116	1.149	9.67
5) T Bromomethane	0.339	0.325	0.340	0.380	0.579	0.625	0.579	0.584	0.469	28.39
6) T Chloroethane	0.730	0.651	0.649	0.614	0.660	0.595	0.611	0.607	0.640	6.81
7) T Trichlorofluor...	1.992	1.827	1.860	1.775	1.828	1.078	1.507	1.643	1.689	16.97
8) T Ethanol		0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	30.19
9) T Freon-113	1.378	1.324	1.274	1.266	1.235	0.636	1.015	1.189	1.165	20.55
10) T 1,1-Dichloroet...	1.138	1.050	1.027	1.012	1.060	0.801	0.921	0.970	0.997	10.21
11) T Acrolein	0.100	0.074	0.080	0.078	0.081	0.084	0.080	0.075	0.081	10.12
12) T Acetone			0.158	0.144	0.127	0.123	0.122	0.121	0.132	11.50
13) T Iodomethane			0.480	0.794	1.221	1.202	1.025	0.997	0.953	29.28
14) T Methyl Acetate	0.345	0.376	0.369	0.355	0.356	0.353	0.342	0.332	0.354	4.04
15) T Carbon disulfide	4.189	3.257	3.029	2.925	3.042	2.533	2.789	2.864	3.079	16.10
16) T tert-Butyl Alc...	0.060	0.059	0.056	0.057	0.055	0.054	0.055	0.053	0.056	4.18
17) T Methylene Chlo...	2.038	1.846	1.688	1.634	1.616	1.617	1.534	1.472	1.680	10.80
18) T Acrylonitrile	0.126	0.167	0.154	0.159	0.157	0.164	0.161	0.158	0.156	8.01
19) T trans-1,2-Dich...	2.235	1.956	1.881	1.875	1.924	1.756	1.744	1.710	1.885	8.88
20) T tert-Butyl Met...	1.643	2.077	1.979	1.999	2.043	2.068	1.990	1.930	1.966	7.08
21) T 1,1-Dichloroet...	2.613	2.613	2.504	2.473	2.500	2.370	2.218	2.127	2.427	7.30
22) T Vinyl Acetate	1.126	1.255	1.342	1.252	1.305	1.240	1.288	1.168	1.247	5.67
23) T Diisopropyl et...	4.025	4.667	4.550	4.403	4.259	3.956	3.507	3.249	4.077	12.23
24) T Ethyl-tert-But...	2.850	3.533	3.426	3.368	3.473	3.442	3.274	3.139	3.313	6.77
25) T cis-1,2-Dichlo...	2.410	2.310	2.187	2.179	2.227	2.160	2.086	2.018	2.197	5.59
26) T 2-Butanone	0.053	0.061	0.058	0.052	0.050	0.053	0.051	0.049	0.053	7.33
27) T 2,2-Dichloropr...	2.355	2.153	2.072	2.043	2.074	1.754	1.874	1.903	2.029	9.15
28) T Tetrahydrofuran	0.055	0.048	0.048	0.044	0.044	0.044	0.044	0.043	0.046	9.13
29) T Bromochloromet...	0.929	0.984	0.947	0.929	0.869	0.825	0.768	0.737	0.874	10.23
30) T Chloroform	1.258	1.446	1.416	1.437	1.514	1.546	1.489	1.447	1.444	6.02



# Response Factor Report VOA No. 8

Method Path : C:\msdchem\1\methods\  
Method File : V8LO0058.M

Title : Volatile Organics EPA 8260C

31) T	1,1,1-Trichloro...	2.467	2.249	2.178	2.184	2.198	1.804	1.954	1.964	2.125	9.79
32) T	Cyclohexane	2.865	2.747	2.671	2.569	2.309	1.139	1.692	1.846	2.230	27.40
33) T	1,1-Dichloropr...	2.141	1.929	1.864	1.861	1.850	1.428	1.619	1.651	1.793	12.22
34) S	d4-1,2-Dichlor...	0.837	0.926	0.929	0.928	0.925	0.902	0.871	0.836	0.895	4.56
35) T	Carbon Tetrach...	2.155	1.991	1.945	1.960	1.975	1.422	1.710	1.801	1.870	11.99
36) T	tert-Amyl alco...	0.030	0.044	0.043	0.042	0.043	0.041	0.040	0.037	0.040	11.12
37) T	1,2-Dichloroet...	1.179	1.274	1.224	1.226	1.255	1.261	1.200	1.141	1.220	3.70
38) T	Benzene	5.349	5.204	4.939	4.854	4.907	4.674	4.435	4.227	4.824	7.73
39) T	tert-Amyl meth...	2.002	2.525	2.453	2.423	2.508	2.481	2.362	2.254	2.376	7.36

40) I	CHLOROBENZENE-d5 (	...	...	...	...	...	...	...	...	...	...
41) T	Trichloroethylene	0.491	0.423	0.399	0.396	0.409	0.380	0.387	0.397	0.410	8.54
42) T	Methyl Cyclohe...	0.749	0.710	0.682	0.662	0.605		0.488	0.599	0.642	13.48
43) T	Methyl Methacr...	0.172	0.215	0.207	0.214	0.226	0.232	0.226	0.225	0.215	8.90
44) T	Dibromomethane	0.129	0.137	0.129	0.128	0.135	0.141	0.136	0.135	0.134	3.39
45) T	Bromodichlorom...	0.396	0.440	0.424	0.429	0.456	0.470	0.452	0.446	0.439	5.22
46) T	1,2-Dichloropr...	0.368	0.392	0.367	0.365	0.378	0.383	0.364	0.355	0.371	3.26
47) T	1,4-Dioxane	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.87
48) T	2-Chloroethyl ...	0.162	0.159	0.146	0.019	0.020	0.019	0.020	0.020	0.071	99.67
49) T	cis-1,3-Dichlo...	0.486	0.526	0.497	0.503	0.528	0.537	0.512	0.503	0.512	3.42
50) T	4-Methyl-2-Pen...	0.210	0.266	0.254	0.255	0.262	0.263	0.254	0.249	0.251	7.08
51) S	Toluene-d8 (SURR)	1.422	1.368	1.364	1.364	1.378	1.380	1.370	1.378	1.378	1.38
52) T	Toluene	1.812	1.663	1.554	1.531	1.497	1.425	1.342	1.295	1.515	11.12
53) T	trans-1,3-Dich...	0.378	0.409	0.382	0.378	0.395	0.403	0.387	0.383	0.389	3.00
54) T	1,1,2-Trichlor...	0.165	0.193	0.183	0.179	0.185	0.188	0.182	0.180	0.182	4.51
55) T	1,3-Dichloropr...	0.296	0.342	0.318	0.318	0.327	0.333	0.322	0.318	0.322	4.15
56) T	Tetrachloroeth...	0.539	0.459	0.428	0.429	0.408	0.325	0.359	0.382	0.416	15.76
57) T	2-Hexanone	0.070	0.092	0.088	0.089	0.092	0.094	0.093	0.091	0.089	8.76
58) T	Dibromochlorom...	0.193	0.230	0.222	0.229	0.247	0.256	0.251	0.249	0.235	8.83
59) T	1,2-Dibromoeth...	0.163	0.183	0.172	0.171	0.179	0.183	0.180	0.179	0.176	4.01
60) T	Chlorobenzene	1.020	1.023	0.956	0.953	0.940	0.940	0.890	0.873	0.950	5.64
61) T	1,1,1,2-tetrac...	0.319	0.354	0.334	0.343	0.340	0.339	0.314	0.303	0.331	5.13
62) T	Ethyl Benzene	2.085	1.917	1.802	1.787	1.665	1.507	1.433	1.386	1.698	14.45
63) T	p- & m-Xylenes	1.607	1.495	1.396	1.376	1.258	1.122	1.011	0.944	1.276	18.41
64) T	o-Xylene	1.433	1.452	1.353	1.348	1.286	1.262	1.204	1.188	1.316	7.46
65) T	Styrene	0.936	1.031	0.993	0.994	0.967	0.960	0.899	0.872	0.956	5.50
66) T	Bromoform	0.087	0.103	0.100	0.108	0.118	0.126	0.126	0.128	0.112	13.33

67) I	1,2-DICHLOROBENZEN...	...	...	...	...	...	...	...	...	...	...
68) T	p-Ethyltoluene	7.419	6.236	5.968	5.871	5.285	4.644	4.828	4.909	5.645	16.39



Method Path : C:\msdchem\1\methods\  
 Method File : V8LO0058.M

Title : Volatile Organics EPA 8260C

69)	T	Isopropylbenzene	7.659	7.331	7.196	6.201	5.210	5.554	5.748	6.414	15.17
70)	S	p-Bromofluorob...	1.819	1.675	1.689	1.639	1.652	1.705	1.744	1.703	3.35
71)	T	1,1,2,2-Tetrac...	0.618	0.656	0.619	0.600	0.602	0.581	0.560	0.609	4.96
72)	T	Bromobenzene	2.380	2.181	2.068	1.985	2.020	1.998	2.015	2.092	6.35
73)	T	trans-1,4-Dich...	0.895	0.833	0.811	0.801	0.785	0.797	0.814	0.818	4.17
74)	T	1,2,3-Trichlor...	0.199	0.198	0.187	0.186	0.176	0.179	0.175	0.184	5.25
75)	T	n-Propylbenzene	8.591	8.258	8.117	7.051	5.799	6.196	6.307	7.189	15.74
76)	T	2-Chlorotoluene	6.627	5.601	5.356	5.247	4.766	4.448	4.310	4.209	16.02
77)	T	4-Chlorotoluene	5.625	4.898	4.688	4.613	4.318	4.224	4.145	4.181	10.90
78)	T	1,3,5-Trimethy...	7.419	6.217	5.968	5.885	4.644	4.828	4.909	5.644	16.37
79)	T	tert-Butylbenzene	6.106	5.079	4.915	4.914	4.284	3.382	3.947	4.279	17.96
80)	T	1,2,4-Trimethy...	6.664	5.791	5.662	5.596	5.076	4.611	4.566	4.484	14.33
81)	T	sec-Butylbenzene	8.674	7.250	7.009	6.926	6.085	4.404	5.352	5.751	20.47
82)	T	1,3-Dichlorobe...	2.953	2.666	2.552	2.505	2.311	2.219	2.114	2.059	12.54
83)	T	p-Isopropyltol...	7.303	6.257	6.058	6.071	5.312	3.966	4.572	4.751	19.63
84)	T	1,4-Dichlorobe...	0.200	0.175	0.170	0.165	0.166	0.165	0.165	0.166	6.93
85)	T	1,2,3-Trimethy...	5.019	4.847	4.875	4.953	4.449	4.276	4.278	4.220	7.38
86)	T	p-Diethylbenzene	3.548	3.051	3.019	3.030	2.797	2.185	2.617	2.801	13.65
87)	T	1,2-Dichlorobe...	2.070	1.991	1.892	1.878	1.801	1.827	1.833	1.835	4.93
88)	T	n-Butylbenzene	6.957	6.019	5.931	5.961	5.381	3.968	4.858	5.190	16.24
89)	T	1,2-Dibromo-3-...	0.072	0.083	0.082	0.081	0.085	0.088	0.092	0.091	7.66
90)	T	1,2,4,5-Tetram...	3.209	3.344	3.392	3.440	3.309	2.870	3.261	3.384	5.50
91)	T	1,2,4-Trichlor...	0.657	0.682	0.678	0.694	0.671	0.613	0.703	0.711	4.57
92)	T	Hexachloro-1,3...	0.193	0.182	0.170	0.178	0.151	0.094	0.155	0.200	20.15
93)	T	Naphthalene	0.901	0.995	0.976	1.010	0.999	0.971	1.040	1.034	4.44
94)	T	1,2,3-Trichlor...	0.029	0.031	0.029	0.028	0.025	0.030	0.030	0.029	6.02

(#) = Out of Range



Data Path : C:\msdchem\1\data\V8101717\  
 Data File : V801633.D  
 Acq On : 17 Oct 2017 9:57 am  
 Operator : SR  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8101717A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 17 10:13:52 2017  
 Quant Method : C:\msdchem\1\methods\V8LO0058.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Oct 06 10:28:22 2017  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	70	0.00
2 T	Dichlorodifluoromethane	0.890	1.663	-86.8#	143	0.00
3 T	Chloromethane	1.397	1.440	-3.0	84	0.00
4 T	Vinyl Chloride	1.149	1.430	-24.4	91	0.00
5 T	Bromomethane	0.469	0.187	60.2#	35#	0.00
6 T	Chloroethane	0.640	0.784	-22.6	90	0.00
7 T	Trichlorofluoromethane	1.689	2.417	-43.1#	96	0.00
8	Ethanol	0.002	0.003	-18.2	83	0.00
9 T	Freon-113	1.165	1.464	NA -25.7#	81	0.00
10 T	1,1-Dichloroethylene	0.997	1.100	-10.3	77	0.00
11 T	Acrolein	0.081	0.062	NA 23.6	56	0.00
12 T	Acetone	0.132	0.143	-8.4	70	0.00
13 T	Iodomethane	0.953	0.679	NA 28.7#	60	0.00
14 T	Methyl Acetate	0.353	0.396	-11.9	78	0.00
15 T	Carbon disulfide	3.079	3.093	-0.5	74	0.00
16 T	tert-Butyl Alcohol (TBA)	0.056	0.054	3.9	66	0.00
17 T	Methylene Chloride	1.680	1.763	-4.9	76	0.00
18 T	Acrylonitrile	0.156	0.159	-2.1	70	0.00
19 T	trans-1,2-Dichloroethylene	1.885	1.992	-5.7	75	0.00
20 T	tert-Butyl Methyl Ether (MT)	1.966	2.051	-4.3	72	0.00
21 T	1,1-Dichloroethane	2.427	2.604	-7.3	74	0.00
22 T	Vinyl Acetate	1.247	1.329	-6.5	75	0.00
23 T	Diisopropyl ether (DIPE)	4.077	4.661	-14.3	74	0.00
24 T	Ethyl-tert-Butyl ether (ETB)	3.313	3.582	-8.1	75	0.00
25 T	cis-1,2-Dichloroethylene	2.197	2.362	-7.5	76	0.00
26 T	2-Butanone	0.053	0.047	12.4	63	0.00
27 T	2,2-Dichloropropane	2.029	2.445	-20.5	84	0.00
28 T	Tetrahydrofuran	0.046	0.042	9.7	67	0.00
29 T	Bromochloromethane	0.874	1.007	-15.2	76	0.00
30 T	Chloroform	1.444	1.535	-6.3	75	0.00
31 T	1,1,1-Trichloroethane	2.125	2.514	-18.3	81	0.00
32 T	Cyclohexane	2.230	2.888	-29.5#	79	0.00
33 T	1,1-Dichloropropylene	1.793	1.992	-11.1	75	0.00
34 S	d4-1,2-Dichloroethane (SURR	0.894	0.970	-8.5	74	0.00
35 T	Carbon Tetrachloride	1.870	2.321	-24.1	83	0.00
36 T	tert-Amyl alcohol (TAA)	0.040	0.045	-13.2	76	0.00
37 T	1,2-Dichloroethane	1.220	1.393	-14.2	80	0.00



Data Path : C:\msdchem\1\data\V8101717\  
 Data File : V801633.D  
 Acq On : 17 Oct 2017 9:57 am  
 Operator : SR  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8101717A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 17 10:13:52 2017  
 Quant Method : C:\msdchem\1\methods\V8LO0058.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Oct 06 10:28:22 2017  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
38 T	Benzene	4.824	4.936	-2.3	72	0.00
39 T	tert-Amyl methyl ether (TAM)	2.376	2.559	-7.7	74	0.00
40 I	CHLOROBENZENE-d5 (ISTD)	1.000	1.000	0.0	73	0.00
41 T	Trichloroethylene	0.410	0.406	0.9	75	0.00
42 T	Methyl Cyclohexane	0.642	0.694	-8.0	77	0.00
43 T	Methyl Methacrylate	0.215	0.201	6.3	69	0.00
44 T	Dibromomethane	0.134	0.130	2.9	74	0.00
45 T	Bromodichloromethane	0.439	0.441	-0.3	75	0.00
46 T	1,2-Dichloropropane	0.372	0.352	5.1	71	0.00
47 T	1,4-Dioxane	0.001	0.001	-14.3	82	0.00
48 T	2-Chloroethyl vinyl ether	0.071	0.097	NA-36.6#	366#	0.00
49 T	cis-1,3-Dichloropropene	0.512	0.504	1.4	73	0.00
50 T	4-Methyl-2-Pentanone	0.251	0.259	-3.0	74	0.00
51 S	Toluene-d8 (SURR)	1.378	1.335	3.1	72	0.00
52 T	Toluene	1.515	1.548	-2.2	74	0.00
53 T	trans-1,3-Dichloropropene	0.389	0.389	0.2	75	0.00
54 T	1,1,2-Trichloroethane	0.182	0.176	3.2	72	0.00
55 T	1,3-Dichloropropane	0.322	0.314	2.5	72	0.00
56 T	Tetrachloroethylene	0.416	0.447	-7.3	76	0.00
57 T	2-Hexanone	0.089	0.090	-1.5	74	0.00
58 T	Dibromochloromethane	0.235	0.239	-2.0	76	0.00
59 T	1,2-Dibromoethane	0.176	0.170	3.3	73	0.00
60 T	Chlorobenzene	0.950	0.959	-1.0	74	0.00
61 T	1,1,1,2-tetrachloroethane	0.331	0.359	-8.5	77	0.00
62 T	Ethyl Benzene	1.698	1.838	-8.2	75	0.00
63 T	p- & m-Xylenes	1.276	1.424	-11.6	76	0.00
64 T	o-Xylene	1.316	1.392	-5.8	75	0.00
65 T	Styrene	0.957	1.007	-5.3	74	0.00
66 T	Bromoform	0.112	0.115	-2.6	78	0.00
67 I	1,2-DICHLOROBENZENE-d4 (IST)	1.000	1.000	0.0	81	0.00
68 T	p-Ethyltoluene	5.645	5.594	0.9	78	0.00
69 T	Isopropylbenzene	6.414	6.741	-5.1	76	0.00
70 S	p-Bromofluorobenzene (SURR)	1.703	1.561	8.3	75	0.00
71 T	1,1,2,2-Tetrachloroethane	0.609	0.556	8.7	73	0.00
72 T	Bromobenzene	2.092	1.911	8.7	75	0.00



Data Path : C:\msdchem\1\data\V8101717\  
 Data File : V801633.D  
 Acq On : 17 Oct 2017 9:57 am  
 Operator : SR  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8101717A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 17 10:13:52 2017  
 Quant Method : C:\msdchem\1\methods\V8L00058.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Oct 06 10:28:22 2017  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
73 T	trans-1,4-Dichloro-2-butene	0.818	0.806	1.4	82	0.00
74 T	1,2,3-Trichloropropane	0.184	0.173	5.9	76	0.00
75 T	n-Propylbenzene	7.189	7.575	-5.4	76	0.00
76 T	2-Chlorotoluene	5.070	5.032	0.8	78	0.00
77 T	4-Chlorotoluene	4.587	4.363	4.9	77	0.00
78 T	1,3,5-Trimethylbenzene	5.644	5.594	0.9	77	0.00
79 T	tert-Butylbenzene	4.613	4.651	-0.8	77	0.00
80 T	1,2,4-Trimethylbenzene	5.306	5.386	-1.5	78	0.00
81 T	sec-Butylbenzene	6.431	6.637	-3.2	78	0.00
82 T	1,3-Dichlorobenzene	2.422	2.442	-0.8	79	0.00
83 T	p-Isopropyltoluene	5.536	5.937	-7.2	80	0.00
84 T	1,4-Dichlorobenzene	0.172	0.172	-0.1	85	0.00
85	1,2,3-Trimethylbenzene	4.614	4.572	0.9	75	0.00
86 T	p-Diethylbenzene	2.881	3.238	-12.4	87	0.00
87 T	1,2-Dichlorobenzene	1.891	1.803	4.6	78	0.00
88 T	n-Butylbenzene	5.533	6.097	-10.2	83	0.00
89 T	1,2-Dibromo-3-chloropropane	0.084	0.079	5.9	80	0.00
90 T	1,2,4,5-Tetramethylbenzene	3.276	3.782	-15.5	90	0.00
91 T	1,2,4-Trichlorobenzene	0.676	0.706	-4.4	83	0.00
92 T	Hexachloro-1,3-Butadiene	0.165	0.234	MA-41.3#	107	0.00
93 T	Naphthalene	0.991	0.972	1.9	78	0.00
94 T	1,2,3-Trichlorobenzene	0.029	0.030	-5.9	87	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



## Response Factor Report VOA No. 3

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Initial Calibration

## Calibration Files

5 =V3127773.D 10 =V3127774.D 20 =V3127775.D  
 50 =V3127776.D 100 =V3127777.D 200 =V3127778.D

Compound		5	10	20	50	100	200	Avg	%RSD
-----									
1)	FLUOROBENZENE (ISTD)	-----ISTD-----							
2)	Dichlorodifluoromet	1.319	1.285	1.369	1.313	1.311	1.248	1.308	3.07
3) P	Chloromethane	2.624	2.483	2.584	2.554	2.476	2.361	2.514	3.75
4) C	Vinyl Chloride	1.713	1.620	1.676	1.543	1.589	1.536	1.613	4.43#
5)	Bromomethane	0.776	0.736	0.708	0.763	0.733	0.776	0.749	3.67
6)	Chloroethane	0.739	0.767	0.764	0.758	0.748	0.765	0.757	1.49
7)	Trichlorofluorometh	1.239	1.148	1.193	1.205	1.235	1.197	1.203	2.76
8)	Ethyl Ether							0.000#	-1.00
9)	Freon-113	0.908	0.825	0.820	0.951	0.866	0.892	0.877	5.75
10) C,M	1,1-Dichloroethylen	0.686	0.678	0.677	0.727	0.650	0.674	0.682	3.70#
11)	Acrolein	0.060	0.071	0.074	0.092	0.081	0.079	0.076	13.99
12)	Iodomethane	0.904	0.974	1.068	1.246	1.120	1.237	1.092	12.65
13)	Methyl Acetate	0.023	0.727	0.647	0.620	0.622	0.557	0.533	47.97
14)	tert-Butyl Alcohol	0.048	0.069	0.095	0.102	0.109	0.094	0.086	26.96
15)	trans-1,2-Dichloroe	2.135	2.091	2.027	2.128	2.034	2.021	2.073	2.52
16)	Carbon Disulfide	3.377	3.063	3.147	3.433	2.989	3.193	3.200	5.45
17)	Methylene Chloride	1.632	1.381	1.266	1.350	1.271	1.309	1.368	9.98
18)	Acrylonitrile	0.343	0.314	0.320	0.341	0.352	0.356	0.338	4.99
19)	tert-Butyl Methyl E	2.370	2.542	2.334	2.464	2.419	2.390	2.420	3.07
20)	Acetone	0.457	0.380	0.276	0.252	0.213	0.209	0.298	33.53
21) P	1,1-Dichloroethane	2.621	2.653	2.578	2.711	2.603	2.562	2.621	2.07
22)	Vinyl Acetate	3.917	3.863	3.808	4.019	4.085	3.843	3.923	2.76
23)	cis-1,2-Dichloroeth	1.661	1.704	1.664	1.732	1.608	1.640	1.668	2.66
24)	2-Butanone	0.059	0.061	0.082	0.077	0.078	0.064	0.070	14.15
25)	2,2-Dichloropropane	1.650	1.884	1.638	1.905	1.571	1.830	1.746	8.22
26)	Bromochloromethane	1.295	1.247	1.307	1.316	1.241	1.219	1.271	3.19
27) C	Chloroform	2.269	2.101	2.114	2.226	2.115	2.032	2.143	4.09#
28)	Tetrahydrofuran	0.129	0.120	0.103	0.106	0.112	0.100	0.111	9.93
29)	1,1-Dichloropropyle	2.238	2.021	1.918	2.106	1.913	1.777	1.995	8.16
30)	1,1,1-Trichloroetha	1.702	1.616	1.633	1.728	1.589	1.556	1.637	4.04
31)	Cyclohexane	2.635	2.829	2.709	2.744	2.628	2.427	2.662	5.15
32) S	d4-1,2-Dichloroetha	1.068	1.069	1.083	1.073	1.009	0.988	1.049	3.75
33)	Carbon Tetrachlorid	1.558	1.468	1.425	1.578	1.493	1.420	1.490	4.44
34)	1,2-Dichloroethane	1.406	1.381	1.280	1.327	1.256	1.197	1.308	6.02
35) M	Benzene	5.679	5.256	5.179	5.168	4.797	4.710	5.131	6.79
-----									
36)	CHLOROBENZENE-d5 (ISTD)	-----ISTD-----							
37) M	Trichloroethylene	0.403	0.442	0.358	0.375	0.384	0.361	0.387	8.15
38)	Methyl Cyclohexane	0.607	0.718	0.630	0.636	0.646	0.562	0.633	8.11
39)	Dibromomethane	0.184	0.202	0.178	0.188	0.192	0.182	0.188	4.46
40)	Methyl Methacrylate	0.184	0.200	0.172	0.190	0.190	0.174	0.185	5.77
41)	Bromodichloromethan	0.390	0.413	0.398	0.423	0.407	0.400	0.405	2.91
42) C	1,2-Dichloropropane	0.405	0.453	0.391	0.393	0.386	0.377	0.401	6.72#

(#) = Out of Range

V3C00289.M

Thu Sep 14 16:07:40 2017

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## Response Factor Report VOA No. 3

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Initial Calibration

## Calibration Files

5 =V3127773.D 10 =V3127774.D 20 =V3127775.D  
 50 =V3127776.D 100 =V3127777.D 200 =V3127778.D

	Compound	5	10	20	50	100	200	Avg	%RSD
43)	1,4-Dioxane	0.002	0.003	0.002	0.002	0.002	0.002	0.002#	8.04
44)	2-Chloroethylvinyl	0.717	0.781	0.680	0.698	0.728	0.696	0.717	5.00
45)	cis-1,3-Dichloropro	0.590	0.597	0.536	0.572	0.549	0.558	0.567	4.18
46)	2-Hexanone	0.211	0.253	0.204	0.213	0.233	0.205	0.220	8.77
47) S	Toluene-d8 (SURR)	1.208	1.245	1.138	1.218	1.223	1.081	1.186	5.29
48) C,M	Toluene	1.436	1.421	1.285	1.315	1.257	1.147	1.310	8.25#
49)	trans-1,3-Dichlorop	0.421	0.415	0.406	0.438	0.446	0.442	0.428	3.81
50)	1,1,2-Trichloroetha	0.224	0.253	0.216	0.225	0.227	0.209	0.226	6.71
51)	1,3-Dichloropropane	0.478	0.482	0.447	0.448	0.470	0.428	0.459	4.64
52)	Tetrachloroethylene	0.583	0.591	0.508	0.489	0.478	0.415	0.511	13.08
53)	4-Methyl-2-Pentanone	0.585	0.666	0.558	0.574	0.639	0.519	0.590	9.09
54)	Dibromochloromethan	0.289	0.306	0.287	0.315	0.308	0.304	0.302	3.70
55)	1,2-Dibromoethane	0.273	0.287	0.255	0.261	0.279	0.251	0.268	5.33
56) P,M	Chlorobenzene	0.988	0.947	0.873	0.866	0.866	0.819	0.893	6.98
57) C	Ethyl Benzene	1.504	1.501	1.379	1.400	1.332	1.243	1.393	7.20#
58)	p- & m-Xylenes	1.136	1.133	0.967	1.022	0.938	0.826	1.004	11.95
59)	o-Xylene	1.134	1.183	0.991	1.034	0.981	0.920	1.041	9.55
60)	Styrene	0.987	1.008	0.883	0.895	0.870	0.812	0.909	8.21
61)	1,1,1,2-Tetrachloro	0.320	0.361	0.321	0.332	0.325	0.297	0.326	6.33
62)	1,2-DICHLOROBENZENE-d	-----ISTD-----							
63) p	Bromoform	0.446	0.415	0.442	0.541	0.557	0.593	0.499	14.79
64) S	p-Bromofluorobenzen	0.878	0.860	0.909	0.921	1.005	1.023	0.933	7.18
65)	p-Ethyltoluene	3.163	3.383	3.201	3.273	3.212	2.863	3.182	5.47
66)	p-Diethylbenzene	1.492	1.458	1.505	1.562	1.515	1.391	1.487	3.88
67) P	1,1,2,2-Tetrachloro	0.776	0.791	0.787	0.848	0.889	0.865	0.826	5.74
68)	1,2,3-Trichloroprop	0.148	0.184	0.176	0.202	0.198	0.179	0.181	10.55
69)	Isopropylbenzene	3.696	3.345	3.363	3.804	3.556	3.563	3.555	5.08
70)	1,2-Dibromo-3-Chlor	0.082	0.093	0.092	0.103	0.102	0.101	0.095	8.23
71)	Bromobenzene	1.268	1.259	1.240	1.282	1.311	1.262	1.270	1.90
72)	trans-1,4-Dichloro-	0.764	0.721	0.713	0.804	0.827	1.190	0.836	21.41
73)	n-Propylbenzene	4.270	4.047	3.956	4.252	4.108	4.012	4.108	3.14
74)	2-Chlorotoluene	2.554	2.437	2.406	2.538	2.391	2.287	2.435	4.08
75)	4-Chlorotoluene	2.518	2.450	2.293	2.497	2.274	2.343	2.396	4.43
76)	tert-Butylbenzene	2.387	2.398	2.191	2.423	2.254	2.220	2.312	4.40
77)	1,3,5-trimethylbenz	3.046	2.659	2.672	2.743	2.556	2.594	2.712	6.49
78)	1,2,4-trimethylbenz	2.749	2.663	2.570	2.652	2.454	2.354	2.574	5.70
79)	sec-Butylbenzene	3.336	3.611	3.558	3.801	3.498	3.484	3.548	4.36
80)	1,3-Dichlorobenzene	1.755	1.610	1.602	1.667	1.480	1.418	1.588	7.73
81)	1,4-Dichlorobenzene	1.668	1.642	1.540	1.626	1.522	1.472	1.579	4.93
82)	1,2-Dichlorobenzene	1.524	1.476	1.437	1.448	1.333	1.377	1.433	4.79
83)	p-Isopropyltoluene	3.160	3.014	2.806	3.028	2.627	2.562	2.866	8.37
84)	n-Butylbenzene	3.149	3.184	2.991	3.182	2.981	2.936	3.071	3.68
85)	1,2,4,5-Tetramethyl	2.286	2.416	2.253	2.316	2.337	2.208	2.303	3.12

(#) = Out of Range



## Response Factor Report VOA No. 3

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
Title : VOCs BY GC/MS EPA SW846-8260  
Last Update : Thu Sep 14 15:49:54 2017  
Response via : Initial Calibration

## Calibration Files

5 =V3127773.D 10 =V3127774.D 20 =V3127775.D  
50 =V3127776.D 100 =V3127777.D 200 =V3127778.D

	Compound	5	10	20	50	100	200	Avg	%RSD
86)	1,2,4-Trichlorobenz	0.899	0.855	0.837	0.877	0.871	0.988	0.888	5.99
87)	Naphthalene	1.879	1.688	1.695	1.847	1.824	1.800	1.789	4.45
88)	Hexachloro-1,3-Buta	0.545	0.510	0.476	0.522	0.501	0.549	0.517	5.37
89)	1,2,3-Trichlorobenz	0.832	0.747	0.731	0.757	0.740	0.786	0.765	4.95



Data File : C:\HPCHEM\1\DATA\V3101817\V3128543.D  
 Acq On : 18 Oct 2017 10:02 am  
 Sample : SEQ-CCV1  
 Misc : QBV3101817A  
 MS Integration Params: RTEINT1.P

Vial: 2  
 Operator: SR  
 Inst : VOA No. 3  
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	107	-0.02
2	Dichlorodifluoromethane	1.308	1.316	-0.6	107	-0.01
3 P	Chloromethane	2.514	2.528	-0.6	106	-0.01
4 C	Vinyl Chloride	1.613	1.626	-0.8	113	-0.01
5	Bromomethane	0.749	0.702	6.3	98	-0.02
6	Chloroethane	0.757	0.702	7.3	99	-0.02
7	Trichlorofluoromethane	1.203	1.142	5.1	101	-0.02
8	Ethyl Ether	0.000	0.000#	0.0	126	-0.02
9	Freon-113	0.877	0.932	-6.3	105	-0.01
10 C,M	1,1-Dichloroethylene	0.682	0.694	-1.8	102	-0.02
11	Acrolein	0.076	0.080	-5.3	94	-0.02
12	Iodomethane	1.092	1.058	3.1	91	-0.02
13	Methyl Acetate	0.533	0.614	-15.2	106	-0.02
14	tert-Butyl Alcohol (TBA)	0.086	0.110	27.9#	115	-0.01
15	trans-1,2-Dichloroethylene	2.073	2.045	1.4	103	-0.02
16	Carbon Disulfide	3.200	2.961	7.5	92	-0.02
17	Methylene Chloride	1.368	1.297	5.2	103	-0.02
18	Acrylonitrile	0.338	0.353	-4.4	111	-0.02
19	tert-Butyl Methyl Ether (MT)	2.420	2.494	-3.1	108	-0.02
20	Acetone	0.298	0.247	17.1	105	-0.02
21 P	1,1-Dichloroethane	2.621	2.717	-3.7	107	-0.02
22	Vinyl Acetate	3.923	4.457	-13.6	119	-0.02
23	cis-1,2-Dichloroethylene	1.668	1.678	-0.6	104	-0.02
24	2-Butanone	0.070	0.116	65.7#	162	0.00
25	2,2-Dichloropropane	1.746	1.862	-6.6	105	-0.02
26	Bromochloromethane	1.271	1.302	-2.4	106	-0.02
27 C	Chloroform	2.143	2.260	-5.5	109	-0.02
28	Tetrahydrofuran	0.111	0.113	-1.8	114	-0.02
29	1,1-Dichloropropylene	1.995	1.996	-0.1	101	-0.02
30	1,1,1-Trichloroethane	1.637	1.757	-7.3	109	-0.03
31	Cyclohexane	2.662	2.859	-7.4	111	-0.02
32 S	d4-1,2-Dichloroethane (SURR)	1.049	1.121	-6.9	112	-0.02
33	Carbon Tetrachloride	1.490	1.523	-2.2	103	-0.02
34	1,2-Dichloroethane	1.308	1.403	-7.3	113	-0.02
35 M	Benzene	5.131	4.968	3.2	103	-0.02
36	CHLOROBENZENE-d5 (ISTD)	1.000	1.000	0.0	104	-0.02
37 M	Trichloroethylene	0.387	0.400	-3.4	110	-0.02
38	Methyl Cyclohexane	0.633	0.652	-3.0	106	-0.02
39	Dibromomethane	0.188	0.196	-4.3	108	-0.02
40	Methyl Methacrylate	0.185	0.194	-4.9	106	-0.02

(#) = Out of Range

V3128543.D V3C00289.M

Thu Oct 19 14:23:53 2017

Page 1

Page 239 of 520



Data File : C:\HPCHEM\1\DATA\V3101817\V3128543.D  
 Acq On : 18 Oct 2017 10:02 am  
 Sample : SEQ-CCV1  
 Misc : QBV3101817A  
 MS Integration Params: RTEINT1.P

Vial: 2  
 Operator: SR  
 Inst : VOA No. 3  
 Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
 Title : VOCs BY GC/MS EPA SW846-8260  
 Last Update : Thu Sep 14 15:49:54 2017  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	Bromodichloromethane	0.405	0.430	-6.2	105	-0.02
42 C	1,2-Dichloropropane	0.401	0.398	0.7	105	-0.02
43	1,4-Dioxane	0.002	0.002#	0.0	108	-0.02
44	2-Chloroethylvinyl ether	0.717	0.722	-0.7	107	-0.02
45	cis-1,3-Dichloropropene	0.567	0.597	-5.3	108	-0.02
46	2-Hexanone	0.220	0.224	-1.8	109	-0.02
47 S	Toluene-d8 (SURR)	1.186	1.122	5.4	95	-0.02
48 C,M	Toluene	1.310	1.322	-0.9	104	-0.02
49	trans-1,3-Dichloropropene	0.428	0.458	-7.0	108	-0.02
50	1,1,2-Trichloroethane	0.226	0.235	-4.0	108	-0.02
51	1,3-Dichloropropane	0.459	0.470	-2.4	109	-0.02
52	Tetrachloroethylene	0.511	0.497	2.7	105	-0.02
53	4-Methyl-2-Pentanone	0.590	0.616	-4.4	111	-0.02
54	Dibromochloromethane	0.302	0.338	-11.9	111	-0.02
55	1,2-Dibromoethane	0.268	0.269	-0.4	107	-0.02
56 P,M	Chlorobenzene	0.893	0.944	-5.7	113	-0.02
57 C	Ethyl Benzene	1.393	1.436	-3.1	106	-0.03
58	p- & m-Xylenes	1.004	1.007	-0.3	102	-0.02
59	o-Xylene	1.041	1.071	-2.9	107	-0.02
60	Styrene	0.909	0.946	-4.1	110	-0.02
61	1,1,1,2-Tetrachloroethane	0.326	0.343	-5.2	107	-0.02
62	1,2-DICHLOROBENZENE-d4 (ISTD	1.000	1.000	0.0	104	-0.02
63 p	Bromoform	0.499	0.582	-16.6	112	-0.02
64 S	p-Bromofluorobenzene (SURR)	0.933	0.922	1.2	104	-0.02
65	p-Ethyltoluene	3.182	3.683	-15.7	117	-0.03
66	p-Diethylbenzene	1.487	1.942	NA-30.6#	129	-0.02
67 P	1,1,2,2-Tetrachloroethane	0.826	0.876	-6.1	108	-0.02
68	1,2,3-Trichloropropane	0.181	0.203	-12.2	104	-0.02
69	Isopropylbenzene	3.555	3.878	-9.1	106	-0.02
70	1,2-Dibromo-3-Chloropropane	0.095	0.111	-16.8	113	-0.02
71	Bromobenzene	1.270	1.335	-5.1	108	-0.02
72	trans-1,4-Dichloro-2-butene	0.836	0.896	-7.2	116	-0.02
73	n-Propylbenzene	4.108	4.471	-8.8	109	-0.02
74	2-Chlorotoluene	2.435	2.738	-12.4	112	-0.02
75	4-Chlorotoluene	2.396	2.717	-13.4	113	-0.02
76	tert-Butylbenzene	2.312	2.498	-8.0	107	-0.02
77	1,3,5-trimethylbenzene	2.712	2.772	-2.2	105	-0.02
78	1,2,4-trimethylbenzene	2.574	2.818	-9.5	111	-0.02
79	sec-Butylbenzene	3.548	3.730	-5.1	102	-0.02
80	1,3-Dichlorobenzene	1.588	1.855	-16.8	116	-0.02

(#) = Out of Range



Data File : C:\HPCHEM\1\DATA\V3101817\V3128543.D  
Acq On : 18 Oct 2017 10:02 am  
Sample : SEQ-CCV1  
Misc : QBV3101817A  
MS Integration Params: RTEINT1.P

Vial: 2  
Operator: SR  
Inst : VOA No. 3  
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\V3C00289.M (RTE Integrator)  
Title : VOCs BY GC/MS EPA SW846-8260  
Last Update : Thu Sep 14 15:49:54 2017  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 25% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	1,4-Dichlorobenzene	1.579	1.884	-19.3	121	-0.02
82	1,2-Dichlorobenzene	1.433	1.573	-9.8	113	-0.02
83	p-Isopropyltoluene	2.866	3.254	-13.5	112	-0.02
84	n-Butylbenzene	3.071	3.609	-17.5	118	-0.02
85	1,2,4,5-Tetramethylbenzene	2.303	2.649	-15.0	119	-0.02
86	1,2,4-Trichlorobenzene	0.888	1.072	-20.7	127	-0.02
87	Naphthalene	1.789	1.978	-10.6	111	-0.02
88	Hexachloro-1,3-Butadiene	0.517	0.518	-0.2	103	-0.02
89	1,2,3-Trichlorobenzene	0.765	0.891	-16.5	123	-0.02





Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8270D Semi-Volatiles Data  
for York Analytical Laboratories, Inc., SDG: 17J0671**

**5 Soil Samples  
Collected October 16, 2017**

Prepared by: Donald Anné  
April 30, 2018

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Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for applicable compounds were above the method minimums, as required. The %RSDs for hexachlorocyclopentadiene, 2,4-dinitrophenol, and pentachlorophenol were above the method maximum for BNA #1 on 10-09-17. No action is taken when fewer than 20% of the compounds per calibration do not meet either method %RSD or average RRF criteria, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.010), as required.

The %RSD for 2,4-dinitrophenol was above the allowable maximum (30%) for BNA #1 on 10-09-17. Positive results for 2,4-dinitrophenol should be considered estimated (J) in associated samples.

Continuing Calibration: The RRFs for applicable compounds were above the method minimums and the %Ds were below the method maximum, as required.

The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.



Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for 24 compounds (circled red on the attached MS/MSD from) were above the allowable maximum and 2 of 2 percent recoveries for hexachlorocyclopentadiene were below QC limits and below 10% for soil MS/MSD sample EP-3 (5 ft). The "not detected" result for hexachlorocyclopentadiene should be considered rejected, unusable (R) in sample EP-3 (5 ft).

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for soil sample BJ71019-BS1.

Compound ID: Checked compounds were within quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EP-3 (5 ft)

EPA 8270D

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ71019

Laboratory ID: BJ71019-MS1

Preparation: EPA 3550C

Initial/Final: 30 g / 1 mL

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. #	QC LIMITS REC.
1,2,4-Trichlorobenzene	963	ND	717	74.5	15 - 139
1,2-Dichlorobenzene	963	ND	707	73.4	29 - 106
1,3-Dichlorobenzene	963	ND	659	68.4	34 - 100
1,4-Dichlorobenzene	963	ND	652	67.7	26 - 107
2,4,5-Trichlorophenol	963	ND	744	77.3	10 - 148
2,4,6-Trichlorophenol	963	ND	732	76.0	12 - 138
2,4-Dichlorophenol	963	ND	814	84.5	16 - 144
2,4-Dimethylphenol	963	ND	798	82.9	11 - 133
2,4-Dinitrophenol	963	ND	377	39.1	10 - 132
2,4-Dinitrotoluene	963	ND	734	76.2	42 - 113
2,6-Dinitrotoluene	963	ND	781	81.1	36 - 124
2-Chloronaphthalene	963	ND	756	78.5	31 - 116
2-Chlorophenol	963	ND	787	81.7	28 - 114
2-Methylnaphthalene	963	ND	877	91.0	10 - 143
2-Methylphenol	963	ND	734	76.2	10 - 160
2-Nitroaniline	963	ND	729	75.7	33 - 122
2-Nitrophenol	963	ND	770	79.9	12 - 127
3- & 4-Methylphenols	963	ND	735	76.3	16 - 115
3,3-Dichlorobenzidine	963	ND	515	53.4	10 - 134
3-Nitroaniline	963	ND	520	54.0	24 - 128
4,6-Dinitro-2-methylphenol	963	ND	456	47.4	10 - 149
4-Bromophenyl phenyl ether	963	ND	697	72.3	32 - 148
4-Chloro-3-methylphenol	963	ND	818	85.0	14 - 138
4-Chloroaniline	963	ND	645	67.0	10 - 124
4-Chlorophenyl phenyl ether	963	ND	707	73.4	10 - 153
4-Nitroaniline	963	ND	679	70.5	10 - 151
4-Nitrophenol	963	ND	837	86.9	10 - 141
Acenaphthene	963	ND	757	78.6	13 - 133
Acenaphthylene	963	ND	724	75.2	25 - 125
Aniline	963	ND	668	69.4	10 - 112
Anthracene	963	ND	825	85.7	27 - 128
Benzo(a)anthracene	963	219	936	74.5	20 - 147



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.  
 Client: Hydro Tech Environmental (Brooklyn)  
 Matrix: Soil  
 Batch: BJ71019  
 Preparation: EPA 3550C  
 Source Sample Name: EP-3 (5 ft)

SDG: 17J0671  
 Project: #170154 11-28 31 Drive, LIC NY  
 Laboratory ID: BJ71019-MS1  
 Initial/Final: 30 g / 1 mL

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. #	QC LIMITS REC.
Benzo(a)pyrene	963	224	870	67.0	18 - 153
Benzo(b)fluoranthene	963	204	908	73.0	10 - 163
Benzo(g,h,i)perylene	963	156	536	39.5	10 - 157
Benzo(k)fluoranthene	963	222	933	73.8	10 - 157
Benzyl alcohol	963	ND	764	79.3	20 - 122
Benzyl butyl phthalate	963	ND	702	72.9	10 - 129
Bis(2-chloroethoxy)methane	963	ND	867	90.0	12 - 128
Bis(2-chloroethyl)ether	963	ND	722	75.0	18 - 113
Bis(2-chloroisopropyl)ether	963	ND	789	81.9	10 - 130
Bis(2-ethylhexyl)phthalate	963	ND	720	74.8	10 - 138
Chrysene	963	266	1020	78.2	18 - 133
Dibenzo(a,h)anthracene	963	50.9	580	55.0	10 - 146
Dibenzofuran	963	ND	760	78.9	26 - 134
Diethyl phthalate	963	ND	715	74.2	30 - 119
Dimethyl phthalate	963	ND	727	75.5	34 - 120
Di-n-butyl phthalate	963	ND	780	81.0	20 - 128
Di-n-octyl phthalate	963	ND	716	74.3	10 - 133
Fluoranthene	963	350	1230	91.1	10 - 155
Fluorene	963	ND	756	78.5	12 - 150
Hexachlorobenzene	963	ND	744	77.3	16 - 142
Hexachlorobutadiene	963	ND	702	72.9	11 - 150
Hexachlorocyclopentadiene	963	ND	84.0	8.72 *	10 - 115
Hexachloroethane	963	ND	578	60.0	14 - 106
Indeno(1,2,3-cd)pyrene	963	143	618	49.4	10 - 155
Isophorone	963	ND	799	83.0	14 - 127
Naphthalene	963	ND	878	91.2	15 - 132
Nitrobenzene	963	ND	744	77.3	18 - 125
N-Nitrosodimethylamine	963	ND	658	68.3	10 - 123
N-nitroso-di-n-propylamine	963	ND	737	76.5	23 - 115
N-Nitrosodiphenylamine	963	ND	823	85.4	16 - 166
Pentachlorophenol	963	ND	737	76.5	10 - 160
Phenanthrene	963	143	1020	90.7	10 - 151



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EP-3 (5 ft)

EPA 8270D

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ71019Laboratory ID: BJ71019-MS1Preparation: EPA 3550CInitial/Final: 30 g / 1 mLSource Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC. #	QC LIMITS REC.
Phenol	963	ND	700	72.6	11 - 124
Pyrene	963	303	1120	85.0	13 - 148
Pyridine	963	ND	539	55.9	10 - 125

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ71019

Laboratory ID: BJ71019-MSD1

Preparation: EPA 3550C

Initial/Final: 30 g / 1 mL

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,2,4-Trichlorobenzene	963	458	47.6	44.0 *	30	15 - 139
1,2-Dichlorobenzene	963	445	46.2	45.4 *	30	29 - 106
1,3-Dichlorobenzene	963	418	43.4	44.8 *	30	34 - 100
1,4-Dichlorobenzene	963	413	42.9	44.9 *	30	26 - 107
2,4,5-Trichlorophenol	963	690	71.6	7.63	30	10 - 148
2,4,6-Trichlorophenol	963	616	64.0	17.1	30	12 - 138
2,4-Dichlorophenol	963	582	60.4	33.2 *	30	16 - 144
2,4-Dimethylphenol	963	586	60.8	30.7 *	30	11 - 133
2,4-Dinitrophenol	963	311	32.3	19.0	30	10 - 132
2,4-Dinitrotoluene	963	716	74.3	2.45	30	42 - 113
2,6-Dinitrotoluene	963	726	75.4	7.36	30	36 - 124
2-Chloronaphthalene	963	552	57.3	31.2 *	30	31 - 116
2-Chlorophenol	963	515	53.4	41.8 *	30	28 - 114
2-Methylnaphthalene	963	596	61.9	38.1 *	30	10 - 143
2-Methylphenol	963	519	53.9	34.2 *	30	10 - 160
2-Nitroaniline	963	669	69.4	8.60	30	33 - 122
2-Nitrophenol	963	518	53.8	39.1 *	30	12 - 127
3- & 4-Methylphenols	963	528	54.8	32.8 *	30	16 - 115
3,3-Dichlorobenzidine	963	573	59.4	10.6	30	10 - 134
3-Nitroaniline	963	577	59.9	10.4	30	24 - 128
4,6-Dinitro-2-methylphenol	963	408	42.4	11.1	30	10 - 149
4-Bromophenyl phenyl ether	963	660	68.6	5.34	30	32 - 148
4-Chloro-3-methylphenol	963	730	75.8	11.4	30	14 - 138
4-Chloroaniline	963	564	58.6	13.4	30	10 - 124
4-Chlorophenyl phenyl ether	963	651	67.6	8.28	30	10 - 153
4-Nitroaniline	963	693	71.9	2.02	30	10 - 151
4-Nitrophenol	963	798	82.9	4.71	30	10 - 141
Acenaphthene	963	605	62.8	22.3	30	13 - 133
Acenaphthylene	963	587	61.0	20.9	30	25 - 125
Aniline	963	485	50.4	31.7 *	30	10 - 112
Anthracene	963	774	80.3	6.46	30	27 - 128
Benzo(a)anthracene	963	840	64.5	10.8	30	20 - 147
Benzo(a)pyrene	963	781	57.8	10.8	30	18 - 153



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.

SDG: 17J0671

Client: Hydro Tech Environmental (Brooklyn)

Project: #170154 11-28 31 Drive, LIC NY

Matrix: Soil

Batch: BJ71019

Laboratory ID: BJ71019-MSD1

Preparation: EPA 3550C

Initial/Final: 30 g / 1 mL

Source Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	%	QC LIMITS	
					RPD	REC.
Benzo(b)fluoranthene	963	818	63.7	10.5	30	10 - 163
Benzo(g,h,i)perylene	963	510	36.8	5.01	30	10 - 157
Benzo(k)fluoranthene	963	823	62.4	12.5	30	10 - 157
Benzyl alcohol	963	546	56.7	33.2 *	30	20 - 122
Benzyl butyl phthalate	963	687	71.4	2.11	30	10 - 129
Bis(2-chloroethoxy)methane	963	581	60.3	39.5 *	30	12 - 128
Bis(2-chloroethyl)ether	963	457	47.4	45.0 *	30	18 - 113
Bis(2-chloroisopropyl)ether	963	489	50.7	47.0 *	30	10 - 130
Bis(2-ethylhexyl)phthalate	963	704	73.0	2.38	30	10 - 138
Chrysene	963	912	67.0	11.2	30	18 - 133
Dibenzo(a,h)anthracene	963	556	52.4	4.34	30	10 - 146
Dibenzofuran	963	652	67.7	15.3	30	26 - 134
Diethyl phthalate	963	689	71.5	3.73	30	30 - 119
Dimethyl phthalate	963	664	69.0	9.08	30	34 - 120
Di-n-butyl phthalate	963	749	77.8	4.03	30	20 - 128
Di-n-octyl phthalate	963	710	73.7	0.865	30	10 - 133
Fluoranthene	963	1020	69.6	18.4	30	10 - 155
Fluorene	963	683	70.9	10.2	30	12 - 150
Hexachlorobenzene	963	707	73.4	5.10	30	16 - 142
Hexachlorobutadiene	963	445	46.2	44.7 *	30	11 - 150
Hexachlorocyclopentadiene	963	ND	*		30	10 - 115
Hexachloroethane	963	364	37.8	45.3 *	30	14 - 106
Indeno(1,2,3-cd)pyrene	963	589	46.4	4.72	30	10 - 155
Isophorone	963	552	57.4	36.5 *	30	14 - 127
Naphthalene	963	574	59.6	41.9 *	30	15 - 132
Nitrobenzene	963	495	51.4	40.1 *	30	18 - 125
N-Nitrosodimethylamine	963	490	50.9	29.3	30	10 - 123
N-nitroso-di-n-propylamine	963	485	50.4	41.1 *	30	23 - 115
N-Nitrosodiphenylamine	963	780	81.0	5.38	30	16 - 166
Pentachlorophenol	963	678	70.4	8.28	30	10 - 160
Phenanthrene	963	882	76.8	14.1	30	10 - 151
Phenol	963	502	52.2	32.8 *	30	11 - 124
Pyrene	963	976	69.8	13.9	30	13 - 148



## MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

EP-3 (5 ft)

Laboratory: York Analytical Laboratories, Inc.SDG: 17J0671Client: Hydro Tech Environmental (Brooklyn)Project: #170154 11-28 31 Drive, LIC NYMatrix: SoilBatch: BJ71019Laboratory ID: BJ71019-MSD1Preparation: EPA 3550CInitial/Final: 30 g / 1 mLSource Sample Name: EP-3 (5 ft)

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Pyridine	963	398	41.4	29.9	30	10 - 125

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## Response Factor Report BNA #1

Method : C:\HPCHEM\1\METHODS\BNA1RQB3.M (Chemstation Integrator)  
 Title : GC MS BNA 1 Semi Volatiles Calibration  
 Last Update : Tue Oct 10 16:38:26 2017  
 Response via : Initial Calibration

October 9, 2017

## Calibration Files

10 =SV109770.D 20 =SV109772.D 40.0 =SV109774.D  
 15.0 =SV109771.D 2.5 =SV109768.D 5 =SV109769.D

Compound	10	20	40.0	15.0	2.5	5	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----							
2) t N-Nitrosodimethylam	1.371	1.477	1.495	1.419	1.757	1.727	1.551	10.27
3) t Pyridine	2.481	2.175	2.113	2.360		2.598	2.342	7.77
4) s 2-Fluorophenol	1.999	1.952	2.000	2.005		1.987	1.980	1.47
5) s Phenol-d5	2.304	2.161	2.130	2.254		2.461	2.237	5.92
6) t Benzaldehyde	1.635	1.195	0.724	1.376		1.697	1.258	NP 30.84
7) t Aniline	2.546	2.424	2.317	2.506		2.625	2.460	4.87
8) t Phenol	2.722	2.528	2.447	2.651	2.963	2.893	2.720	8.85
9) t Bis(2-chloroethyl)e	2.482	2.300	2.361	2.412	2.769	2.693	2.515	8.19
10) t 2-Chlorophenol	1.867	1.798	1.829	1.842	2.006	1.956	1.895	5.24
11) t 1,3-Dichlorobenzene	1.868	1.797	1.784	1.876		1.969	1.844	4.09
12) t 1,4-Dichlorobenzene	2.011	1.891	1.826	1.959		2.112	1.944	5.44
13) t Benzyl Alcohol	1.293	1.236	1.164	1.294		1.359	1.257	5.73
14) t 1,2-Dichlorobenzene	1.912	1.734	1.588	1.835		2.047	1.800	9.25
15) t 2-Methylphenol	1.544	1.448	1.421	1.490	1.666	1.637	1.546	8.11
16) t Acetophenone	2.646	2.313	2.264	2.378		2.834	2.449	9.67
17) t Bis(2-chloroisoprop	3.380	3.106	2.949	3.252	3.787	3.643	3.382	10.76
18) t N-Nitroso-di-n-prop	1.591	1.455	1.275	1.544	1.794	1.712	1.567	12.40
19) t 4-Methylphenol	2.023	1.839	1.587	1.963	2.215	2.158	1.963	11.58
20) t Hexachloroethane	0.857	0.819	0.699	0.843	0.912	0.899	0.841	8.87
21) I Naphthalene-d8	-----ISTD-----							
22) s Nitrobenzene-d5	0.687	0.647	0.581	0.675	0.721	0.736	0.671	8.62
23) t Nitrobenzene	0.723	0.654	0.569	0.699	0.763	0.784	0.697	11.85
24) t Isophorone	1.394	1.279	1.167	1.346	1.451	1.497	1.342	9.22
25) t 2-Nitrophenol	0.353	0.338	0.308	0.357	0.366	0.387	0.345	7.50
26) t 2,4-Dimethylphenol	0.497	0.447	0.389	0.475	0.532	0.541	0.480	12.66
27) t Bis(2-chloroethoxy)	0.797	0.719	0.616	0.766		0.872	0.738	12.70
28) t Benzoic acid	0.270	0.399	0.406	0.393		0.269	0.354	18.66
29) t 2,4-Dichlorophenol	0.457	0.418	0.367	0.446	0.469	0.493	0.435	9.97
30) t 1,2,4-Trichlorobenz	0.501	0.452	0.385	0.477	0.555	0.544	0.487	13.80
31) t Naphthalene	1.449	1.211	0.881	1.360		1.455	1.233	18.98
32) t Alpha-Terpeneol	0.470	0.433	0.345	0.457		0.511	0.433	13.98
33) t 4-Chloroaniline	0.685	0.635	0.511	0.669		0.749	0.635	13.63
34) t Hexachlorobutadiene	0.260	0.234	0.198	0.248	0.294	0.287	0.253	14.23
35) t Caprolactam	0.270	0.256	0.256	0.205		0.288	0.252	11.44
36) t 4-Chloro-3-methylph	0.564	0.508	0.448	0.532	0.572	0.603	0.532	10.29
37) t 1-Methylnaphthalene	0.921	0.747	0.609	0.803		0.988	0.788	18.64
38) t 2-Methylnaphthalene	0.976	0.851	0.697	0.925		1.070	0.879	15.84
39) I Acenaphthene-d10	-----ISTD-----							
40) t 1,2,4,5-tetrachloro	0.897	0.792	0.666	0.831		1.025	0.821	15.69
41) t Hexachlorocyclopent	0.358	0.349	0.320	0.368	0.254	0.329	0.311	21.34



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 15.0 =SV109771.D 2.5 =SV109768.D 5 =SV109769.D

	Compound	10	20	40.0	15.0	2.5	5	Avg	%RSD
42) t	Biphenyl	0.890	0.748	0.621	0.789		0.989	0.787	17.19
43) t	2,4,6-Trichlorophen	0.617	0.583	0.546	0.608	0.605	0.632	0.592	4.85
44) t	2,4,5-Trichlorophen	0.630	0.590	0.519	0.606	0.663	0.669	0.614	9.04
45) s	2-Fluorobiphenyl	1.850	1.572	1.340	1.717		2.050	1.663	15.82
46) t	2-Chloronaphthalene	1.730	1.571	1.391	1.665		1.900	1.621	11.42
47) t	2-Nitroaniline	0.809	0.783	0.774	0.807		0.815	0.794	2.34
48) t	Dimethylphthalate	2.320	2.108	1.929	2.232		2.473	2.181	9.18
49) t	2,6-Dinitrotoluene	0.539	0.498	0.481	0.523	0.538	0.564	0.515	5.93
50) t	Acenaphthylene	2.840	2.465	2.197	2.679		3.086	2.597	12.91
51) t	3-Nitroaniline	0.505	0.485	0.543	0.492		0.535	0.511	4.56
52) t	Acenaphthene	1.665	1.518	1.393	1.610		1.778	1.570	9.03
53) t	2,4-Dinitrophenol	0.332	0.362	0.403	0.351	0.169	0.269	0.297	36.69
54) t	Dibenzofuran	2.539	2.278	2.091	2.414		2.735	2.368	10.27
55) t	2,4-Dinitrotoluene	0.807	0.782	0.786	0.803	0.783	0.826	0.783	4.68
56) t	4-Nitrophenol	0.510	0.510	0.527	0.520	0.491	0.503	0.501	5.41
57) t	2,3,4,6-Tetrachloro	0.272	0.261	0.250	0.266	0.251	0.277	0.258	6.01
58) t	Diethyl phthalate	2.480	2.268	2.139	2.369		2.607	2.344	7.54
59) t	Fluorene	1.972	1.747	1.611	1.871		2.147	1.837	10.91
60) t	4-Chlorophenyl phen	0.990	0.883	0.781	0.945		1.090	0.920	12.24
61) t	4-Nitroaniline	0.613	0.532	0.525	0.577		0.647	0.568	9.40
62) I	Phenanthrene-d10	-----ISTD-----							
63) t	4,6-Dinitro-2-methy	0.231	0.232	0.219	0.236	0.174	0.226	0.208	19.35
64) t	Diphenylamine	0.813	0.740	0.684	0.783		0.890	0.769	9.95
65) t	N-Nitrosodiphenylam	0.283	0.255	0.236	0.272	0.312	0.313	0.279	11.86
66) t	Azobenzene	1.451	1.324	1.369	1.397	1.597	1.554	1.519	11.25
67) s	2,4,6-Tribromopheno	0.199	0.190	0.185	0.196		0.204	0.193	3.92
68) t	4-Bromophenyl pheny	0.342	0.319	0.298	0.333		0.363	0.327	7.42
69) t	Atrazine	0.315	0.269	0.236	0.278	0.313	0.342	0.287	12.54
70) t	Hexachlorobenzene	0.152	0.142	0.131	0.148	0.169	0.163	0.151	9.79
71) t	Pentachlorophenol	0.202	0.219	0.218	0.209	0.131	0.182	0.183	27.58
72) t	Pentachloronitroben	0.113	0.105	0.101	0.106		0.116	0.107	5.87
73) t	Phenanthrene	1.416	1.314	1.232	1.376		1.528	1.355	8.07
74) t	Anthracene	1.530	1.409	1.309	1.474		1.646	1.452	8.66
75) t	Carbazole	1.136	1.019	1.074	1.060	1.286	1.238	1.156	12.30
76) t	Di-n-butyl phthalat	2.247	2.018	1.793	2.133		2.340	2.071	10.10
77) t	Parathion	0.375	0.362	0.346	0.375		0.375	0.364	3.49
78) t	Fluoranthene	1.570	1.420	1.309	1.499		1.682	1.473	9.44
79) t	Benzidine	0.245	0.254	0.192	0.264	0.102	0.283	0.224	27.25
80) I	Chrysene-d12	-----ISTD-----							
81) t	Pyrene	1.666	1.561	1.469	1.642		1.775	1.594	7.83
82) s	Terphenyl-d14	1.114	1.041	0.973	1.095		1.180	1.062	7.86
83) t	Benzyl butyl phthal	1.069	1.017	0.986	1.056		1.090	1.033	4.38



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 15.0 =SV109771.D 2.5 =SV109768.D 5 =SV109769.D

	Compound	10	20	40.0	15.0	2.5	5	Avg	%RSD
84) t	Bis(2-ethylhexyl) p	1.482	1.408	1.370	1.458	1.521	1.547	1.459	4.45
85) t	Benz (a) anthracene	1.623	1.553	1.525	1.606	1.742	1.710	1.628	5.44
86) t	3,3-Dichlorobenzidi	0.456	0.454	0.422	0.456	0.345	0.412	0.421	9.43
87) t	Chrysene	1.433	1.336	1.306	1.394	1.606	1.540	1.452	9.70
88) t	Di-n-octyl phthalat	2.516	2.412	2.418	2.506		2.542	2.469	2.35
89) t	Benzo(b)fluoranthen	1.541	1.490	1.421	1.523	1.597	1.590	1.543	4.13
90) t	Benzo(k)fluoranthen	1.520	1.435	1.279	1.495	1.648	1.610	1.506	9.75
91) t	Benzo(a)pyrene	1.467	1.414	1.393	1.441	1.532	1.534	1.476	5.32
92) I	Perylene-d12	-----ISTD-----							
93) t	Indeno(1,2,3-cd)pyr	1.731	1.649	1.549	1.729	1.882	1.843	1.745	7.94
94) t	Dibenz(a,h)anthrace	1.383	1.298	1.174	1.363	1.521	1.471	1.381	9.73
95) t	Benzo(g,h,i)perylen	1.414	1.356	1.274	1.416		1.497	1.381	5.62



# 2015 Groundwater Data





Geology

Hydrology

Remediation

Water Supply

February 16, 2015

Mr. Paul I. Matli, Ph.D.  
Hydro Tech Environmental, Corp.  
NYC Office  
15 Ocean Avenue, 2<sup>nd</sup> Floor  
Brooklyn, NY 11225

Re: Data Validation Report  
January 2015 Ground Water Sampling Event  
11-28 31 Drive, LIC, NY

Dear Dr. Matli:

The data usability summary reports and data validation summaries are attached to this letter for the above referenced project. The data for York Analytical Laboratories, Inc. SDG 15A0377 were acceptable with some minor issues that are identified in the validation summary. There were no data that were rejected (R) in the data pack.

We have attached lists of data validation acronyms and data qualifiers to assist you in the interpretation of the reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Stantec Consulting Services, Inc.

Sincerely,  
Alpha Geoscience

Donald Anné  
Senior Chemist

DCA:dca  
attachments



## **Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II**

- U     =     Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R     =     Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N     =     Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J     =     Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ    =     Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.



## Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation





Geology

Hydrology

Remediation

Water Supply

**QA/QC Review of Method 8260 Volatiles Data for  
York Analytical Laboratories, Inc., SDG: 15A0377**

**8 Ground Water Samples,  
1 Field Blank, and 1 Trip Blank  
Collected January 13, 2015**

Prepared by: Donald Anné  
February 16, 2015

---

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010), as required

The %RSD for acetone was above the allowable maximum (30%) for MSVOA6 on 01-14-15. Positive results for acetone should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required

The %Ds for cis-1,2-dichloroethylene, 2-butanone, and 2,2-dichloropropane were above the allowable maximum (25%) on 01-17-15 (V6008080.D). The %D for 2,2-dichloropropane was above the allowable maximum (25%) on 01-17-15 (V6008108.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank BA50737-BLK1 contained traces of 1,2,3-trichlorobenzene (0.68 ug/L), 1,2,4,5-tetramethylbenzene, (0.37 ug/L), 1,2,4-trichlorobenzene (0.53 ug/L), hexachlorobutadiene (0.60 ug/L), n-butylbenzene (0.36 ug/L), p-isopropyltoluene (0.23 ug/L), and sec-butylbenzene (0.21 ug/L). Method blank BA50787-BLK1 contained traces of 1,2,3-trichlorobenzene (0.81 ug/L), 1,2,4,5-tetramethylbenzene, (0.43 ug/L), 1,2,4-trichlorobenzene (0.65 ug/L), 1,2-dichlorobenzene (0.22 ug/L), 1,3-dichlorobenzene (0.25 ug/L), 1,4-dichlorobenzene (0.23 ug/L), hexachlorobutadiene (0.64 ug/L), n-butylbenzene



(0.38 ug/L), p-diethylbenzene (0.31 ug/L), p-isopropyltoluene (0.25 ug/L), and sec-butylbenzene (0.24 ug/L). Method blank BA50837-BLK1 contained traces of 1,2,3-trichlorobenzene (0.50 ug/L), 1,2,4,5-tetramethylbenzene, (0.21 ug/L), 1,2,4-trichlorobenzene (0.38 ug/L), and hexachlorobutadiene (0.22 ug/L). The field blank contained traces of o-xylene (0.28 ug/L) and tetrachloroethylene (0.53 ug/L). The trip blank contained traces of o-xylene (0.29 ug/L), tetrachloroethylene (0.36 ug/L), and toluene (0.22ug/L). Positive results for these compounds that are less than 5 times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples, ground water sample, field blank, and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for target compounds were below the allowable maximums and the percent recoveries (%Rs) were within the QC limits for aqueous MS/MSD sample MW-5, batch 50787.

The RPDs for target compounds were below the allowable maximum, but 13 of 138 %Rs were above QC limits for aqueous MS/MSD sample MW-5, batch 50737. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximums and the percent recoveries (%Rs) were within the QC for aqueous samples BA50787-BS1 and BA50787-BSD1.

The RPDs for target compounds were below the allowable maximums, but 1 of 2 %Rs for 2,2-dichloropropane, bromochloromethane, and cis-1,2-dichloroethylene were above the QC limits for aqueous samples BA50737-BS1 and BA50737-BSD1. The RPDs for target compounds were below the allowable maximums, but 1 of 2 %Rs for 2,2-dichloropropane was above the QC limits for aqueous samples BA50837-BS1 and BA50837-BSD1. Positive results for 2,2-dichloropropane, bromochloromethane, and cis-1,2-dichloroethylene should be considered estimated (J) in associated aqueous samples.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.





**Data Usability Summary Report for  
York Analytical Laboratories, Inc., SDG: 15A0377**

**8 Ground Water Samples,  
1 Field Blank, and 1 Trip Blank  
Collected January 13, 2015**

Prepared by: Donald Anné  
February 16, 2015

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results of volatile analyses for 8 ground water samples, 1 field blank, and 1 trip blank.

The overall performances of the analyses are acceptable. York Analytical Laboratories, Inc. did fulfill the requirements of the volatile method. The laboratory an exceptionally large number of compounds in the method blanks. These compounds weren't detected in the associated samples; therefore, no action is taken. The laboratory should work to clean up their method blanks in the future.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile result for tetrachloroethylene was flagged as “not detected” (U) for sample MW-8 because the levels reported in the sample was not significantly greater than (more than 5 times) the highest associated blank level.
- The positive volatile results for cis-1,2-dichloroethylene were flagged as “estimated” (J) in samples MW-3 and MW-4 because %D for cis-1,2-dichloroethylene was above the allowable maximum in the associated continuing calibration.
- The positive volatile results for acetone were flagged as “estimated” (J) in samples MW-4 and MW-7 because %RSD for acetone was above the allowable maximum in the associated initial calibration.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY**  
**EPA 8260C**

MW-5

Laboratory: York Analytical Laboratories, Inc.

SDG: 15A0377

Client: Hydro Tech Environmental (Brooklyn)

Project: #140344 11-28 31 Drive, LIC NY

Matrix: Water

Batch: BA50737

Laboratory ID: BA50737-MS1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

Source Sample Name: MW-5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	ND	10.9	109	45 - 161
1,1,1-Trichloroethane	10.0	ND	12.9	129	70 - 146
1,1,2,2-Tetrachloroethane	10.0	ND	9.93	99.3	74 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	ND	11.0	110	21 - 217
1,1,2-Trichloroethane	10.0	ND	10.0	100	59 - 146
1,1-Dichloroethane	10.0	ND	13.4	134	54 - 146
1,1-Dichloroethylene	10.0	ND	13.3	133	44 - 165
1,1-Dichloropropylene	10.0	ND	13.7	137 *	82 - 134
1,2,3-Trichlorobenzene	10.0	ND	10.9	109	40 - 161
1,2,3-Trichloropropane	10.0	ND	10.9	109	74 - 127
1,2,4,5-Tetramethylbenzene	10.0	ND	10.8	108	27 - 190
1,2,4-Trichlorobenzene	10.0	ND	10.8	108	41 - 161
1,2,4-Trimethylbenzene	10.0	ND	10.4	104	72 - 129
1,2-Dibromo-3-chloropropane	10.0	ND	9.46	94.6	31 - 151
1,2-Dibromoethane	10.0	ND	10.8	108	75 - 125
1,2-Dichlorobenzene	10.0	ND	10.5	105	63 - 122
1,2-Dichloroethane	10.0	ND	13.4	134 *	68 - 131
1,2-Dichloropropane	10.0	ND	11.7	117	77 - 121
1,3,5-Trimethylbenzene	10.0	ND	10.4	104	69 - 126
1,3-Dichlorobenzene	10.0	ND	10.6	106	74 - 119
1,3-Dichloropropane	10.0	ND	11.6	116	77 - 119
1,4-Dichlorobenzene	10.0	ND	10.4	104	70 - 124
2,2-Dichloropropane	10.0	ND	14.4	144	10 - 160
2-Butanone	10.0	ND	13.4	134	10 - 193
2-Chlorotoluene	10.0	ND	11.0	110	70 - 126
2-Hexanone	10.0	ND	9.87	98.7	53 - 133
4-Chlorotoluene	10.0	ND	10.6	106	69 - 124
4-Methyl-2-pentanone	10.0	ND	11.3	113	38 - 150
Acetone	10.0	ND	10.9	109	13 - 149
Benzene	10.0	ND	12.6	126	38 - 155
Bromobenzene	10.0	ND	10.9	109	72 - 122
Bromochloromethane	10.0	ND	14.4	144 *	75 - 121



**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY**  
**EPA 8260C**

MW-5

Laboratory: York Analytical Laboratories, Inc.

SDG: 15A0377

Client: Hydro Tech Environmental (Brooklyn)

Project: #140344 11-28 31 Drive, LIC NY

Matrix: Water

Batch: BA50737

Laboratory ID: BA50737-MS1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

Source Sample Name: MW-5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
Bromodichloromethane	10.0	ND	11.2	112	70 - 129
Bromoform	10.0	ND	10.9	109	66 - 136
Bromomethane	10.0	ND	10.1	101	30 - 158
Carbon disulfide	10.0	ND	13.3	133	10 - 138
Carbon tetrachloride	10.0	ND	12.9	129	71 - 146
Chlorobenzene	10.0	ND	11.2	112	81 - 117
Chloroethane	10.0	ND	10.7	107	51 - 145
Chloroform	10.0	ND	12.7	127 *	80 - 124
Chloromethane	10.0	ND	10.7	107	16 - 163
cis-1,2-Dichloroethylene	10.0	ND	14.4	144 *	76 - 125
cis-1,3-Dichloropropylene	10.0	ND	12.2	122	58 - 131
Dibromochloromethane	10.0	ND	10.9	109	71 - 129
Dibromomethane	10.0	ND	11.4	114	76 - 120
Dichlorodifluoromethane	10.0	ND	9.07	90.7	30 - 147
Ethyl Benzene	10.0	ND	11.4	114	72 - 128
Hexachlorobutadiene	10.0	ND	10.9	109	34 - 166
Isopropylbenzene	10.0	ND	10.6	106	66 - 139
Methyl tert-butyl ether (MTBE)	10.0	0.390	11.6	112	75 - 128
Methylene chloride	10.0	ND	13.8	138 *	57 - 128
Naphthalene	10.0	ND	10.4	104	39 - 158
n-Butylbenzene	10.0	ND	11.1	111	61 - 138
n-Propylbenzene	10.0	ND	11.0	110	66 - 134
o-Xylene	10.0	ND	11.4	114	69 - 126
p- & m- Xylenes	20.0	ND	23.0	115	67 - 130
p-Diethylbenzene	10.0	ND	10.5	105	52 - 150
p-Ethyltoluene	10.0	ND	10.4	104	76 - 127
p-Isopropyltoluene	10.0	ND	10.6	106	64 - 137
sec-Butylbenzene	10.0	ND	10.8	108	53 - 155
Styrene	10.0	ND	11.4	114	69 - 125
tert-Butylbenzene	10.0	ND	10.7	107	65 - 139
Tetrachloroethylene	10.0	5.63	16.0	104	64 - 139
Toluene	10.0	ND	11.2	112	76 - 123



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

MW-5

Laboratory: York Analytical Laboratories, Inc.

SDG: 15A0377

Client: Hydro Tech Environmental (Brooklyn)

Project: #140344 11-28 31 Drive, LIC NY

Matrix: Water

Batch: BA50737

Laboratory ID: BA50737-MS1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

Source Sample Name: MW-5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC. #	QC LIMITS REC.
trans-1,2-Dichloroethylene	10.0	ND	13.3	133 *	79 - 131
trans-1,3-Dichloropropylene	10.0	ND	11.5	115	55 - 130
Trichloroethylene	10.0	0.810	12.1	113	53 - 145
Trichlorofluoromethane	10.0	ND	11.6	116	61 - 142
Vinyl Chloride	10.0	ND	11.4	114	31 - 165

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

MW-5

Laboratory: York Analytical Laboratories, Inc.

SDG: 15A0377

Client: Hydro Tech Environmental (Brooklyn)

Project: #140344 11-28 31 Drive, LIC NY

Matrix: Water

Batch: BA50737

Laboratory ID: BA50737-MSD1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

Source Sample Name: MW-5

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	%	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	10.6	106	2.97	30	45 - 161
1,1,1-Trichloroethane	10.0	12.6	126	2.42	30	70 - 146
1,1,2,2-Tetrachloroethane	10.0	10.1	101	1.50	30	74 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.5	115	4.53	30	21 - 217
1,1,2-Trichloroethane	10.0	10.0	100	0.399	30	59 - 146
1,1-Dichloroethane	10.0	13.3	133	0.300	30	54 - 146
1,1-Dichloroethylene	10.0	13.2	132	0.754	30	44 - 165
1,1-Dichloropropylene	10.0	13.5	135 *	1.10	30	82 - 134
1,2,3-Trichlorobenzene	10.0	11.0	110	1.37	30	40 - 161
1,2,3-Trichloropropane	10.0	10.9	109	0.0920	30	74 - 127
1,2,4,5-Tetramethylbenzene	10.0	11.0	110	1.56	30	27 - 190
1,2,4-Trichlorobenzene	10.0	10.9	109	0.735	30	41 - 161
1,2,4-Trimethylbenzene	10.0	10.6	106	2.19	30	72 - 129
1,2-Dibromo-3-chloropropane	10.0	11.0	110	15.1	30	31 - 151
1,2-Dibromoethane	10.0	10.4	104	3.95	30	75 - 125
1,2-Dichlorobenzene	10.0	10.7	107	1.99	30	63 - 122
1,2-Dichloroethane	10.0	12.6	126	5.62	30	68 - 131
1,2-Dichloropropane	10.0	11.4	114	2.94	30	77 - 121
1,3,5-Trimethylbenzene	10.0	10.7	107	2.93	30	69 - 126
1,3-Dichlorobenzene	10.0	10.6	106	0.284	30	74 - 119
1,3-Dichloropropane	10.0	11.1	111	4.23	30	77 - 119
1,4-Dichlorobenzene	10.0	10.6	106	1.71	30	70 - 124
2,2-Dichloropropane	10.0	13.5	135	6.09	30	10 - 160
2-Butanone	10.0	14.1	141	4.73	30	10 - 193
2-Chlorotoluene	10.0	11.3	113	2.97	30	70 - 126
2-Hexanone	10.0	10.6	106	7.60	30	53 - 133
4-Chlorotoluene	10.0	11.0	110	3.89	30	69 - 124
4-Methyl-2-pentanone	10.0	11.1	111	2.14	30	38 - 150
Acetone	10.0	10.2	102	6.45	30	13 - 149
Benzene	10.0	12.2	122	3.63	30	38 - 155
Bromobenzene	10.0	10.8	108	0.460	30	72 - 122
Bromochloromethane	10.0	14.0	140 *	2.60	30	75 - 121
Bromodichloromethane	10.0	10.8	108	3.54	30	70 - 129



# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260C

MW-5

Laboratory: York Analytical Laboratories, Inc.

SDG: 15A0377

Client: Hydro Tech Environmental (Brooklyn)

Project: #140344 11-28 31 Drive, LIC NY

Matrix: Water

Batch: BA50737

Laboratory ID: BA50737-MSD1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

Source Sample Name: MW-5

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC. #	%	QC LIMITS	
					RPD	REC.
Bromoform	10.0	10.6	106	2.51	30	66 - 136
Bromomethane	10.0	10.8	108	7.19	30	30 - 158
Carbon disulfide	10.0	13.4	134	0.375	30	10 - 138
Carbon tetrachloride	10.0	12.7	127	1.65	30	71 - 146
Chlorobenzene	10.0	11.0	110	1.45	30	81 - 117
Chloroethane	10.0	10.9	109	1.95	30	51 - 145
Chloroform	10.0	12.5	125 *	1.51	30	80 - 124
Chloromethane	10.0	10.4	104	2.85	30	16 - 163
cis-1,2-Dichloroethylene	10.0	13.9	139 *	3.32	30	76 - 125
cis-1,3-Dichloropropylene	10.0	11.8	118	3.41	30	58 - 131
Dibromochloromethane	10.0	10.8	108	1.20	30	71 - 129
Dibromomethane	10.0	10.7	107	6.22	30	76 - 120
Dichlorodifluoromethane	10.0	9.50	95.0	4.63	30	30 - 147
Ethyl Benzene	10.0	11.2	112	1.77	30	72 - 128
Hexachlorobutadiene	10.0	11.2	112	2.35	30	34 - 166
Isopropylbenzene	10.0	10.9	109	2.79	30	66 - 139
Methyl tert-butyl ether (MTBE)	10.0	11.6	112	0.259	30	75 - 128
Methylene chloride	10.0	13.8	138 *	0.290	30	57 - 128
Naphthalene	10.0	10.8	108	3.60	30	39 - 158
n-Butylbenzene	10.0	11.4	114	3.20	30	61 - 138
n-Propylbenzene	10.0	11.2	112	2.26	30	66 - 134
o-Xylene	10.0	11.3	113	1.06	30	69 - 126
p- & m- Xylenes	20.0	22.8	114	1.09	30	67 - 130
p-Diethylbenzene	10.0	10.9	109	3.18	30	52 - 150
p-Ethyltoluene	10.0	10.7	107	2.84	30	76 - 127
p-Isopropyltoluene	10.0	10.9	109	2.78	30	64 - 137
sec-Butylbenzene	10.0	11.3	113	4.24	30	53 - 155
Styrene	10.0	11.2	112	2.04	30	69 - 125
tert-Butylbenzene	10.0	10.9	109	2.12	30	65 - 139
Tetrachloroethylene	10.0	16.0	104	0.125	30	64 - 139
Toluene	10.0	11.0	110	1.89	30	76 - 123
trans-1,2-Dichloroethylene	10.0	13.2	132 *	0.677	30	79 - 131
trans-1,3-Dichloropropylene	10.0	11.2	112	2.29	30	55 - 130



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50737Laboratory ID: BA50737-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	10.4	104	82 - 126
1,1,1-Trichloroethane	10.0	10.9	109	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.81	98.1	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.86	98.6	54 - 165
1,1,2-Trichloroethane	10.0	9.36	93.6	82 - 123
1,1-Dichloroethane	10.0	11.7	117	82 - 129
1,1-Dichloroethylene	10.0	12.3	123	68 - 138
1,1-Dichloropropylene	10.0	11.6	116	83 - 133
1,2,3-Trichlorobenzene	10.0	11.2	112	76 - 136
1,2,3-Trichloropropane	10.0	10.4	104	77 - 128
1,2,4,5-Tetramethylbenzene	10.0	10.8	108	85 - 140
1,2,4-Trichlorobenzene	10.0	11.0	110	76 - 137
1,2,4-Trimethylbenzene	10.0	10.7	107	82 - 132
1,2-Dibromo-3-chloropropane	10.0	10.8	108	45 - 147
1,2-Dibromoethane	10.0	10.3	103	83 - 124
1,2-Dichlorobenzene	10.0	10.8	108	79 - 123
1,2-Dichloroethane	10.0	11.2	112	73 - 132
1,2-Dichloropropane	10.0	10.6	106	78 - 126
1,3,5-Trimethylbenzene	10.0	10.5	105	80 - 131
1,3-Dichlorobenzene	10.0	10.6	106	86 - 122
1,3-Dichloropropane	10.0	10.6	106	81 - 125
1,4-Dichlorobenzene	10.0	10.5	105	85 - 124
2,2-Dichloropropane	10.0	15.0	150	56 - 150
2-Butanone	10.0	11.2	112	49 - 152
2-Chlorotoluene	10.0	10.9	109	79 - 130
2-Hexanone	10.0	7.74	77.4	51 - 146
4-Chlorotoluene	10.0	10.7	107	79 - 128
4-Methyl-2-pentanone	10.0	9.78	97.8	57 - 145
Acetone	10.0	9.58	95.8	14 - 150
Benzene	10.0	11.1	111	85 - 126



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50737Laboratory ID: BA50737-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Bromobenzene	10.0	10.9	109	78 - 129
Bromochloromethane	10.0	11.9	119	77 - 128
Bromodichloromethane	10.0	10.0	100	79 - 128
Bromoform	10.0	9.65	96.5	78 - 133
Bromomethane	10.0	9.78	97.8	43 - 168
Carbon disulfide	10.0	12.2	122	68 - 146
Carbon tetrachloride	10.0	11.0	110	77 - 141
Chlorobenzene	10.0	10.5	105	88 - 120
Chloroethane	10.0	9.53	95.3	65 - 136
Chloroform	10.0	11.0	110	82 - 128
Chloromethane	10.0	9.50	95.0	43 - 155
cis-1,2-Dichloroethylene	10.0	12.1	121	83 - 129
cis-1,3-Dichloropropylene	10.0	11.5	115	80 - 131
Dibromochloromethane	10.0	10.1	101	80 - 130
Dibromomethane	10.0	10.1	101	72 - 134
Dichlorodifluoromethane	10.0	8.56	85.6	44 - 144
Ethyl Benzene	10.0	10.7	107	80 - 131
Hexachlorobutadiene	10.0	11.3	113	67 - 146
Isopropylbenzene	10.0	10.7	107	76 - 140
Methyl tert-butyl ether (MTBE)	10.0	10.3	103	76 - 135
Methylene chloride	10.0	12.1	121	55 - 137
Naphthalene	10.0	10.3	103	70 - 147
n-Butylbenzene	10.0	11.3	113	79 - 132
n-Propylbenzene	10.0	11.0	110	78 - 133
o-Xylene	10.0	10.8	108	78 - 130
p- & m- Xylenes	20.0	21.6	108	77 - 133
p-Diethylbenzene	10.0	10.6	106	84 - 134
p-Ethyltoluene	10.0	10.4	104	88 - 129
p-Isopropyltoluene	10.0	10.9	109	81 - 136
sec-Butylbenzene	10.0	10.9	109	79 - 137



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50737Laboratory ID: BA50737-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Styrene	10.0	11.1	111	67 - 132
tert-Butylbenzene	10.0	10.8	108	77 - 138
Tetrachloroethylene	10.0	10.6	106	82 - 131
Toluene	10.0	10.4	104	80 - 127
trans-1,2-Dichloroethylene	10.0	11.8	118	80 - 132
trans-1,3-Dichloropropylene	10.0	10.8	108	78 - 131
Trichloroethylene	10.0	10.6	106	82 - 128
Trichlorofluoromethane	10.0	10.2	102	67 - 139
Vinyl Chloride	10.0	10.2	102	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50737Laboratory ID: BA50737-BSDIPreparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	10.5	105	1.34	30	82 - 126
1,1,1-Trichloroethane	10.0	12.3	123	12.1	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	10.0	100	2.22	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.3	103	4.66	30	54 - 165
1,1,2-Trichloroethane	10.0	9.75	97.5	4.08	30	82 - 123
1,1-Dichloroethane	10.0	12.5	125	5.95	30	82 - 129
1,1-Dichloroethylene	10.0	12.6	126	2.25	30	68 - 138
1,1-Dichloropropylene	10.0	13.2	132	13.1	30	83 - 133
1,2,3-Trichlorobenzene	10.0	12.1	121	7.73	30	76 - 136
1,2,3-Trichloropropane	10.0	10.8	108	3.57	30	77 - 128
1,2,4,5-Tetramethylbenzene	10.0	10.9	109	1.57	30	85 - 140
1,2,4-Trichlorobenzene	10.0	11.6	116	4.61	30	76 - 137
1,2,4-Trimethylbenzene	10.0	10.6	106	0.848	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	12.2	122	11.8	30	45 - 147
1,2-Dibromoethane	10.0	9.97	99.7	3.26	30	83 - 124
1,2-Dichlorobenzene	10.0	10.8	108	0.555	30	79 - 123
1,2-Dichloroethane	10.0	12.8	128	13.7	30	73 - 132
1,2-Dichloropropane	10.0	10.9	109	2.69	30	78 - 126
1,3,5-Trimethylbenzene	10.0	10.6	106	0.190	30	80 - 131
1,3-Dichlorobenzene	10.0	10.7	107	0.470	30	86 - 122
1,3-Dichloropropane	10.0	10.7	107	0.936	30	81 - 125
1,4-Dichlorobenzene	10.0	10.7	107	1.80	30	85 - 124
2,2-Dichloropropane	10.0	16.5	165 *	9.28	30	56 - 150
2-Butanone	10.0	11.8	118	5.82	30	49 - 152
2-Chlorotoluene	10.0	11.3	113	3.15	30	79 - 130
2-Hexanone	10.0	10.3	103	28.8	30	51 - 146
4-Chlorotoluene	10.0	11.0	110	2.68	30	79 - 128
4-Methyl-2-pentanone	10.0	10.9	109	10.7	30	57 - 145
Acetone	10.0	9.27	92.7	3.29	30	14 - 150
Benzene	10.0	12.0	120	8.48	30	85 - 126



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50737Laboratory ID: BA50737-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromobenzene	10.0	10.2	102	6.55	30	78 - 129
Bromochloromethane	10.0	13.9	139 *	14.9	30	77 - 128
Bromodichloromethane	10.0	10.7	107	7.04	30	79 - 128
Bromoform	10.0	10.1	101	4.46	30	78 - 133
Bromomethane	10.0	9.83	98.3	0.510	30	43 - 168
Carbon disulfide	10.0	12.8	128	4.40	30	68 - 146
Carbon tetrachloride	10.0	12.3	123	11.1	30	77 - 141
Chlorobenzene	10.0	10.7	107	1.13	30	88 - 120
Chloroethane	10.0	9.98	99.8	4.61	30	65 - 136
Chloroform	10.0	12.3	123	11.3	30	82 - 128
Chloromethane	10.0	9.57	95.7	0.734	30	43 - 155
cis-1,2-Dichloroethylene	10.0	13.7	137 *	12.2	30	83 - 129
cis-1,3-Dichloropropylene	10.0	12.0	120	3.66	30	80 - 131
Dibromochloromethane	10.0	10.3	103	1.37	30	80 - 130
Dibromomethane	10.0	10.5	105	3.59	30	72 - 134
Dichlorodifluoromethane	10.0	8.99	89.9	4.90	30	44 - 144
Ethyl Benzene	10.0	10.8	108	1.21	30	80 - 131
Hexachlorobutadiene	10.0	12.3	123	8.58	30	67 - 146
Isopropylbenzene	10.0	10.9	109	1.76	30	76 - 140
Methyl tert-butyl ether (MTBE)	10.0	10.9	109	5.38	30	76 - 135
Methylene chloride	10.0	12.8	128	5.88	30	55 - 137
Naphthalene	10.0	11.3	113	8.80	30	70 - 147
n-Butylbenzene	10.0	11.4	114	1.59	30	79 - 132
n-Propylbenzene	10.0	11.0	110	0.0906	30	78 - 133
o-Xylene	10.0	10.8	108	0.0929	30	78 - 130
p- & m- Xylenes	20.0	21.8	109	0.737	30	77 - 133
p-Diethylbenzene	10.0	11.1	111	4.90	30	84 - 134
p-Ethyltoluene	10.0	10.2	102	1.26	30	88 - 129
p-Isopropyltoluene	10.0	10.9	109	0.367	30	81 - 136
sec-Butylbenzene	10.0	11.2	112	2.63	30	79 - 137



## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50737Laboratory ID: BA50737-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Styrene	10.0	11.2	112	1.16	30	67 - 132
tert-Butylbenzene	10.0	10.9	109	0.645	30	77 - 138
Tetrachloroethylene	10.0	10.6	106	0.943	30	82 - 131
Toluene	10.0	10.7	107	2.64	30	80 - 127
trans-1,2-Dichloroethylene	10.0	12.6	126	6.73	30	80 - 132
trans-1,3-Dichloropropylene	10.0	11.4	114	5.12	30	78 - 131
Trichloroethylene	10.0	11.0	110	3.15	30	82 - 128
Trichlorofluoromethane	10.0	10.8	108	6.02	30	67 - 139
Vinyl Chloride	10.0	10.8	108	4.76	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

LCS / LCS DUPLICATE RECOVERY  
EPA 8260CLaboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50837Laboratory ID: BA50837-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	10.2	102	82 - 126
1,1,1-Trichloroethane	10.0	11.3	113	78 - 136
1,1,2,2-Tetrachloroethane	10.0	8.89	88.9	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.50	95.0	54 - 165
1,1,2-Trichloroethane	10.0	9.51	95.1	82 - 123
1,1-Dichloroethane	10.0	11.3	113	82 - 129
1,1-Dichloroethylene	10.0	11.2	112	68 - 138
1,1-Dichloropropylene	10.0	11.1	111	83 - 133
1,2,3-Trichlorobenzene	10.0	10.6	106	76 - 136
1,2,3-Trichloropropane	10.0	9.66	96.6	77 - 128
1,2,4,5-Tetramethylbenzene	10.0	11.1	111	85 - 140
1,2,4-Trichlorobenzene	10.0	11.1	111	76 - 137
1,2,4-Trimethylbenzene	10.0	10.6	106	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.56	95.6	45 - 147
1,2-Dibromoethane	10.0	9.86	98.6	83 - 124
1,2-Dichlorobenzene	10.0	10.2	102	79 - 123
1,2-Dichloroethane	10.0	10.7	107	73 - 132
1,2-Dichloropropane	10.0	10.5	105	78 - 126
1,3,5-Trimethylbenzene	10.0	10.5	105	80 - 131
1,3-Dichlorobenzene	10.0	10.5	105	86 - 122
1,3-Dichloropropane	10.0	10.2	102	81 - 125
1,4-Dichlorobenzene	10.0	10.4	104	85 - 124
2,2-Dichloropropane	10.0	15.2	152 *	56 - 150
2-Butanone	10.0	10.1	101	49 - 152
2-Chlorotoluene	10.0	10.7	107	79 - 130
2-Hexanone	10.0	9.33	93.3	51 - 146
4-Chlorotoluene	10.0	10.6	106	79 - 128
4-Methyl-2-pentanone	10.0	7.26	72.6	57 - 145
Acetone	10.0	7.78	77.8	14 - 150
Benzene	10.0	11.1	111	85 - 126



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50837Laboratory ID: BA50837-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Bromobenzene	10.0	10.3	103	78 - 129
Bromochloromethane	10.0	10.9	109	77 - 128
Bromodichloromethane	10.0	10.5	105	79 - 128
Bromoform	10.0	10.4	104	78 - 133
Bromomethane	10.0	9.14	91.4	43 - 168
Carbon disulfide	10.0	12.5	125	68 - 146
Carbon tetrachloride	10.0	11.5	115	77 - 141
Chlorobenzene	10.0	10.3	103	88 - 120
Chloroethane	10.0	10.1	101	65 - 136
Chloroform	10.0	11.2	112	82 - 128
Chloromethane	10.0	8.94	89.4	43 - 155
cis-1,2-Dichloroethylene	10.0	11.8	118	83 - 129
cis-1,3-Dichloropropylene	10.0	11.9	119	80 - 131
Dibromochloromethane	10.0	10.3	103	80 - 130
Dibromomethane	10.0	10.2	102	72 - 134
Dichlorodifluoromethane	10.0	10.1	101	44 - 144
Ethyl Benzene	10.0	10.5	105	80 - 131
Hexachlorobutadiene	10.0	11.6	116	67 - 146
Isopropylbenzene	10.0	10.7	107	76 - 140
Methyl tert-butyl ether (MTBE)	10.0	10.4	104	76 - 135
Methylene chloride	10.0	11.3	113	55 - 137
Naphthalene	10.0	9.90	99.0	70 - 147
n-Butylbenzene	10.0	11.2	112	79 - 132
n-Propylbenzene	10.0	10.8	108	78 - 133
o-Xylene	10.0	10.5	105	78 - 130
p- & m- Xylenes	20.0	21.5	108	77 - 133
p-Diethylbenzene	10.0	10.8	108	84 - 134
p-Ethyltoluene	10.0	10.4	104	88 - 129
p-Isopropyltoluene	10.0	10.9	109	81 - 136
sec-Butylbenzene	10.0	10.8	108	79 - 137



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50837Laboratory ID: BA50837-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Styrene	10.0	10.8	108	67 - 132
tert-Butylbenzene	10.0	10.7	107	77 - 138
Tetrachloroethylene	10.0	10.4	104	82 - 131
Toluene	10.0	10.4	104	80 - 127
trans-1,2-Dichloroethylene	10.0	11.4	114	80 - 132
trans-1,3-Dichloropropylene	10.0	11.2	112	78 - 131
Trichloroethylene	10.0	10.6	106	82 - 128
Trichlorofluoromethane	10.0	10.9	109	67 - 139
Vinyl Chloride	10.0	10.6	106	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50837Laboratory ID: BA50837-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	10.7	107	4.79	30	82 - 126
1,1,1-Trichloroethane	10.0	11.1	111	1.25	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.35	93.5	5.04	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.60	96.0	1.05	30	54 - 165
1,1,2-Trichloroethane	10.0	9.79	97.9	2.90	30	82 - 123
1,1-Dichloroethane	10.0	11.3	113	0.00	30	82 - 129
1,1-Dichloroethylene	10.0	11.4	114	2.30	30	68 - 138
1,1-Dichloropropylene	10.0	11.0	110	1.36	30	83 - 133
1,2,3-Trichlorobenzene	10.0	11.2	112	6.06	30	76 - 136
1,2,3-Trichloropropane	10.0	10.5	105	8.43	30	77 - 128
1,2,4,5-Tetramethylbenzene	10.0	11.4	114	2.59	30	85 - 140
1,2,4-Trichlorobenzene	10.0	11.2	112	0.716	30	76 - 137
1,2,4-Trimethylbenzene	10.0	10.6	106	0.0945	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.02	90.2	5.81	30	45 - 147
1,2-Dibromoethane	10.0	10.0	100	1.51	30	83 - 124
1,2-Dichlorobenzene	10.0	10.6	106	3.66	30	79 - 123
1,2-Dichloroethane	10.0	10.8	108	1.02	30	73 - 132
1,2-Dichloropropane	10.0	10.8	108	2.64	30	78 - 126
1,3,5-Trimethylbenzene	10.0	10.8	108	2.45	30	80 - 131
1,3-Dichlorobenzene	10.0	10.8	108	2.53	30	86 - 122
1,3-Dichloropropane	10.0	10.4	104	1.55	30	81 - 125
1,4-Dichlorobenzene	10.0	10.6	106	1.80	30	85 - 124
2,2-Dichloropropane	10.0	14.8	148	2.40	30	56 - 150
2-Butanone	10.0	10.6	106	4.65	30	49 - 152
2-Chlorotoluene	10.0	10.9	109	1.39	30	79 - 130
2-Hexanone	10.0	9.59	95.9	2.75	30	51 - 146
4-Chlorotoluene	10.0	10.7	107	0.843	30	79 - 128
4-Methyl-2-pentanone	10.0	9.66	96.6	28.4	30	57 - 145
Acetone	10.0	6.20	62.0	22.6	30	14 - 150
Benzene	10.0	11.0	110	0.908	30	85 - 126



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50837Laboratory ID: BA50837-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromobenzene	10.0	10.6	106	2.78	30	78 - 129
Bromochloromethane	10.0	10.8	108	1.47	30	77 - 128
Bromodichloromethane	10.0	10.9	109	4.11	30	79 - 128
Bromoform	10.0	10.4	104	0.386	30	78 - 133
Bromomethane	10.0	9.87	98.7	7.68	30	43 - 168
Carbon disulfide	10.0	12.3	123	1.37	30	68 - 146
Carbon tetrachloride	10.0	11.1	111	3.55	30	77 - 141
Chlorobenzene	10.0	10.5	105	1.92	30	88 - 120
Chloroethane	10.0	10.0	100	0.695	30	65 - 136
Chloroform	10.0	11.1	111	0.807	30	82 - 128
Chloromethane	10.0	8.46	84.6	5.52	30	43 - 155
cis-1,2-Dichloroethylene	10.0	11.7	117	0.597	30	83 - 129
cis-1,3-Dichloropropylene	10.0	12.2	122	1.74	30	80 - 131
Dibromochloromethane	10.0	10.5	105	1.82	30	80 - 130
Dibromomethane	10.0	10.3	103	1.66	30	72 - 134
Dichlorodifluoromethane	10.0	9.53	95.3	5.41	30	44 - 144
Ethyl Benzene	10.0	10.7	107	1.51	30	80 - 131
Hexachlorobutadiene	10.0	12.0	120	3.06	30	67 - 146
Isopropylbenzene	10.0	10.8	108	0.743	30	76 - 140
Methyl tert-butyl ether (MTBE)	10.0	10.2	102	1.07	30	76 - 135
Methylene chloride	10.0	11.4	114	0.883	30	55 - 137
Naphthalene	10.0	10.3	103	3.86	30	70 - 147
n-Butylbenzene	10.0	11.3	113	1.16	30	79 - 132
n-Propylbenzene	10.0	10.8	108	0.462	30	78 - 133
o-Xylene	10.0	10.8	108	2.91	30	78 - 130
p- & m- Xylenes	20.0	21.7	109	1.11	30	77 - 133
p-Diethylbenzene	10.0	11.0	110	1.66	30	84 - 134
p-Ethyltoluene	10.0	10.6	106	1.24	30	88 - 129
p-Isopropyltoluene	10.0	11.1	111	1.82	30	81 - 136
sec-Butylbenzene	10.0	11.0	110	1.56	30	79 - 137



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 15A0377Client: Hydro Tech Environmental (Brooklyn)Project: #140344 11-28 31 Drive, LIC NYMatrix: WaterBatch: BA50837Laboratory ID: BA50837-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Styrene	10.0	11.1	111	1.92	30	67 - 132
tert-Butylbenzene	10.0	10.9	109	1.48	30	77 - 138
Tetrachloroethylene	10.0	10.5	105	0.959	30	82 - 131
Toluene	10.0	10.6	106	1.62	30	80 - 127
trans-1,2-Dichloroethylene	10.0	11.4	114	0.264	30	80 - 132
trans-1,3-Dichloropropylene	10.0	11.5	115	2.21	30	78 - 131
Trichloroethylene	10.0	10.8	108	1.77	30	82 - 128
Trichlorofluoromethane	10.0	11.0	110	1.28	30	67 - 139
Vinyl Chloride	10.0	10.5	105	0.568	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn) Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water Laboratory ID: BA50737-BLK1 File ID: V6008083.D  
 Prepared: 01/17/15 08:21 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/17/15 12:35 Instrument: MSVOA6  
 Batch: BA50737 Sequence: Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
563-58-6	1,1-Dichloropropylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.68	
96-18-4	1,2,3-Trichloropropane	0.50	U
527-53-7	1,2,4,5-Tetramethylbenzene	0.37	J
120-82-1	1,2,4-Trichlorobenzene	0.53	
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromochthane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
78-93-3	2-Butanone	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
591-78-6	2-Hexanone	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
71-43-2	Benzene	0.50	U



## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn) Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water Laboratory ID: BA50737-BLK1 File ID: V6008083.D  
 Prepared: 01/17/15 08:21 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/17/15 12:35 Instrument: MSVOA6  
 Batch: BA50737 Sequence: Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-86-1	Bromobenzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.60	
98-82-8	Isopropylbenzene	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
75-09-2	Methylene chloride	2.0	U
91-20-3	Naphthalene	2.0	U
104-51-8	n-Butylbenzene	0.36	J
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
105-05-5	p-Diethylbenzene	0.50	U
622-96-8	p-Ethyltoluene	0.50	U
99-87-6	p-Isopropyltoluene	0.23	J
135-98-8	sec-Butylbenzene	0.21	J



## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn) Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water Laboratory ID: BA50737-BLK1 File ID: V6008083.D  
 Prepared: 01/17/15 08:21 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/17/15 12:35 Instrument: MSVOA6  
 Batch: BA50737 Sequence: Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
100-42-5	Styrene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	12.9	129	69 - 130	
p-Bromofluorobenzene	10.0	10.2	102	79 - 122	
Toluene-d8	10.0	9.78	97.8	81 - 117	



## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn) Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water Laboratory ID: BA50787-BLK1 File ID: V6008111.D  
 Prepared: 01/19/15 12:54 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/19/15 16:36 Instrument: MSVOA6  
 Batch: BA50787 Sequence: Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
563-58-6	1,1-Dichloropropylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.81	
96-18-4	1,2,3-Trichloropropane	0.50	U
527-53-7	1,2,4,5-Tetramethylbenzene	0.43	J
120-82-1	1,2,4-Trichlorobenzene	0.65	
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.22	J
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.25	J
142-28-9	1,3-Dichloropropane	0.50	U
106-46-7	1,4-Dichlorobenzene	0.23	J
594-20-7	2,2-Dichloropropane	0.50	U
78-93-3	2-Butanone	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
591-78-6	2-Hexanone	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
71-43-2	Benzene	0.50	U



## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn) Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water Laboratory ID: BA50787-BLK1 File ID: V6008111.D  
 Prepared: 01/19/15 12:54 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/19/15 16:36 Instrument: MSVOA6  
 Batch: BA50787 Sequence: Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-86-1	Bromobenzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.64	
98-82-8	Isopropylbenzene	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
75-09-2	Methylene chloride	2.0	U
91-20-3	Naphthalene	2.0	U
104-51-8	n-Butylbenzene	0.38	J
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
105-05-5	p-Diethylbenzene	0.31	J
622-96-8	p-Ethyltoluene	0.50	U
99-87-6	p-Isopropyltoluene	0.25	J
135-98-8	sec-Butylbenzene	0.24	J



## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.      SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn)      Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water      Laboratory ID: BA50787-BLK1      File ID: V6008111.D  
 Prepared: 01/19/15 12:54      Preparation: EPA 5030B      Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/19/15 16:36      Instrument: MSVOA6  
 Batch: BA50787      Sequence:      Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
100-42-5	Styrene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	8.96	89.6	69 - 130	
p-Bromofluorobenzene	10.0	11.3	113	79 - 122	
Toluene-d8	10.0	9.95	99.5	81 - 117	



## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn) Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water Laboratory ID: BA50837-BLK1 File ID: V6008151.D  
 Prepared: 01/20/15 08:14 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/20/15 12:38 Instrument: MSVOA6  
 Batch: BA50837 Sequence: Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
563-58-6	1,1-Dichloropropylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	
96-18-4	1,2,3-Trichloropropane	0.50	U
527-53-7	1,2,4,5-Tetramethylbenzene	0.21	J
120-82-1	1,2,4-Trichlorobenzene	0.38	J
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
78-93-3	2-Butanone	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
591-78-6	2-Hexanone	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
71-43-2	Benzene	0.50	U



## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn) Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water Laboratory ID: BA50837-BLK1 File ID: V6008151.D  
 Prepared: 01/20/15 08:14 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/20/15 12:38 Instrument: MSVOA6  
 Batch: BA50837 Sequence: Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-86-1	Bromobenzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.22	J
98-82-8	Isopropylbenzene	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
75-09-2	Methylene chloride	2.0	U
91-20-3	Naphthalene	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
105-05-5	p-Diethylbenzene	0.50	U
622-96-8	p-Ethyltoluene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U



## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc.      SDG: 15A0377  
 Client: Hydro Tech Environmental (Brooklyn)      Project: #140344 11-28 31 Drive, LIC NY  
 Matrix: Water      Laboratory ID: BA50837-BLK1      File ID: V6008151.D  
 Prepared: 01/20/15 08:14      Preparation: EPA 5030B      Initial/Final: 25 mL / 25 mL  
 Analyzed: 01/20/15 12:38      Instrument: MSVOA6  
 Batch: BA50837      Sequence:      Calibration:

CAS NO.	COMPOUND	CONC. (ug/L)	Q
100-42-5	Styrene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	11.0	110	69 - 130	
p-Bromofluorobenzene	10.0	9.69	96.9	79 - 122	
Toluene-d8	10.0	9.80	98.0	81 - 117	



## Response Factor Report MSVOA6

Method Path : C:\msdchem\1\METHODS\  
 Method File : V6LO0032.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Wed Jan 14 10:32:28 2015  
 Response Via : Initial Calibration

## Calibration Files

0.5 =V6007922.D 2.0 =V6007923.D 4.0 =V6007924.D 10.0=V6007925.D  
 20.0=V6007926.D 40.0=V6007927.D

SD	Compound	0.5	2.0	4.0	10.0	20.0	40.0	Avg	%R
-----									
1) I	FLUOROBENZENE (ISTD)	-----ISTD-----							
2) T	Dichlorodifluo...	1.569	1.550	1.746	1.749	1.658	1.806	1.679	6.23
3) T	Chloromethane	3.439	3.141	3.218	3.041	2.939	3.074	3.142	5.52
4) T	Vinyl Chloride	2.332	2.558	2.565	2.527	2.529	2.701	2.535	4.68
5) T	Bromomethane	1.506	1.495	1.517	1.323	1.431	1.662	1.489	7.49
6) T	Chloroethane	1.868	1.673	1.812	1.714	1.830	2.275	1.862	11.55
7) T	Trichlorofluor...	2.682	2.667	2.856	2.664	2.650	3.074	2.765	6.14
8) T	Ethyl Ether	1.471	1.359	1.428	1.282	1.367	1.395	1.384	4.68
9) T	Freon-113	1.778	1.674	1.735	1.754	1.585	1.752	1.713	4.20
10) T	1,1-Dichloroet...	3.050	3.201	3.324	3.098	3.062	3.300	3.173	3.80
11) T	Acrolein	0.108	0.148	0.126	0.107	0.124	0.106	0.120	13.68
12) T	Acetone		0.576	0.432	0.320	0.298	0.279	0.381	32.61
13) T	Iodomethane	1.386	1.246	1.197	1.191	1.333	1.442	1.299	8.01
14) T	Methyl Acetate	0.364	0.513	0.556	0.477	0.454	0.479	0.474	13.61
15) T	Carbon disulfide	5.621	5.828	5.978	5.768	5.819	6.098	5.852	2.84
16) T	tert-Butyl Alc...	0.293	0.202	0.197	0.139	0.131	0.144	0.184	33.27 NA
17) T	Methylene Chlo...		2.563	2.818	2.402	2.515	2.587	2.577	5.92
18) T	Acrylonitrile	0.384	0.357	0.378	0.284	0.339	0.340	0.347	10.38
19) T	trans-1,2-Dich...	3.108	3.057	3.414	3.004	3.095	3.307	3.164	5.05
20) T	tert-Butyl Met...	4.157	3.940	4.132	3.680	3.948	4.078	3.989	4.43
21) T	1,1-Dichloroet...	3.958	4.119	4.150	3.792	4.030	4.161	4.035	3.52
22) T	Vinyl Acetate	3.713	3.391	4.386	3.271	3.249	2.483	3.415	18.28
23) T	Diisopropyl et...	7.240	6.613	6.885	6.906	6.716	6.787	6.858	3.16
24) T	Ethyl-tert-But...	6.614	5.785	6.084	6.149	6.091	6.137	6.144	4.35
25) T	cis-1,2-Dichlo...	3.341	3.399	3.536	3.161	3.333	3.512	3.380	4.05
26) T	2-Butanone	0.094	0.122	0.123	0.100	0.099	0.109	0.108	11.40
27) T	2,2-Dichloropr...	2.053	2.341	2.152	2.179	2.245	2.454	2.237	6.40
28) T	Tetrahydrofuran		0.147	0.134	0.106	0.094	0.095	0.115	20.66
29) T	Bromochloromet...	1.425	1.553	1.517	1.374	1.442	1.488	1.467	4.47
30) T	Chloroform	3.324	3.323	3.545	3.167	3.319	3.388	3.344	3.66
31) T	1,1,1-Trichlor...	2.910	2.806	2.893	2.757	2.846	3.069	2.880	3.75
32) T	Cyclohexane	4.271	3.667	3.899	3.891	3.446	3.788	3.827	7.19
33) T	1,1-Dichloropr...	2.855	2.889	2.995	2.792	2.800	3.055	2.898	3.68
34) S	d4-1,2-Dichlor...	1.025	0.960	0.971	0.989	0.916	0.943	0.967	3.91
35) T	Carbon Tetrach...	2.000	2.227	2.300	2.188	2.276	2.467	2.243	6.82
36) T	tert-Amyl alco...	0.084	0.080	0.094	0.094	0.100	0.105	0.093	10.14
37) T	1,2-Dichloroet...	2.192	2.040	2.187	1.936	2.032	2.176	2.094	5.08
38) T	Benzene	8.787	8.676	9.042	8.124	8.302	8.514	8.574	3.89
39) T	tert-Amyl meth...	4.917	4.361	4.576	4.492	4.409	4.535	4.548	4.34
40) I	CHLOROBENZENE-d5 (...)	-----ISTD-----							
41) T	Trichloroethylene	0.514	0.563	0.563	0.524	0.546	0.570	0.547	4.27
42) T	Methyl Cyclohe...	0.936	0.984	1.036	1.000	0.966	1.038	0.993	4.03



## Response Factor Report MSVOA6

Method Path : C:\msdchem\1\METHODS\

Method File : V6LO0032.M

Title : Volatile Organics EPA 8260C

43)	T	Methyl Methacr...	0.298	0.210	0.232	0.206	0.214	0.228	0.231	14.70
44)	T	Dibromomethane	0.186	0.181	0.195	0.168	0.189	0.196	0.186	5.49
45)	T	Bromodichlorom...	0.571	0.577	0.613	0.562	0.593	0.617	0.589	3.85
46)	T	1,2-Dichloropr...	0.557	0.579	0.604	0.541	0.572	0.590	0.574	3.95
47)	T	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	5.63
48)	T	2-Chloroethyl ...							0.000	-1.00
49)	T	cis-1,3-Dichlo...	0.567	0.615	0.675	0.617	0.660	0.673	0.634	6.72
50)	T	4-Methyl-2-Pen...	0.380	0.406	0.366	0.348	0.375	0.383	0.376	5.12
51)	S	Toluene-d8 (SURR)	1.344	1.370	1.344	1.357	1.363	1.338	1.353	0.92
52)	T	Toluene	2.651	2.551	2.576	2.306	2.378	2.410	2.479	5.38
53)	T	trans-1,3-Dich...	0.500	0.494	0.524	0.497	0.530	0.558	0.517	4.83
54)	T	1,1,2-Trichlor...	0.392	0.319	0.302	0.266	0.283	0.289	0.309	14.49
55)	T	1,3-Dichloropr...	0.528	0.556	0.589	0.520	0.551	0.573	0.553	4.77
56)	T	Tetrachloroeth...	0.446	0.458	0.472	0.429	0.444	0.464	0.452	3.41
57)	T	2-Hexanone		0.206	0.187	0.170	0.183	0.190	0.187	6.85
58)	T	Dibromochlorom...	0.276	0.285	0.299	0.281	0.307	0.324	0.295	6.11
59)	T	1,2-Dibromoethane	0.277	0.239	0.251	0.223	0.237	0.252	0.247	7.45
60)	T	Chlorobenzene	1.433	1.432	1.449	1.286	1.353	1.383	1.389	4.47
61)	T	1,1,1,2-tetrac...	0.379	0.406	0.403	0.363	0.399	0.411	0.393	4.68
62)	T	Ethyl Benzene	2.975	2.907	2.933	2.634	2.748	2.765	2.827	4.66
63)	T	p- & m-Xylenes	2.213	2.224	2.266	2.035	2.116	2.110	2.161	4.04
64)	T	o-Xylene	2.237	2.259	2.318	2.051	2.184	2.277	2.221	4.26
65)	T	Styrene	1.546	1.546	1.604	1.473	1.594	1.676	1.573	4.36
66)	T	Bromofrom	0.121	0.141	0.143	0.138	0.152	0.165	0.143	10.15
67)	I	1,2-DICHLOROBENZEN...	-----ISTD-----							
68)	T	p-Ethyltoluene	6.306	6.253	6.119	5.958	5.683	5.683	6.000	4.56
69)	T	Isopropylbenzene	5.946	6.172	6.073	5.769	5.599	5.587	5.858	4.19
70)	S	p-Bromofluorob...	1.307	1.272	1.232	1.295	1.215	1.162	1.247	4.40
71)	T	1,1,2,2-Tetrac...	1.025	0.801	0.775	0.719	0.734	0.722	0.796	14.67
72)	T	Bromobenzene	2.523	2.414	2.528	2.344	2.351	2.337	2.416	3.68
73)	T	trans-1,4-Dich...	0.775	0.857	0.811	0.732	0.728	0.730	0.772	6.84
74)	T	1,2,3-Trichlor...	0.306	0.220	0.220	0.190	0.188	0.186	0.218	20.92
75)	T	n-Propylbenzene	7.899	8.308	7.913	7.474	7.262	7.085	7.657	6.03
76)	T	2-Chlorotoluene	4.882	5.234	5.112	4.851	4.820	4.826	4.954	3.54
77)	T	4-Chlorotoluene	5.241	5.408	5.230	4.953	4.914	5.008	5.126	3.83
78)	T	1,3,5-Trimethy...	5.362	5.407	5.228	4.943	4.936	5.012	5.148	4.12
79)	T	tert-Butylbenzene	4.619	4.932	4.834	4.584	4.583	4.691	4.707	3.08
80)	T	1,2,4-Trimethy...	5.424	5.594	5.300	4.980	4.989	4.986	5.212	5.10
81)	T	sec-Butylbenzene	6.471	6.761	6.587	6.319	6.090	6.133	6.393	4.10
82)	T	1,3-Dichlorobe...	2.448	2.418	2.380	2.171	2.223	2.216	2.309	5.18
83)	T	p-Isopropyltol...	5.260	5.872	5.533	5.335	5.236	5.341	5.429	4.43
84)	T	1,4-Dichlorobe...	2.392	2.357	2.317	2.219	2.179	2.209	2.279	3.87
85)	T	p-Diethylbenzene	3.725	3.481	3.280	3.263	3.202	3.380	3.389	5.66
86)	T	1,2-Dichlorobe...	2.120	2.061	2.068	1.840	1.900	1.954	1.991	5.49
87)	T	n-Butylbenzene	7.087	7.435	7.197	6.915	6.816	7.101	7.092	3.06
88)	T	1,2-Dibromo-3-...	0.148	0.127	0.141	0.139	0.163	0.123	0.140	10.22
89)	T	1,2,4,5-Tetram...	4.963	5.092	4.968	4.649	4.581	4.611	4.811	4.61
90)	T	1,2,4-Trichlor...	1.413	1.423	1.340	1.235	1.229	1.225	1.311	7.13
91)	T	Hexachloro-1,3...	0.819	0.811	0.795	0.729	0.714	0.755	0.770	5.75
92)	T	Naphthalene	2.602	2.199	2.089	1.904	1.951	1.963	2.118	12.29
93)	T	1,2,3-Trichlor...	1.144	1.078	1.024	0.936	0.941	0.943	1.011	8.58

(#)= Out of Range



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\V6011715\  
 Data File : V6008080.D  
 Acq On : 17 Jan 2015 10:55 am  
 InstName : MSVOA6  
 Operator : SS  
 Sample : 10ppb VOA CAL CHECK STD  
 Misc : QBV6011715A < 2 OW Y14L041  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 14:57:24 2015  
 Quant Method : C:\msdchem\1\METHODS\V6LO0032.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Jan 14 10:32:28 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	76	0.00
2 T	Dichlorodifluoromethane	1.679	1.573	6.3	68	0.00
3 T	Chloromethane	3.142	3.084	1.8	77	0.00
4 T	Vinyl Chloride	2.535	2.759	-8.8	83	0.00
5 T	Bromomethane	1.489	1.428	4.1	82	0.00
6 T	Chloroethane	1.862	1.847	0.8	82	0.00
7 T	Trichlorofluoromethane	2.765	3.021	-9.3	86	0.00
8 T	Ethyl Ether	1.384	1.510	-9.1	89	0.00
9 T	Freon-113	1.713	1.848	-7.9	80	0.00
10 T	1,1-Dichloroethylene	3.173	3.857	-21.6	94	0.00
11 T	Acrolein	0.120	0.097	19.2	69	0.00
12 T	Acetone	0.381	0.297	22.0	70	0.00
13 T	Iodomethane	1.299	1.345	-3.5	86	0.00
14 T	Methyl Acetate	0.474	0.680	NA -43.5#	108	0.00
15 T	Carbon disulfide	5.852	6.794	-16.1	89	0.00
16 T	tert-Butyl Alcohol (TBA)	0.184	0.163	11.4	89	0.00
17 T	Methylene Chloride	2.577	3.136	-21.7	99	0.00
18 T	Acrylonitrile	0.347	0.422	-21.6	113	0.00
19 T	trans-1,2-Dichloroethylene	3.164	3.841	-21.4	97	0.00
20 T	tert-Butyl Methyl Ether (MT)	3.989	4.191	-5.1	86	0.00
21 T	1,1-Dichloroethane	4.035	4.814	-19.3	96	0.00
22 T	Vinyl Acetate	3.415	1.521	NA 55.5#	35#	-0.01
23 T	Diisopropyl ether (DIPE)	6.858	0.003	NA 100.0#	0#	0.00
24 T	Ethyl-tert-Butyl ether (ETB)	6.144	0.128	NA 97.9#	2#	0.13
25 T	cis-1,2-Dichloroethylene	3.380	4.299	-27.2#	103	0.00
26 T	2-Butanone	0.108	0.137	-26.9#	104	0.00
27 T	2,2-Dichloropropane	2.237	3.529	-57.8#	123	0.00
28 T	Tetrahydrofuran	0.115	0.104	9.6	74	0.01
29 T	Bromochloromethane	1.467	1.831	-24.8	101	0.00
30 T	Chloroform	3.344	3.696	-10.5	88	0.00
31 T	1,1,1-Trichloroethane	2.880	3.327	-15.5	91	0.00
32 T	Cyclohexane	3.827	5.175	NA -35.2#	101	0.00
33 T	1,1-Dichloropropylene	2.898	3.510	-21.1	95	0.00
34 S	d4-1,2-Dichloroethane (SURR)	0.967	1.007	-4.1	77	0.00
35 T	Carbon Tetrachloride	2.243	2.626	-17.1	91	0.00
36 T	tert-Amyl alcohol (TAA)	0.093	0.000	NA 100.0#	0#	-5.46#
37 T	1,2-Dichloroethane	2.094	2.397	-14.5	94	0.01



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\V6011715\  
 Data File : V6008080.D  
 Acq On : 17 Jan 2015 10:55 am  
 InstName : MSVOA6  
 Operator : SS  
 Sample : 10ppb VOA CAL CHECK STD  
 Misc : QBV6011715A < 2 OW Y14L041  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 14:57:24 2015  
 Quant Method : C:\msdchem\1\METHODS\V6LO0032.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Jan 14 10:32:28 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
38 T	Benzene	8.574	9.462	-10.4	88	0.00
39 T	tert-Amyl methyl ether (TAM	4.548	0.000	NA	100.0#	0# -5.57#
40 I	CHLOROBENZENE-d5 (ISTD)	1.000	1.000	0.0	75	0.00
41 T	Trichloroethylene	0.547	0.601	-9.9	86	0.00
42 T	Methyl Cyclohexane	0.993	1.164	-17.2	87	0.00
43 T	Methyl Methacrylate	0.231	0.242	-4.8	88	0.00
44 T	Dibromomethane	0.186	0.189	-1.6	84	0.01
45 T	Bromodichloromethane	0.589	0.618	-4.9	82	0.00
46 T	1,2-Dichloropropane	0.574	0.628	-9.4	87	0.00
47 T	1,4-Dioxane	0.001	0.001	0.0	81	0.02
48 T	2-Chloroethyl vinyl ether	0.000	0.272	0.0	0#	0.00
49 T	cis-1,3-Dichloropropene	0.634	0.700	-10.4	85	0.00
50 T	4-Methyl-2-Pentanone	0.376	0.389	-3.5	83	0.01
51 S	Toluene-d8 (SURRE)	1.353	1.340	1.0	74	0.00
52 T	Toluene	2.479	2.718	-9.6	88	0.00
53 T	trans-1,3-Dichloropropene	0.517	0.569	-10.1	86	0.00
54 T	1,1,2-Trichloroethane	0.309	0.292	5.5	82	0.00
55 T	1,3-Dichloropropane	0.553	0.625	-13.0	90	0.00
56 T	Tetrachloroethylene	0.452	0.497	-10.0	87	0.00
57 T	2-Hexanone	0.187	0.185	1.1	81	0.02
58 T	Dibromochloromethane	0.295	0.300	-1.7	80	0.00
59 T	1,2-Dibromoethane	0.247	0.255	-3.2	85	0.00
60 T	Chlorobenzene	1.389	1.494	-7.6	87	0.00
61 T	1,1,1,2-tetrachloroethane	0.393	0.418	-6.4	86	0.00
62 T	Ethyl Benzene	2.827	3.150	-11.4	89	0.00
63 T	p- & m-Xylenes	2.161	2.422	-12.1	89	0.00
64 T	o-Xylene	2.221	2.474	-11.4	90	0.00
65 T	Styrene	1.573	1.717	-9.2	87	0.00
66 T	Bromofrom	0.143	0.146	-2.1	79	0.00
67 I	1,2-DICHLOROBENZENE-d4 (IST	1.000	1.000	0.0	81	0.00
68 T	p-Ethyltoluene	6.000	6.255	-4.2	85	0.00
69 T	Isopropylbenzene	5.858	6.362	-8.6	89	0.00
70 S	p-Bromofluorobenzene (SURRE)	1.247	1.208	3.1	75	0.00
71 T	1,1,2,2-Tetrachloroethane	0.796	0.791	0.6	89	0.00
72 T	Bromobenzene	2.416	2.608	-7.9	90	0.00



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\V6011715\  
 Data File : V6008080.D  
 Acq On : 17 Jan 2015 10:55 am  
 InstName : MSVOA6  
 Operator : SS  
 Sample : 10ppb VOA CAL CHECK STD  
 Misc : QBV6011715A < 2 OW Y14L041  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jan 19 14:57:24 2015  
 Quant Method : C:\msdchem\1\METHODS\V6LO0032.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Jan 14 10:32:28 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
73 T	trans-1,4-Dichloro-2-butene	0.772	0.771	0.1	85	0.00
74 T	1,2,3-Trichloropropane	0.218	0.194	11.0	82	0.00
75 T	n-Propylbenzene	7.657	8.546	-11.6	92	0.00
76 T	2-Chlorotoluene	4.954	5.608	-13.2	93	0.00
77 T	4-Chlorotoluene	5.126	5.713	-11.5	93	0.00
78 T	1,3,5-Trimethylbenzene	5.148	5.514	-7.1	90	0.00
79 T	tert-Butylbenzene	4.707	5.141	-9.2	90	0.00
80 T	1,2,4-Trimethylbenzene	5.212	5.625	-7.9	91	0.00
81 T	sec-Butylbenzene	6.393	7.199	-12.6	92	0.00
82 T	1,3-Dichlorobenzene	2.309	2.457	-6.4	91	0.00
83 T	p-Isopropyltoluene	5.429	6.057	-11.6	91	0.00
84 T	1,4-Dichlorobenzene	2.279	2.447	-7.4	89	0.00
85 T	p-Diethylbenzene	3.389	3.621	-6.8	89	0.00
86 T	1,2-Dichlorobenzene	1.991	2.095	-5.2	92	0.00
87 T	n-Butylbenzene	7.092	8.148	-14.9	95	0.00
88 T	1,2-Dibromo-3-chloropropane	0.140	0.118	15.7	68	0.00
89 T	1,2,4,5-Tetramethylbenzene	4.811	5.144	-6.9	89	0.00
90 T	1,2,4-Trichlorobenzene	1.311	1.450	-10.6	95	0.00
91 T	Hexachloro-1,3-Butadiene	0.770	0.895	-16.2	99	0.00
92 T	Naphthalene	2.118	2.139	-1.0	90	0.00
93 T	1,2,3-Trichlorobenzene	1.011	1.136	-12.4	98	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\V6011915\  
 Data File : V6008108.D  
 Acq On : 19 Jan 2015 2:38 pm  
 InstName : MSVOA6  
 Operator : SS  
 Sample : 10PPB VOA CAL CHECK STD  
 Misc : QBV6011915B <2 BGS Y14L041  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 20 12:20:28 2015  
 Quant Method : C:\msdchem\1\METHODS\V6LO0032.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Jan 14 10:32:28 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	FLUOROBENZENE (ISTD)	1.000	1.000	0.0	86	0.00
2 T	Dichlorodifluoromethane	1.679	1.891	-12.6	93	0.00
3 T	Chloromethane	3.142	3.299	-5.0	93	0.00
4 T	Vinyl Chloride	2.535	2.780	-9.7	95	0.00
5 T	Bromomethane	1.489	1.511	-1.5	98	0.00
6 T	Chloroethane	1.862	1.890	-1.5	95	0.00
7 T	Trichlorofluoromethane	2.765	2.925	-5.8	95	0.00
8 T	Ethyl Ether	1.384	1.334	3.6	90	0.00
9 T	Freon-113	1.713	1.944	-13.5	95	0.00
10 T	1,1-Dichloroethylene	3.173	3.648	-15.0	101	0.00
11 T	Acrolein	0.120	0.124	-3.3	100	0.00
12 T	Acetone	0.381	0.364	4.5	98	0.00
13 T	Iodomethane	1.299	1.366	-5.2	99	0.00
14 T	Methyl Acetate	0.474	0.606	NA -27.8#	110	0.00
15 T	Carbon disulfide	5.852	6.620	-13.1	99	0.00
16 T	tert-Butyl Alcohol (TBA)	0.184	0.152	17.4	94	0.00
17 T	Methylene Chloride	2.577	2.825	-9.6	101	0.00
18 T	Acrylonitrile	0.347	0.329	5.2	100	0.00
19 T	trans-1,2-Dichloroethylene	3.164	3.502	-10.7	100	0.00
20 T	tert-Butyl Methyl Ether (MT)	3.989	3.974	0.4	93	0.00
21 T	1,1-Dichloroethane	4.035	4.458	-10.5	101	0.00
22 T	Vinyl Acetate	3.415	1.749	NA 48.8#	46#	-0.02
23 T	Diisopropyl ether (DIPE)	6.858	0.003	NA 100.0#	0#	0.00
24 T	Ethyl-tert-Butyl ether (ETB)	6.144	0.113	NA 98.2#	2#	0.13
25 T	cis-1,2-Dichloroethylene	3.380	3.790	-12.1	103	0.00
26 T	2-Butanone	0.108	0.107	0.9	92	0.00
27 T	2,2-Dichloropropane	2.237	2.843	-27.1#	112	0.00
28 T	Tetrahydrofuran	0.115	0.098	14.8	79	0.00
29 T	Bromochloromethane	1.467	1.599	-9.0	100	0.00
30 T	Chloroform	3.344	3.570	-6.8	97	0.00
31 T	1,1,1-Trichloroethane	2.880	3.206	-11.3	100	0.00
32 T	Cyclohexane	3.827	4.683	-22.4	104	0.00
33 T	1,1-Dichloropropylene	2.898	3.243	-11.9	100	0.00
34 S	d4-1,2-Dichloroethane (SURR)	0.967	0.967	0.0	84	0.00
35 T	Carbon Tetrachloride	2.243	2.557	-14.0	101	0.00
36 T	tert-Amyl alcohol (TAA)	0.093	0.000	NA 100.0#	0#	-5.46#
37 T	1,2-Dichloroethane	2.094	2.225	-6.3	99	0.00



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\V6011915\  
 Data File : V6008108.D  
 Acq On : 19 Jan 2015 2:38 pm  
 InstName : MSVOA6  
 Operator : SS  
 Sample : 10PPB VOA CAL CHECK STD  
 Misc : QBV6011915B <2 BGS Y14L041  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 20 12:20:28 2015  
 Quant Method : C:\msdchem\1\METHODS\V6LO0032.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Jan 14 10:32:28 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
38 T	Benzene	8.574	9.214	-7.5	98	0.00
39 T	tert-Amyl methyl ether (TAM	4.548	0.000	NA 100.0#	0#	-5.57#
40 I	CHLORO BENZENE-d5 (ISTD)	1.000	1.000	0.0	88	0.00
41 T	Trichloroethylene	0.547	0.589	-7.7	98	0.00
42 T	Methyl Cyclohexane	0.993	1.165	-17.3	102	0.00
43 T	Methyl Methacrylate	0.231	0.219	5.2	93	0.00
44 T	Dibromomethane	0.186	0.196	-5.4	102	0.00
45 T	Bromodichloromethane	0.589	0.618	-4.9	96	0.00
46 T	1,2-Dichloropropane	0.574	0.618	-7.7	100	0.00
47 T	1,4-Dioxane	0.001	0.001	0.0	102	0.00
48 T	2-Chloroethyl vinyl ether	0.000	0.257	0.0	0#	0.00
49 T	cis-1,3-Dichloropropene	0.634	0.686	-8.2	97	0.00
50 T	4-Methyl-2-Pentanone	0.376	0.420	-11.7	106	0.00
51 S	Toluene-d8 (SURR)	1.353	1.367	-1.0	88	0.00
52 T	Toluene	2.479	2.584	-4.2	98	0.00
53 T	trans-1,3-Dichloropropene	0.517	0.551	-6.6	97	0.00
54 T	1,1,2-Trichloroethane	0.309	0.286	7.4	94	0.00
55 T	1,3-Dichloropropane	0.553	0.575	-4.0	97	0.00
56 T	Tetrachloroethylene	0.452	0.480	-6.2	98	0.00
57 T	2-Hexanone	0.187	0.209	-11.8	107	0.00
58 T	Dibromochloromethane	0.295	0.300	-1.7	93	0.00
59 T	1,2-Dibromoethane	0.247	0.246	0.4	97	0.00
60 T	Chlorobenzene	1.389	1.410	-1.5	96	0.00
61 T	1,1,1,2-tetrachloroethane	0.393	0.398	-1.3	96	0.00
62 T	Ethyl Benzene	2.827	2.976	-5.3	99	0.00
63 T	p- & m-Xylenes	2.161	2.287	-5.8	98	0.00
64 T	o-Xylene	2.221	2.340	-5.4	100	0.00
65 T	Styrene	1.573	1.641	-4.3	98	0.00
66 T	Bromofrom	0.143	0.148	-3.5	94	0.00
67 I	1,2-DICHLORO BENZENE-d4 (IST	1.000	1.000	0.0	89	0.00
68 T	p-Ethyltoluene	6.000	6.551	-9.2	98	0.00
69 T	Isopropylbenzene	5.858	6.345	-8.3	98	0.00
70 S	p-Bromofluorobenzene (SURR)	1.247	1.283	-2.9	88	0.00
71 T	1,1,2,2-Tetrachloroethane	0.796	0.877	-10.2	109	0.00
72 T	Bromobenzene	2.416	2.703	-11.9	103	0.00



# Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\V6011915\  
 Data File : V6008108.D  
 Acq On : 19 Jan 2015 2:38 pm  
 InstName : MSVOA6  
 Operator : SS  
 Sample : 10PPB VOA CAL CHECK STD  
 Misc : QBV6011915B <2 BGS Y14L041  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jan 20 12:20:28 2015  
 Quant Method : C:\msdchem\1\METHODS\V6LO0032.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Jan 14 10:32:28 2015  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
73 T	trans-1,4-Dichloro-2-butene	0.772	0.860	-11.4	105	0.00
74 T	1,2,3-Trichloropropane	0.218	0.213	2.3	100	0.00
75 T	n-Propylbenzene	7.657	8.311	-8.5	99	0.00
76 T	2-Chlorotoluene	4.954	5.488	-10.8	101	0.00
77 T	4-Chlorotoluene	5.126	5.551	-8.3	100	0.00
78 T	1,3,5-Trimethylbenzene	5.148	5.562	-8.0	100	0.00
79 T	tert-Butylbenzene	4.707	5.154	-9.5	100	0.00
80 T	1,2,4-Trimethylbenzene	5.212	5.570	-6.9	100	0.00
81 T	sec-Butylbenzene	6.393	6.952	-8.7	98	0.00
82 T	1,3-Dichlorobenzene	2.309	2.487	-7.7	102	0.00
83 T	p-Isopropyltoluene	5.429	5.823	-7.3	97	0.00
84 T	1,4-Dichlorobenzene	2.279	2.418	-6.1	97	0.00
85 T	p-Diethylbenzene	3.389	3.597	-6.1	98	0.00
86 T	1,2-Dichlorobenzene	1.991	2.138	-7.4	104	0.00
87 T	n-Butylbenzene	7.092	7.691	-8.4	99	0.00
88 T	1,2-Dibromo-3-chloropropane	0.140	0.130	7.1	83	0.00
89 T	1,2,4,5-Tetramethylbenzene	4.811	5.109	-6.2	98	0.00
90 T	1,2,4-Trichlorobenzene	1.311	1.300	0.8	94	0.00
91 T	Hexachloro-1,3-Butadiene	0.770	0.764	0.8	94	0.00
92 T	Naphthalene	2.118	1.967	7.1	92	0.00
93 T	1,2,3-Trichlorobenzene	1.011	0.971	4.0	93	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



# **ATTACHMENT P** **UST Removal Documentation**



# UST Closure and Removal Documentation



# MERCURY TANK & PUMP SERVICE, INC.

88 Cabot Road  
Massapequa, N.Y. 11758  
(917) 559-5519



New York City Fire Department  
Bulk Safety Unit  
9 Metrotech  
Brooklyn, N.Y. 11201

Re: 11-28 31<sup>ST</sup> Drive Queens; permanent removal of one 550 gallon underground gasoline tank

## AFFIDAVIT

In accordance with FC 3404-01, the permanent removal of one 550 gallon underground gasoline tank at 11-28 31<sup>ST</sup> Drive Queens has been completed.

- 1) The contents of the tanks were completely removed.
- 2) The tanks were thoroughly cleaned and purged of combustible vapors
- 3) All pipes were removed
- 4) The fill boxes were removed
- 5) The tanks were removed from the ground and disposed of off site
- 6) This work was completed on 16, October 2017

Sincerely

A handwritten signature in black ink, appearing to read "Mark Salamack".

Mark Salamack

Underground Tank Installer

Certificate of License #80151715 (Expires 16, June 2018)

LASSALLE BEST JR.  
Notary Public, State of New York  
No. 24-0279100  
Qualified in Queens County  
Commission Expires March 30, 19

Sworn before me this 23 day of OCT, 2017

A handwritten signature in black ink, appearing to read "Lassalle Best Jr.".

Notary Public





PBS # :  
2-612618

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
Petroleum Bulk Storage Program  
Facility Information Report

Printed : 12/7/2017

pbsfactrpt\_foil.rpt

Page 1 of 1

Site Information

11-28 31ST DRIVE  
11-28 31ST DRIVE  
ASTORIA, NY 11106

Tax Map Information

Boro/Sec.: Queens  
Block: 502  
Lot: 22

Site Owner Information

GBT REAL ESTATE LLC  
1083 MAPLE LANE  
NEW HYDE PARK, NY 11040  
(917) 416-2002

Mail Correspondent Information

HYDROTECH ENVIRONMENTAL CORP.  
15 OCEAN AVENUE  
SUITE B  
BROOKLYN, NY 11225

Site Phone:

Town: New York City  
Facility Operator: NA

County: Queens

Owner Type : Corporate/Commercial/Other

ATTN: PAUL I. MATLI  
(718) 636-0800

Authorized Representative: GEORGE MAN

Emergency Contact:

Emergency Phone:

Site Status : Unregulated/Closed

Last Inspected:

Site Type: Manufacturing (Other than Chemical)/Processing

Total Active Tanks : 0

Inspected By:

Reg Expires : 06/22/2022

Cert Printed: 06/22/2017

Total Active Capacity : 0

Cert Issued: 06/22/2017

(2) Tank No

(3) Tank Loc

(4) Status

(5) Date Instal

(6) Capacity (gals)

(7) Product

(8) Type

(9) IP

(10) Tank EP

(11) Tank SC

(12) Tank LD

(13) Tank OP

(14) Tank SP

(15) Tank Disp

(16) Pipe Loc

(17) Pipe Type

(18) Pipe EP

(19) Pipe SC

(20) Pipe LD

(21) UDC

(22) Tank Test

(23) Tank Owner

(24) Tank Test

(25) Tank Test

(26) Tank Test

(27) Tank Test

(28) Tank Test

(29) Tank Test

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(285) Tank Test



PETROLEUM BULK STORAGE APPLICATION - SECTION B - TANK INFORMATION - CODE KEYS

Action (1)

- 1. Initial Listing
- 2. Add Tank
- 3. Close/Remove Tank
- 4. Information Correction
- 5. Recondition/Repair/Reline

Tank Location (3)

- 1. Aboveground-contact w/soil
- 2. Aboveground-contact w/impervious barrier
- 3. Aboveground on saddles, leggs, stilts, rack or cradle
- 4. Tank 10% or more below ground
- 5. Underground including vaulted with no access for inspection
- 6. Aboveground in Subterranean

Status (4)

- 1. In-service
- 2. Out-of-service
- 3. Closed-Removed
- 4. Closed- In Place
- 5. Tank converted to Non-Regulated use

Products Stored (7)

Heating Oils: On-Site

Consumption

- 0001. #2 Fuel Oil
- 0002. #4 Fuel Oil
- 0259. #5 Fuel Oil
- 0003. #6 Fuel Oil
- 0012. Kerosene
- 0591. Clarified Oil
- 2711. Biodiesel (Heating)
- 2642. Used Oil (Heating)

Heating Oils: Resale/

Redistribution

- 2718. #2 Fuel Oil
- 2719. #4 Fuel Oil
- 2720. #5 Fuel Oil
- 2721. #6 Fuel Oil
- 2722. Kerosene
- 2723. Clarified Oil
- 2724. Biodiesel (Heating)

Motor Fuels

- 0009. Gasoline
- 2712. Gasoline/Ethanol
- 0008. Diesel
- 2710. Biodiesel
- 0011. Jet Fuel
- 1044. Jet Fuel (Biofuel)
- 2641. Aviation Gasoline

Lubricating/Cutting Oils

- 0013. Lube Oil
- 0015. Motor Oil
- 1045. Gear/Spindle Oil
- 0010. Hydraulic Oil
- 0007. Cutting Oil
- 0021. Transmission Fluid
- 1836. Turbine Oil

Oils Used as Building Materials

- 2626. Asphaltic Emulsions
- 0748. Form Oil

Petroleum Spirits

- 0014. White/Mineral Spirits
- 1731. Nantha

Mineral/Insulating Oils

- 0020. Insulating Oil (e.g., Transformer, Cable Oil)
- 2630. Mineral Oil

Waste/Used/Other Oils

- 0022 Waste/Used Oil
- 9999. Other-Please list:\*

Crude Oil

- 0006. Crude Oil
- 0701. Crude Oil Fractions

Tank Type. (8)

- 01. Steel/Carbon Steel/Iron
- 02. Galvanized Steel Alloy
- 03. Stainless Steel Alloy
- 04. Fiberglass Coated Steel
- 05. Steel Tank in Concrete
- 06. Fiberglass Reinforced Plastic (FRP)
- 07. Plastic
- 08. Equivalent Technology
- 09. Concrete
- 10. Urethane Clad Steel
- 99. Other-Please list:\*

Internal Protection (9)

- 00. None
- 01 Epoxy Liner
- 02. Rubber Liner
- 03. Fiberglass Liner (FRP)
- 04. Glass Liner
- 99. Other-Please list:\*

External Protection (10/18)

- 00. None
- 01. Painted/Asphalt Coating
- 02. Original Sacrificial Anode
- 03. Original Impressed Current
- 04. Fiberglass
- 05. Jacketed
- 06. Wrapped (Piping)
- 07 Retrofitted Sacrificial Anode
- 08. Retrofitted Impressed Current
- 09. Urethane

Tank Secondary Containment (11)

- 00. None
- 01. Diking (AST Only)
- 02. Vault (w/access)
- 03. Vault (w/o access)
- 04. Double-Walled (UST Only)
- 05. Synthetic Liner
- 06. Remote Impounding Area
- 07. Excavation Liner
- 09. Modified Double-Walled (AST Only)
- 10. Impervious Underlayment (AST Only)\*\*
- 11. Double Bottom (AST Only)\*\*
- 12. Double-Walled (AST Only)
- 99. Other - Please List:\*

Tank Leak Detection (12)

- 00. None
- 01. Interstitial Electronic Monitoring
- 02. Interstitial Manual Monitoring
- 03. Vapor Well
- 04. Groundwater Well
- 05. In-Tank System (Auto Tank Gauge)
- 06. Impervious Barrier/Concrete Pad (AST Only)
- 07. Statistical Inventory Reconciliation (SIR)
- 08. Weep holes in vaults with no access for inspection.

Overfill Protection (13)

- 00. None
- 01. Float Vent Valve
- 02. High Level Alarm
- 03. Automatic Shut-Off
- 04. Product Level Gauge (AST)
- 05. Vent Whistle
- 99. Other-Please list:\*

Spill Prevention (14)

- 00. None
- 01. Catch Basin
- 99. Other-Please list:\*

Pumping/Dispensing Method (15)

- 00. None
- 01. Pressurized Dispenser
- 02. Suction Dispenser
- 03. Gravity
- 04. On-Site Heating System (Suction)
- 05. On-Site Heating System (Supply/Return)
- 06. Tank-Mounted Dispenser

Piping Location (16)

- 00. No Piping
- 01. Aboveground
- 02. Underground/On-ground
- 03. Aboveground/Underground Combination

Piping Type. (17)

- 00. None
- 01. Steel/Carbon Steel/Iron
- 02. Galvanized Steel
- 03. Stainless Steel Alloy
- 04. Fiberglass Coated Steel
- 05. Steel Encased in Concrete
- 06. Fiberglass Reinforced Plastic (FRP)
- 07. Plastic
- 08. Equivalent Technology
- 09. Concrete
- 10. Copper
- 11. Flexible Piping

Piping Secondary Containment (19)

- 00. None
- 01. Diking (Aboveground Only)
- 02. Vault (w/access)
- 04. Double-Walled (Underground Only)
- 06. Remote Impounding Area
- 07. Trench Liner
- 12. Double-Walled (Aboveground Only)
- 99. Other - Please List:\*

Pipe Leak Detection (20)

- 00. None
- 01. Interstitial Electronic Monitoring
- 02. Interstitial Manual Monitoring
- 03. Vapor Well
- 04. Groundwater Well
- 07. Pressurized Piping Leak Detector
- 09. Exempt Suction Piping
- 10. Statistical Inventory Reconciliation (SIR)
- 99. Other-Please list:\*

Under Dispenser Containment (UDC) (21)

Check Box if Present \_\_\_\_\_

\* If other, please list on a separate sheet including tank number

\*\* Each of these codes must be combined with code 01 or 06 to meet compliance requirements



# UST Sediment Lab Report





# Technical Report

prepared for:

## **Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 11/03/2017

**Client Project ID: #170154 11-28 31 Drive, LIC NY**

York Project (SDG) No.: 17J1208

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371



132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)



**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

---

**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on October 30, 2017 and listed below. The project was identified as your project: **#170154 11-28 31 Drive, LIC NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
17J1208-01	Sediments from UST	Soil	10/27/2017	10/30/2017

**General Notes for York Project (SDG) No.: 17J1208**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 11/03/2017







## Sample Information

**Client Sample ID:** Sediments from UST

**York Sample ID:** 17J1208-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

17J1208

#170154 11-28 31 Drive, LIC NY

Soil

October 27, 2017 3:00 pm

10/30/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
563-58-6	1,1-Dichloropropylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
142-28-9	1,3-Dichloropropane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
123-91-1	1,4-Dioxane	ND		ug/kg dry	64	130	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR





## Sample Information

**Client Sample ID:** Sediments from UST

**York Sample ID:** 17J1208-01

**York Project (SDG) No.**

17J1208

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 27, 2017 3:00 pm

**Date Received**

10/30/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
594-20-7	2,2-Dichloropropane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
78-93-3	2-Butanone	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
95-49-8	2-Chlorotoluene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
106-43-4	4-Chlorotoluene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
67-64-1	Acetone	54		ug/kg dry	6.4	13	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
71-43-2	Benzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
108-86-1	Bromobenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
74-97-5	Bromochloromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
75-25-2	Bromoform	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
74-83-9	Bromomethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
108-90-7	Chlorobenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
75-00-3	Chloroethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
67-66-3	Chloroform	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
74-87-3	Chloromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
74-95-3	Dibromomethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 12:02	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 07:30	11/01/2017 12:02	SR





## Sample Information

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**York Sample ID:** 17J1208-01

**York Project (SDG) No.**

17J1208

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

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October 27, 2017 3:00 pm

**Date Received**

10/30/2017

### Volatile Organics, 8260 List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
75-09-2	Methylene chloride	ND		ug/kg dry	6.4	13	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
91-20-3	Naphthalene	ND		ug/kg dry	3.2	13	1	EPA 8260C Certifications:	11/01/2017 07:30 NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 12:02	SR
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
95-47-6	o-Xylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/01/2017 12:02	SR
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	6.4	13	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NELAC-NY10854	11/01/2017 12:02	SR
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
100-42-5	Styrene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
127-18-4	Tetrachloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
108-88-3	Toluene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
79-01-6	Trichloroethylene	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
108-05-4	Vinyl acetate	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 NELAC-NY10854-CT,NJDEP,NELAC-NY10854-	11/01/2017 12:02	SR
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
1330-20-7	Xylenes, Total	ND		ug/kg dry	9.5	19	1	EPA 8260C Certifications:	11/01/2017 07:30 CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 12:02	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %	77-125								
2037-26-5	Surrogate: Toluene-d8	106 %	85-120								
460-00-4	Surrogate: p-Bromofluorobenzene	100 %	76-130								





## Sample Information

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**Matrix**

Soil

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10/30/2017

### Volatile Organics, TCLP RCRA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-35-4	1,1-Dichloroethylene	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
78-93-3	2-Butanone	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
71-43-2	Benzene	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
56-23-5	Carbon tetrachloride	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
108-90-7	Chlorobenzene	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
67-66-3	Chloroform	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
127-18-4	Tetrachloroethylene	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
79-01-6	Trichloroethylene	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS
75-01-4	Vinyl Chloride	ND		ug/L	25	50	10	EPA 8260C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,NELAC-N	11/01/2017 07:30	11/01/2017 19:08	SS

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	120 %	77-125
460-00-4	Surrogate: p-Bromofluorobenzene	103 %	76-130
2037-26-5	Surrogate: Toluene-d8	88.3 %	85-120

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: NELAC-NY10854-CT,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR





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10/30/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	114	227	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
95-57-8	2-Chlorophenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
95-48-7	2-Methylphenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
88-74-4	2-Nitroaniline	ND		ug/kg dry	114	227	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
88-75-5	2-Nitrophenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
99-09-2	3-Nitroaniline	ND		ug/kg dry	114	227	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	114	227	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
106-47-8	4-Chloroaniline	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
100-01-6	4-Nitroaniline	ND		ug/kg dry	114	227	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
100-02-7	4-Nitrophenol	ND		ug/kg dry	114	227	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
83-32-9	Acenaphthene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications:	11/02/2017 07:29 CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR
62-53-3	Aniline	ND		ug/kg dry	228	456	2	EPA 8270D Certifications:	11/02/2017 07:29 NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 21:18	SR





## Sample Information

**Client Sample ID:** Sediments from UST

**York Sample ID:** 17J1208-01

**York Project (SDG) No.**

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**Matrix**

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17J1208

#170154 11-28 31 Drive, LIC NY

Soil

October 27, 2017 3:00 pm

10/30/2017

### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-12-7	Anthracene	102	J	ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
56-55-3	Benzo(a)anthracene	361		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
50-32-8	Benzo(a)pyrene	337		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
205-99-2	Benzo(b)fluoranthene	300		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
191-24-2	Benzo(g,h,i)perylene	227		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
207-08-9	Benzo(k)fluoranthene	330		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
100-51-6	Benzyl alcohol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
117-81-7	Bis(2-ethylhexyl)phthalate	90.1	J	ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
218-01-9	Chrysene	358		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
53-70-3	Dibenzo(a,h)anthracene	79.1	J	ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
132-64-9	Dibenzofuran	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
84-66-2	Diethyl phthalate	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
131-11-3	Dimethyl phthalate	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
84-74-2	Di-n-butyl phthalate	232		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
206-44-0	Fluoranthene	767		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
86-73-7	Fluorene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
118-74-1	Hexachlorobenzene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR





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**Matrix**

Soil

**Collection Date/Time**

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**Date Received**

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### Semi-Volatiles, 8270 Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
67-72-1	Hexachloroethane	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
193-39-5	<b>Indeno(1,2,3-cd)pyrene</b>	<b>207</b>		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
78-59-1	Isophorone	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
91-20-3	Naphthalene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
98-95-3	Nitrobenzene	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
87-86-5	Pentachlorophenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
85-01-8	<b>Phenanthrene</b>	<b>460</b>		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
108-95-2	Phenol	ND		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
129-00-0	<b>Pyrene</b>	<b>596</b>		ug/kg dry	57.0	114	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
110-86-1	Pyridine	ND		ug/kg dry	228	456	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 07:29	11/02/2017 21:18	SR
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
367-12-4	Surrogate: 2-Fluorophenol	63.7 %	20-108								
4165-62-2	Surrogate: Phenol-d5	65.4 %	23-114								
4165-60-0	Surrogate: Nitrobenzene-d5	52.6 %	22-108								
321-60-8	Surrogate: 2-Fluorobiphenyl	57.0 %	21-113								
118-79-6	Surrogate: 2,4,6-Tribromophenol	69.0 %	19-110								
1718-51-0	Surrogate: Terphenyl-d14	49.0 %	24-116								

### Semi-Volatiles, TCLP RCRA Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-46-7	1,4-Dichlorobenzene	ND		ug/L	6.45	10.0	1	EPA 8270D/1311 Certifications: NELAC-NY10854-CT,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	7.22	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH





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### Semi-Volatiles, TCLP RCRA Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	6.54	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/L	4.73	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
95-48-7	2-Methylphenol	ND		ug/L	1.71	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/L	7.43	20.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
1319-77-3	Cresols, total	ND		ug/L	7.40	30.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT	11/01/2017 14:20	11/02/2017 15:22	KH
118-74-1	Hexachlorobenzene	ND		ug/L	5.91	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
87-68-3	Hexachlorobutadiene	ND		ug/L	6.62	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
67-72-1	Hexachloroethane	ND		ug/L	7.26	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
98-95-3	Nitrobenzene	ND		ug/L	3.93	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
87-86-5	Pentachlorophenol	ND		ug/L	7.53	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
110-86-1	Pyridine	ND		ug/L	6.37	10.0	1	EPA 8270D/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 14:20	11/02/2017 15:22	KH
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
367-12-4	Surrogate: 2-Fluorophenol	72.7 %			11-76						
4165-62-2	Surrogate: Phenol-d5	50.5 %			10-62						
4165-60-0	Surrogate: Nitrobenzene-d5	53.6 %			15-105						
321-60-8	Surrogate: 2-Fluorobiphenyl	86.0 %			17-100						
118-79-6	Surrogate: 2,4,6-Tribromophenol	94.6 %			15-148						
1718-51-0	Surrogate: Terphenyl-d14	79.4 %			22-88						

### Pesticides, TCLP RCRA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
57-74-9	Chlordane, total	ND		ug/L	0.222	0.222	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 09:02	11/01/2017 14:26	SA
72-20-8	Endrin	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 09:02	11/01/2017 14:26	SA
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 09:02	11/01/2017 14:26	SA
76-44-8	Heptachlor	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 09:02	11/01/2017 14:26	SA
1024-57-3	Heptachlor epoxide	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 09:02	11/01/2017 14:26	SA





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### Pesticides, TCLP RCRA List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3510C/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-43-5	Methoxychlor	ND		ug/L	0.0444	0.0444	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 09:02	11/01/2017 14:26	SA
8001-35-2	Toxaphene	ND		ug/L	1.11	1.11	1	EPA 8081B/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/01/2017 09:02	11/01/2017 14:26	SA
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
877-09-8	Surrogate: Tetrachloro-m-xylene	78.2 %			30-120						
2051-24-3	Surrogate: Decachlorobiphenyl	81.9 %			30-120						

### Herbicides, TCLP Target List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3535A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
93-72-1	2,4,5-TP (Silvex)	ND		ug/L	5.00	1	EPA 8151A/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP	11/02/2017 08:34	11/02/2017 10:30	LAB
94-75-7	2,4-D	ND		ug/L	5.00	1	EPA 8151A/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP	11/02/2017 08:34	11/02/2017 10:30	LAB
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>					
19719-28-9	Surrogate: 2,4-Dichlorophenylacetic acid (L	88.6 %			30-150					

### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	8180	B	mg/kg dry	6.82	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-36-0	Antimony	3.74		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-38-2	Arsenic	4.57		mg/kg dry	1.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-39-3	Barium	88.5		mg/kg dry	1.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-41-7	Beryllium	ND		mg/kg dry	0.136	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-43-9	Cadmium	ND		mg/kg dry	0.409	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-70-2	Calcium	49500		mg/kg dry	6.82	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-47-3	Chromium	16.4		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-48-4	Cobalt	8.01		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML





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### Metals, Target Analyte

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	Copper	36.9		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7439-89-6	Iron	31600		mg/kg dry	2.73	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7439-92-1	Lead	179		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7439-95-4	Magnesium	2930		mg/kg dry	6.82	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7439-96-5	Manganese	353		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-02-0	Nickel	7.93		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-09-7	Potassium	1020		mg/kg dry	6.82	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7782-49-2	Selenium	3.42		mg/kg dry	1.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-22-4	Silver	ND		mg/kg dry	0.682	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-23-5	Sodium	129		mg/kg dry	13.6	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-28-0	Thallium	ND		mg/kg dry	1.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-62-2	Vanadium	17.9		mg/kg dry	1.36	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML
7440-66-6	Zinc	109		mg/kg dry	2.05	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	10/31/2017 12:10	11/01/2017 06:05	KML

### Metals, TCLP RCRA

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 14:34	11/03/2017 10:36	KML
7440-39-3	Barium	0.640	B	mg/L	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 14:34	11/03/2017 10:36	KML
7440-43-9	Cadmium	0.004		mg/L	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 14:34	11/03/2017 10:36	KML
7440-47-3	Chromium	ND		mg/L	0.006	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 14:34	11/03/2017 10:36	KML
7439-92-1	Lead	0.018		mg/L	0.006	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 14:34	11/03/2017 10:36	KML
7782-49-2	Selenium	0.015	B	mg/L	0.011	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 14:34	11/03/2017 10:36	KML
7440-22-4	Silver	ND		mg/L	0.006	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854-CT,NJDEP,PADEP	11/02/2017 14:34	11/03/2017 10:36	KML





## Sample Information

**Client Sample ID:** Sediments from UST

**York Sample ID:** 17J1208-01

**York Project (SDG) No.**

17J1208

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Soil

**Collection Date/Time**

October 27, 2017 3:00 pm

**Date Received**

10/30/2017

### Mercury by 7473

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.151		mg/kg dry	0.0409	1	EPA 7473	10/31/2017 09:49	10/31/2017 14:26	SY
							Certifications:	CTDOH,NJDEP,NELAC-NY10854-CT,PADEP		

### Mercury TCLP by 7473

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002000	1	EPA 7473/1311	11/02/2017 14:19	11/02/2017 17:01	SY
							Certifications:	NELAC-NY10854-CT,NJDEP,CTDOH		

### Total Solids

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	73.3		%	0.100	1	SM 2540G	11/03/2017 11:22	11/03/2017 15:51	TJM
							Certifications:	CTDOH		

### TCLP Extraction for METALS EPA 1311

### Log-in Notes:

### Sample Notes: EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1	EPA 1311	10/31/2017 20:52	11/01/2017 12:49	TAJ
							Certifications:	NELAC-NY10854-CT,CTDOH,NJDEP,PADEP		

### TCLP Extraction for SVOCS/PEST/HERB

### Log-in Notes:

### Sample Notes: EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP extr. for SVOA/PEST/HERBS

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1	EPA 1311	10/31/2017 18:50	11/01/2017 12:38	TAJ
							Certifications:	NELAC-NY10854-CT,CTDOH,NJDEP,PADEP		

### TCLP Extraction for VOA by EPA 1311 ZHE

### Log-in Notes:

### Sample Notes: EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ZHE for VOA

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		%	1.00	1	EPA 1311	10/31/2017 20:58	11/01/2017 13:13	TAJ
							Certifications:	NELAC-NY10854-CT,CTDOH,NJDEP,PADEP		





## Analytical Batch Summary

**Batch ID:** BJ71593      **Preparation Method:** EPA 7473 soil      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	10/31/17
BJ71593-BLK1	Blank	10/31/17
BJ71593-SRM1	Reference	10/31/17

**Batch ID:** BJ71606      **Preparation Method:** EPA 3050B      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	10/31/17
BJ71606-BLK1	Blank	10/31/17
BJ71606-SRM1	Reference	10/31/17

**Batch ID:** BJ71627      **Preparation Method:** EPA SW 846-1311 TCLP extr. for SV      **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	10/31/17
BJ71627-BLK1	Blank	10/31/17

**Batch ID:** BJ71631      **Preparation Method:** EPA SW 846-1311 TCLP ext. for met      **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	10/31/17
BJ71631-BLK1	Blank	10/31/17

**Batch ID:** BJ71632      **Preparation Method:** EPA SW 846-1311 TCLP ZHE for VC      **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	10/31/17
BJ71632-BLK1	Blank	10/31/17

**Batch ID:** BK70013      **Preparation Method:** EPA 5035A      **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/01/17
BK70013-BLK1	Blank	11/01/17
BK70013-BLK2	Blank	11/01/17
BK70013-BS1	LCS	11/01/17
BK70013-BSD1	LCS Dup	11/01/17

**Batch ID:** BK70023      **Preparation Method:** EPA 3510C/1311      **Prepared By:** TMP

YORK Sample ID	Client Sample ID	Preparation Date
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17J1208-01	Sediments from UST	11/01/17
BK70023-BLK1	Blank	11/01/17
BK70023-BS1	LCS	11/01/17
BK70023-BSD1	LCS Dup	11/01/17

**Batch ID:** BK70047      **Preparation Method:** EPA 5030B/1311      **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/01/17
BK70047-BLK1	Blank	11/01/17
BK70047-BLK2	Blank	11/01/17
BK70047-BS1	LCS	11/01/17
BK70047-BSD1	LCS Dup	11/01/17
BK70047-DUP1	Duplicate	11/01/17

**Batch ID:** BK70048      **Preparation Method:** EPA 3510C/1311      **Prepared By:** TMP

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/01/17
BK70048-BLK1	Blank	11/01/17
BK70048-BS1	LCS	11/01/17
BK70048-BSD1	LCS Dup	11/01/17
BK70048-DUP1	Duplicate	11/01/17

**Batch ID:** BK70078      **Preparation Method:** EPA 3550C      **Prepared By:** SGM

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/02/17
BK70078-BLK1	Blank	11/02/17
BK70078-BS1	LCS	11/02/17

**Batch ID:** BK70088      **Preparation Method:** EPA 3535A/1311      **Prepared By:** CM

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/02/17
BK70088-BLK1	Blank	11/02/17
BK70088-BS1	LCS	11/02/17
BK70088-BSD1	LCS Dup	11/02/17

**Batch ID:** BK70118      **Preparation Method:** EPA 7473 water      **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/02/17
BK70118-BLK1	Blank	11/02/17
BK70118-SRM1	Reference	11/02/17





**Batch ID:** BK70119

**Preparation Method:** EPA 3015A/1311

**Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/02/17
BK70119-BLK1	Blank	11/02/17
BK70119-BLK2	Blank	11/02/17
BK70119-SRM1	Reference	11/02/17

**Batch ID:** BK70195

**Preparation Method:** % Solids Prep

**Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
17J1208-01	Sediments from UST	11/03/17





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70013 - EPA 5035A

#### Blank (BK70013-BLK1)

Prepared & Analyzed: 11/01/2017

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,1-Dichloropropylene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,3-Trichloropropane	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"
1,2,4-Trimethylbenzene	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	5.0	"
1,2-Dibromoethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3,5-Trimethylbenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
1,4-Dioxane	ND	100	"
2,2-Dichloropropane	ND	5.0	"
2-Butanone	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Acetone	ND	10	"
Benzene	ND	5.0	"
Bromobenzene	ND	5.0	"
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
cis-1,2-Dichloroethylene	ND	5.0	"
cis-1,3-Dichloropropylene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
Dibromomethane	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
Ethyl Benzene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
Methyl tert-butyl ether (MTBE)	ND	5.0	"
Methylene chloride	ND	10	"
Naphthalene	2.8	10	"
n-Butylbenzene	ND	5.0	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70013 - EPA 5035A

##### Blank (BK70013-BLK1)

Prepared & Analyzed: 11/01/2017

n-Propylbenzene	ND	5.0	ug/kg wet
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
Trichloroethylene	ND	5.0	"
Trichlorofluoromethane	ND	5.0	"
Vinyl acetate	ND	5.0	"
Vinyl Chloride	ND	5.0	"
Xylenes, Total	ND	15	"

Surrogate: 1,2-Dichloroethane-d4	49.8	ug/L	50.0	99.5	77-125
Surrogate: Toluene-d8	49.8	"	50.0	99.6	85-120
Surrogate: p-Bromofluorobenzene	47.5	"	50.0	95.0	76-130

##### Blank (BK70013-BLK2)

Prepared & Analyzed: 11/01/2017

1,1,1,2-Tetrachloroethane	ND	500	ug/kg wet
1,1,1-Trichloroethane	ND	500	"
1,1,2,2-Tetrachloroethane	ND	500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	"
1,1,2-Trichloroethane	ND	500	"
1,1-Dichloroethane	ND	500	"
1,1-Dichloroethylene	ND	500	"
1,1-Dichloropropylene	ND	500	"
1,2,3-Trichlorobenzene	ND	500	"
1,2,3-Trichloropropane	ND	500	"
1,2,4-Trichlorobenzene	ND	500	"
1,2,4-Trimethylbenzene	ND	500	"
1,2-Dibromo-3-chloropropane	ND	500	"
1,2-Dibromoethane	ND	500	"
1,2-Dichlorobenzene	ND	500	"
1,2-Dichloroethane	ND	500	"
1,2-Dichloropropane	ND	500	"
1,3,5-Trimethylbenzene	ND	500	"
1,3-Dichlorobenzene	ND	500	"
1,3-Dichloropropane	ND	500	"
1,4-Dichlorobenzene	ND	500	"
1,4-Dioxane	ND	10000	"
2,2-Dichloropropane	ND	500	"
2-Butanone	ND	500	"
2-Chlorotoluene	ND	500	"
4-Chlorotoluene	ND	500	"
Acetone	ND	1000	"
Benzene	ND	500	"
Bromobenzene	ND	500	"
Bromochloromethane	ND	500	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70013 - EPA 5035A

#### Blank (BK70013-BLK2)

Prepared & Analyzed: 11/01/2017

Bromodichloromethane	ND	500	ug/kg wet								
Bromoform	ND	500	"								
Bromomethane	ND	500	"								
Carbon tetrachloride	ND	500	"								
Chlorobenzene	ND	500	"								
Chloroethane	ND	500	"								
Chloroform	ND	500	"								
Chloromethane	ND	500	"								
cis-1,2-Dichloroethylene	ND	500	"								
cis-1,3-Dichloropropylene	ND	500	"								
Dibromochloromethane	ND	500	"								
Dibromomethane	ND	500	"								
Dichlorodifluoromethane	ND	500	"								
Ethyl Benzene	ND	500	"								
Hexachlorobutadiene	ND	500	"								
Isopropylbenzene	ND	500	"								
Methyl tert-butyl ether (MTBE)	ND	500	"								
Methylene chloride	ND	1000	"								
Naphthalene	ND	1000	"								
n-Butylbenzene	ND	500	"								
n-Propylbenzene	ND	500	"								
o-Xylene	ND	500	"								
p- & m- Xylenes	ND	1000	"								
p-Isopropyltoluene	ND	500	"								
sec-Butylbenzene	ND	500	"								
Styrene	ND	500	"								
tert-Butylbenzene	ND	500	"								
Tetrachloroethylene	ND	500	"								
Toluene	ND	500	"								
trans-1,2-Dichloroethylene	ND	500	"								
trans-1,3-Dichloropropylene	ND	500	"								
Trichloroethylene	ND	500	"								
Trichlorofluoromethane	ND	500	"								
Vinyl acetate	ND	500	"								
Vinyl Chloride	ND	500	"								
Xylenes, Total	ND	1500	"								
Surrogate: 1,2-Dichloroethane-d4	50.3		ug/L	50.0		101	77-125				
Surrogate: Toluene-d8	49.0		"	50.0		97.9	85-120				
Surrogate: p-Bromofluorobenzene	50.2		"	50.0		100	76-130				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BK70013 - EPA 5035A</b>											
<b>LCS (BK70013-BS1)</b>						Prepared & Analyzed: 11/01/2017					
1,1,1,2-Tetrachloroethane	56.0		ug/L	50.0		112	75-129				
1,1,1-Trichloroethane	51.5		"	50.0		103	71-137				
1,1,2,2-Tetrachloroethane	55.3		"	50.0		111	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50.0		"	50.0		100	58-146				
1,1,2-Trichloroethane	56.7		"	50.0		113	83-123				
1,1-Dichloroethane	53.9		"	50.0		108	75-130				
1,1-Dichloroethylene	104		"	25.0		415	64-137	High Bias			
1,1-Dichloropropylene	51.9		"	50.0		104	77-127				
1,2,3-Trichlorobenzene	57.5		"	50.0		115	81-140				
1,2,3-Trichloropropane	54.7		"	50.0		109	81-126				
1,2,4-Trichlorobenzene	60.9		"	50.0		122	80-141				
1,2,4-Trimethylbenzene	54.7		"	50.0		109	84-125				
1,2-Dibromo-3-chloropropane	55.5		"	50.0		111	74-142				
1,2-Dibromoethane	55.4		"	50.0		111	86-123				
1,2-Dichlorobenzene	56.6		"	50.0		113	85-122				
1,2-Dichloroethane	52.9		"	50.0		106	71-133				
1,2-Dichloropropane	54.5		"	50.0		109	81-122				
1,3,5-Trimethylbenzene	54.0		"	50.0		108	82-126				
1,3-Dichlorobenzene	57.9		"	50.0		116	84-124				
1,3-Dichloropropane	55.4		"	50.0		111	83-123				
1,4-Dichlorobenzene	58.4		"	50.0		117	84-124				
1,4-Dioxane	1180		"	1000		118	10-228				
2,2-Dichloropropane	52.8		"	50.0		106	67-136				
2-Butanone	81.3		"	50.0		163	58-147	High Bias			
2-Chlorotoluene	54.1		"	50.0		108	78-127				
4-Chlorotoluene	56.0		"	50.0		112	79-125				
Acetone	34.2		"	50.0		68.3	36-155				
Benzene	52.1		"	50.0		104	77-127				
Bromobenzene	54.2		"	50.0		108	77-129				
Bromochloromethane	50.1		"	50.0		100	74-129				
Bromodichloromethane	59.4		"	50.0		119	81-124				
Bromoform	57.3		"	50.0		115	80-136				
Bromomethane	47.5		"	50.0		94.9	32-177				
Carbon tetrachloride	54.1		"	50.0		108	66-143				
Chlorobenzene	55.0		"	50.0		110	86-120				
Chloroethane	45.1		"	50.0		90.2	51-142				
Chloroform	51.6		"	50.0		103	76-131				
Chloromethane	46.5		"	50.0		93.0	49-132				
cis-1,2-Dichloroethylene	52.1		"	50.0		104	74-132				
cis-1,3-Dichloropropylene	57.4		"	50.0		115	81-129				
Dibromochloromethane	58.2		"	50.0		116	10-200				
Dibromomethane	54.9		"	50.0		110	83-124				
Dichlorodifluoromethane	42.2		"	50.0		84.4	28-158				
Ethyl Benzene	58.0		"	50.0		116	84-125				
Hexachlorobutadiene	53.8		"	50.0		108	83-133				
Isopropylbenzene	53.9		"	50.0		108	81-127				
Methyl tert-butyl ether (MTBE)	50.8		"	50.0		102	74-131				
Methylene chloride	47.8		"	50.0		95.5	57-141				
Naphthalene	57.3		"	50.0		115	86-141				
n-Butylbenzene	58.9		"	50.0		118	80-130				
n-Propylbenzene	58.2		"	50.0		116	74-136				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BK70013 - EPA 5035A</b>											
<b>LCS (BK70013-BS1)</b>						Prepared & Analyzed: 11/01/2017					
o-Xylene	54.4		ug/L	50.0		109	83-123				
p- & m- Xylenes	114		"	100		114	82-128				
p-Isopropyltoluene	55.8		"	50.0		112	85-125				
sec-Butylbenzene	56.6		"	50.0		113	83-125				
Styrene	57.1		"	50.0		114	86-126				
tert-Butylbenzene	54.1		"	50.0		108	80-127				
Tetrachloroethylene	52.3		"	50.0		105	80-129				
Toluene	56.6		"	50.0		113	85-121				
trans-1,2-Dichloroethylene	51.6		"	50.0		103	72-132				
trans-1,3-Dichloropropylene	60.4		"	50.0		121	78-132				
Trichloroethylene	54.8		"	50.0		110	84-123				
Trichlorofluoromethane	45.0		"	50.0		89.9	62-140				
Vinyl acetate	60.3		"	50.0		121	67-136				
Vinyl Chloride	46.0		"	50.0		92.0	52-130				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>49.3</i>		<i>"</i>	<i>50.0</i>		<i>98.7</i>	<i>77-125</i>				
<i>Surrogate: Toluene-d8</i>	<i>50.6</i>		<i>"</i>	<i>50.0</i>		<i>101</i>	<i>85-120</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>49.6</i>		<i>"</i>	<i>50.0</i>		<i>99.1</i>	<i>76-130</i>				
<b>LCS Dup (BK70013-BSD1)</b>						Prepared & Analyzed: 11/01/2017					
1,1,1,2-Tetrachloroethane	54.7		ug/L	50.0		109	75-129		2.40	30	
1,1,1-Trichloroethane	52.4		"	50.0		105	71-137		1.64	30	
1,1,2,2-Tetrachloroethane	53.0		"	50.0		106	79-129		4.17	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	52.3		"	50.0		105	58-146		4.45	30	
1,1,2-Trichloroethane	54.1		"	50.0		108	83-123		4.66	30	
1,1-Dichloroethane	54.2		"	50.0		108	75-130		0.592	30	
1,1-Dichloroethylene	109		"	25.0		437	64-137	High Bias	5.26	30	
1,1-Dichloropropylene	53.2		"	50.0		106	77-127		2.63	30	
1,2,3-Trichlorobenzene	58.7		"	50.0		117	81-140		2.10	30	
1,2,3-Trichloropropane	52.8		"	50.0		106	81-126		3.61	30	
1,2,4-Trichlorobenzene	62.7		"	50.0		125	80-141		2.87	30	
1,2,4-Trimethylbenzene	54.5		"	50.0		109	84-125		0.458	30	
1,2-Dibromo-3-chloropropane	55.0		"	50.0		110	74-142		0.905	30	
1,2-Dibromoethane	53.8		"	50.0		108	86-123		3.11	30	
1,2-Dichlorobenzene	56.8		"	50.0		114	85-122		0.265	30	
1,2-Dichloroethane	52.8		"	50.0		106	71-133		0.0946	30	
1,2-Dichloropropane	53.4		"	50.0		107	81-122		2.09	30	
1,3,5-Trimethylbenzene	51.9		"	50.0		104	82-126		3.91	30	
1,3-Dichlorobenzene	56.8		"	50.0		114	84-124		1.94	30	
1,3-Dichloropropane	54.8		"	50.0		110	83-123		1.09	30	
1,4-Dichlorobenzene	58.4		"	50.0		117	84-124		0.0685	30	
1,4-Dioxane	1160		"	1000		116	10-228		1.58	30	
2,2-Dichloropropane	54.0		"	50.0		108	67-136		2.17	30	
2-Butanone	75.8		"	50.0		152	58-147	High Bias	6.91	30	
2-Chlorotoluene	56.9		"	50.0		114	78-127		4.99	30	
4-Chlorotoluene	55.1		"	50.0		110	79-125		1.71	30	
Acetone	39.6		"	50.0		79.1	36-155		14.7	30	
Benzene	53.7		"	50.0		107	77-127		3.02	30	
Bromobenzene	51.3		"	50.0		103	77-129		5.37	30	
Bromochloromethane	52.2		"	50.0		104	74-129		4.13	30	
Bromodichloromethane	56.2		"	50.0		112	81-124		5.54	30	
Bromoform	55.4		"	50.0		111	80-136		3.43	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70013 - EPA 5035A

#### LCS Dup (BK70013-BSD1)

Prepared & Analyzed: 11/01/2017

Bromomethane	46.4		ug/L	50.0		92.7	32-177		2.39	30	
Carbon tetrachloride	54.4		"	50.0		109	66-143		0.700	30	
Chlorobenzene	56.0		"	50.0		112	86-120		1.84	30	
Chloroethane	47.4		"	50.0		94.9	51-142		5.10	30	
Chloroform	53.3		"	50.0		107	76-131		3.28	30	
Chloromethane	46.5		"	50.0		93.1	49-132		0.107	30	
cis-1,2-Dichloroethylene	56.2		"	50.0		112	74-132		7.52	30	
cis-1,3-Dichloropropylene	56.0		"	50.0		112	81-129		2.52	30	
Dibromochloromethane	58.4		"	50.0		117	10-200		0.257	30	
Dibromomethane	56.1		"	50.0		112	83-124		2.23	30	
Dichlorodifluoromethane	41.6		"	50.0		83.2	28-158		1.41	30	
Ethyl Benzene	56.6		"	50.0		113	84-125		2.44	30	
Hexachlorobutadiene	53.8		"	50.0		108	83-133		0.149	30	
Isopropylbenzene	54.0		"	50.0		108	81-127		0.148	30	
Methyl tert-butyl ether (MTBE)	51.7		"	50.0		103	74-131		1.78	30	
Methylene chloride	47.5		"	50.0		95.1	57-141		0.504	30	
Naphthalene	56.9		"	50.0		114	86-141		0.735	30	
n-Butylbenzene	58.8		"	50.0		118	80-130		0.153	30	
n-Propylbenzene	54.8		"	50.0		110	74-136		5.88	30	
o-Xylene	55.1		"	50.0		110	83-123		1.22	30	
p- & m- Xylenes	113		"	100		113	82-128		0.733	30	
p-Isopropyltoluene	55.1		"	50.0		110	85-125		1.17	30	
sec-Butylbenzene	55.3		"	50.0		111	83-125		2.25	30	
Styrene	55.4		"	50.0		111	86-126		2.90	30	
tert-Butylbenzene	54.7		"	50.0		109	80-127		0.974	30	
Tetrachloroethylene	49.6		"	50.0		99.2	80-129		5.32	30	
Toluene	55.4		"	50.0		111	85-121		2.20	30	
trans-1,2-Dichloroethylene	52.5		"	50.0		105	72-132		1.84	30	
trans-1,3-Dichloropropylene	58.8		"	50.0		118	78-132		2.58	30	
Trichloroethylene	53.8		"	50.0		108	84-123		1.93	30	
Trichlorofluoromethane	47.2		"	50.0		94.3	62-140		4.78	30	
Vinyl acetate	63.2		"	50.0		126	67-136		4.70	30	
Vinyl Chloride	45.4		"	50.0		90.8	52-130		1.31	30	
Surrogate: 1,2-Dichloroethane-d4	50.1		"	50.0		100	77-125				
Surrogate: Toluene-d8	49.8		"	50.0		99.6	85-120				
Surrogate: p-Bromofluorobenzene	47.6		"	50.0		95.3	76-130				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70047 - EPA 5030B/1311

##### Blank (BK70047-BLK1)

Prepared & Analyzed: 11/01/2017

1,1-Dichloroethylene	ND	5.0	ug/L								
1,2-Dichloroethane	ND	5.0	"								
1,4-Dichlorobenzene	ND	5.0	"								
2-Butanone	ND	5.0	"								
Benzene	ND	5.0	"								
Carbon tetrachloride	ND	5.0	"								
Chlorobenzene	ND	5.0	"								
Chloroform	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Surrogate: 1,2-Dichloroethane-d4	58.6		"	50.0		117	77-125				
Surrogate: p-Bromofluorobenzene	49.5		"	50.0		99.0	76-130				
Surrogate: Toluene-d8	45.9		"	50.0		91.8	85-120				

##### Blank (BK70047-BLK2)

Prepared & Analyzed: 11/01/2017

1,1-Dichloroethylene	ND	50	ug/L								
1,2-Dichloroethane	ND	50	"								
1,4-Dichlorobenzene	ND	50	"								
2-Butanone	ND	50	"								
Benzene	ND	50	"								
Carbon tetrachloride	ND	50	"								
Chlorobenzene	ND	50	"								
Chloroform	ND	50	"								
Tetrachloroethylene	ND	50	"								
Trichloroethylene	ND	50	"								
Vinyl Chloride	ND	50	"								
Surrogate: 1,2-Dichloroethane-d4	61.4		"	50.0		123	77-125				
Surrogate: p-Bromofluorobenzene	51.0		"	50.0		102	76-130				
Surrogate: Toluene-d8	45.2		"	50.0		90.4	85-120				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70047 - EPA 5030B/1311

##### LCS (BK70047-BS1)

Prepared & Analyzed: 11/01/2017

1,1-Dichloroethylene	55		ug/L	25.0		220	68-134	High Bias		
1,2-Dichloroethane	58		"	50.0		117	69-133			
1,4-Dichlorobenzene	46		"	50.0		92.9	82-124			
2-Butanone	52		"	50.0		104	44-169			
Benzene	48		"	50.0		96.3	72-134			
Carbon tetrachloride	61		"	50.0		122	62-145			
Chlorobenzene	46		"	50.0		92.8	85-119			
Chloroform	55		"	50.0		111	74-131			
Tetrachloroethylene	49		"	50.0		97.5	78-133			
Trichloroethylene	48		"	50.0		95.6	81-125			
Vinyl Chloride	51		"	50.0		102	42-136			

Surrogate: 1,2-Dichloroethane-d4

59.4

"

50.0

119

77-125

Surrogate: p-Bromofluorobenzene

53.0

"

50.0

106

76-130

Surrogate: Toluene-d8

46.0

"

50.0

92.1

85-120

##### LCS Dup (BK70047-BS1)

Prepared & Analyzed: 11/01/2017

1,1-Dichloroethylene	56		ug/L	25.0		224	68-134	High Bias	1.91	30
1,2-Dichloroethane	61		"	50.0		122	69-133		4.13	30
1,4-Dichlorobenzene	45		"	50.0		90.0	82-124		3.11	30
2-Butanone	51		"	50.0		102	44-169		2.27	30
Benzene	49		"	50.0		98.2	72-134		1.95	30
Carbon tetrachloride	60		"	50.0		121	62-145		0.907	30
Chlorobenzene	47		"	50.0		93.3	85-119		0.537	30
Chloroform	56		"	50.0		112	74-131		1.38	30
Tetrachloroethylene	50		"	50.0		99.5	78-133		2.03	30
Trichloroethylene	47		"	50.0		93.4	81-125		2.31	30
Vinyl Chloride	53		"	50.0		105	42-136		3.44	30

Surrogate: 1,2-Dichloroethane-d4

58.7

"

50.0

117

77-125

Surrogate: p-Bromofluorobenzene

51.9

"

50.0

104

76-130

Surrogate: Toluene-d8

45.7

"

50.0

91.4

85-120





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70047 - EPA 5030B/1311

<b>Duplicate (BK70047-DUP1)</b>		*Source sample: 17J1208-01 (Sediments from UST)					Prepared & Analyzed: 11/01/2017				
1,1-Dichloroethylene	ND	50	ug/L		ND					200	
1,2-Dichloroethane	ND	50	"		ND					200	
1,4-Dichlorobenzene	ND	50	"		ND					200	
2-Butanone	ND	50	"		ND					200	
Benzene	ND	50	"		ND					200	
Carbon tetrachloride	ND	50	"		ND					200	
Chlorobenzene	ND	50	"		ND					200	
Chloroform	ND	50	"		ND					200	
Tetrachloroethylene	ND	50	"		ND					200	
Trichloroethylene	ND	50	"		ND					200	
Vinyl Chloride	ND	50	"		ND					200	
<hr/>											
Surrogate: 1,2-Dichloroethane-d4	61.2		"	50.0		122	77-125				
Surrogate: p-Bromofluorobenzene	51.0		"	50.0		102	76-130				
Surrogate: Toluene-d8	45.0		"	50.0		90.0	85-120				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70048 - EPA 3510C/1311

##### Blank (BK70048-BLK1)

Prepared & Analyzed: 11/01/2017

1,4-Dichlorobenzene	ND	5.00	ug/L								
2,4,5-Trichlorophenol	ND	5.00	"								
2,4,6-Trichlorophenol	ND	5.00	"								
2,4-Dinitrotoluene	ND	5.00	"								
2-Methylphenol	ND	5.00	"								
3- & 4-Methylphenols	ND	10.0	"								
Cresols, total	ND	15.0	"								
Hexachlorobenzene	ND	5.00	"								
Hexachlorobutadiene	ND	5.00	"								
Hexachloroethane	ND	5.00	"								
Nitrobenzene	ND	5.00	"								
Pentachlorophenol	ND	5.00	"								
Pyridine	ND	5.00	"								
Surrogate: 2-Fluorophenol	29.4		"	75.7		38.8	11-76				
Surrogate: Phenol-d5	17.7		"	75.7		23.4	10-62				
Surrogate: Nitrobenzene-d5	28.2		"	53.2		52.9	15-105				
Surrogate: 2-Fluorobiphenyl	38.6		"	51.5		75.0	17-100				
Surrogate: 2,4,6-Tribromophenol	59.8		"	75.5		79.2	15-148				
Surrogate: Terphenyl-d14	29.7		"	50.0		59.4	22-88				

##### LCS (BK70048-BS1)

Prepared: 11/01/2017 Analyzed: 11/02/2017

1,4-Dichlorobenzene	15.1	5.00	ug/L	25.0		60.5	42-82				
2,4,5-Trichlorophenol	18.6	5.00	"	25.0		74.4	36-112				
2,4,6-Trichlorophenol	19.8	5.00	"	25.0		79.0	41-107				
2,4-Dinitrotoluene	21.2	5.00	"	25.0		84.6	41-114				
2-Methylphenol	12.4	5.00	"	25.0		49.6	10-90				
3- & 4-Methylphenols	10.0	10.0	"	25.0		40.1	10-101				
Cresols, total	22.4	15.0	"	50.0		44.8	30-130				
Hexachlorobenzene	20.4	5.00	"	25.0		81.6	27-120				
Hexachlorobutadiene	18.4	5.00	"	25.0		73.4	25-106				
Hexachloroethane	17.7	5.00	"	25.0		70.8	33-84				
Nitrobenzene	16.1	5.00	"	25.0		64.4	32-113				
Pentachlorophenol	19.6	5.00	"	25.0		78.4	19-127				
Pyridine	ND	5.00	"	25.0			10-46	Low Bias			
Surrogate: 2-Fluorophenol	25.0		"	75.7		33.0	11-76				
Surrogate: Phenol-d5	17.1		"	75.7		22.5	10-62				
Surrogate: Nitrobenzene-d5	38.0		"	53.2		71.4	15-105				
Surrogate: 2-Fluorobiphenyl	39.0		"	51.5		75.8	17-100				
Surrogate: 2,4,6-Tribromophenol	104		"	75.5		138	15-148				
Surrogate: Terphenyl-d14	29.9		"	50.0		59.8	22-88				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70048 - EPA 3510C/1311

##### LCS Dup (BK70048-BSD1)

Prepared: 11/01/2017 Analyzed: 11/02/2017

1,4-Dichlorobenzene	15.1	5.00	ug/L	25.0		60.3	42-82		0.265	20	
2,4,5-Trichlorophenol	19.5	5.00	"	25.0		77.9	36-112		4.62	20	
2,4,6-Trichlorophenol	21.0	5.00	"	25.0		84.2	41-107		6.32	20	
2,4-Dinitrotoluene	23.2	5.00	"	25.0		92.6	41-114		9.07	20	
2-Methylphenol	12.8	5.00	"	25.0		51.1	10-90		3.02	20	
3- & 4-Methylphenols	10.9	10.0	"	25.0		43.4	10-101		8.05	20	
Cresols, total	23.6	15.0	"	50.0		47.3	30-130		5.30	20	
Hexachlorobenzene	24.7	5.00	"	25.0		98.8	27-120		19.0	20	
Hexachlorobutadiene	17.3	5.00	"	25.0		69.2	25-106		5.89	20	
Hexachloroethane	14.9	5.00	"	25.0		59.5	33-84		17.4	20	
Nitrobenzene	13.9	5.00	"	25.0		55.5	32-113		14.9	20	
Pentachlorophenol	22.4	5.00	"	25.0		89.6	19-127		13.4	20	
Pyridine	3.46	5.00	"	25.0		13.8	10-46		8.43	20	
Surrogate: 2-Fluorophenol	26.9		"	75.7		35.5	11-76				
Surrogate: Phenol-d5	17.4		"	75.7		23.0	10-62				
Surrogate: Nitrobenzene-d5	37.3		"	53.2		70.2	15-105				
Surrogate: 2-Fluorobiphenyl	39.1		"	51.5		75.8	17-100				
Surrogate: 2,4,6-Tribromophenol	109		"	75.5		145	15-148				
Surrogate: Terphenyl-d14	33.0		"	50.0		66.1	22-88				

##### Duplicate (BK70048-DUP1)

\*Source sample: 17J1208-01 (Sediments from UST)

Prepared: 11/01/2017 Analyzed: 11/02/2017

1,4-Dichlorobenzene	ND	5.00	ug/L		ND					200	
2,4,5-Trichlorophenol	ND	5.00	"		ND					200	
2,4,6-Trichlorophenol	ND	5.00	"		ND					200	
2,4-Dinitrotoluene	ND	5.00	"		ND					200	
2-Methylphenol	ND	5.00	"		ND					200	
3- & 4-Methylphenols	ND	10.0	"		ND					200	
Cresols, total	ND	15.0	"		ND					200	
Hexachlorobenzene	ND	5.00	"		ND					200	
Hexachlorobutadiene	ND	5.00	"		ND					200	
Hexachloroethane	ND	5.00	"		ND					200	
Nitrobenzene	ND	5.00	"		ND					200	
Pentachlorophenol	ND	5.00	"		ND					200	
Pyridine	ND	5.00	"		ND					200	
Surrogate: 2-Fluorophenol	44.1		"	75.7		58.3	11-76				
Surrogate: Phenol-d5	30.9		"	75.7		40.8	10-62				
Surrogate: Nitrobenzene-d5	25.4		"	53.2		47.8	15-105				
Surrogate: 2-Fluorobiphenyl	34.0		"	51.5		66.1	17-100				
Surrogate: 2,4,6-Tribromophenol	73.6		"	75.5		97.5	15-148				
Surrogate: Terphenyl-d14	33.7		"	50.0		67.4	22-88				





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70078 - EPA 3550C

##### Blank (BK70078-BLK1)

Prepared & Analyzed: 11/02/2017

1,2,4-Trichlorobenzene	ND	41.7	ug/kg wet
1,2-Dichlorobenzene	ND	41.7	"
1,3-Dichlorobenzene	ND	41.7	"
1,4-Dichlorobenzene	ND	41.7	"
2,4,5-Trichlorophenol	ND	41.7	"
2,4,6-Trichlorophenol	ND	41.7	"
2,4-Dichlorophenol	ND	41.7	"
2,4-Dimethylphenol	ND	41.7	"
2,4-Dinitrophenol	ND	83.3	"
2,4-Dinitrotoluene	ND	41.7	"
2,6-Dinitrotoluene	ND	41.7	"
2-Chloronaphthalene	ND	41.7	"
2-Chlorophenol	ND	41.7	"
2-Methylnaphthalene	ND	41.7	"
2-Methylphenol	ND	41.7	"
2-Nitroaniline	ND	83.3	"
2-Nitrophenol	ND	41.7	"
3- & 4-Methylphenols	ND	41.7	"
3,3-Dichlorobenzidine	ND	41.7	"
3-Nitroaniline	ND	83.3	"
4,6-Dinitro-2-methylphenol	ND	83.3	"
4-Bromophenyl phenyl ether	ND	41.7	"
4-Chloro-3-methylphenol	ND	41.7	"
4-Chloroaniline	ND	41.7	"
4-Chlorophenyl phenyl ether	ND	41.7	"
4-Nitroaniline	ND	83.3	"
4-Nitrophenol	ND	83.3	"
Acenaphthene	ND	41.7	"
Acenaphthylene	ND	41.7	"
Aniline	ND	167	"
Anthracene	ND	41.7	"
Benzo(a)anthracene	ND	41.7	"
Benzo(a)pyrene	ND	41.7	"
Benzo(b)fluoranthene	ND	41.7	"
Benzo(g,h,i)perylene	ND	41.7	"
Benzo(k)fluoranthene	ND	41.7	"
Benzyl alcohol	ND	41.7	"
Benzyl butyl phthalate	ND	41.7	"
Bis(2-chloroethoxy)methane	ND	41.7	"
Bis(2-chloroethyl)ether	ND	41.7	"
Bis(2-chloroisopropyl)ether	ND	41.7	"
Bis(2-ethylhexyl)phthalate	ND	41.7	"
Chrysene	ND	41.7	"
Dibenzo(a,h)anthracene	ND	41.7	"
Dibenzofuran	ND	41.7	"
Diethyl phthalate	ND	41.7	"
Dimethyl phthalate	ND	41.7	"
Di-n-butyl phthalate	ND	41.7	"
Di-n-octyl phthalate	ND	41.7	"
Fluoranthene	ND	41.7	"
Fluorene	ND	41.7	"





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70078 - EPA 3550C

##### Blank (BK70078-BLK1)

Prepared & Analyzed: 11/02/2017

Hexachlorobenzene	ND	41.7	ug/kg wet
Hexachlorobutadiene	ND	41.7	"
Hexachlorocyclopentadiene	ND	41.7	"
Hexachloroethane	ND	41.7	"
Indeno(1,2,3-cd)pyrene	ND	41.7	"
Isophorone	ND	41.7	"
Naphthalene	ND	41.7	"
Nitrobenzene	ND	41.7	"
N-Nitrosodimethylamine	ND	41.7	"
N-nitroso-di-n-propylamine	ND	41.7	"
N-Nitrosodiphenylamine	ND	41.7	"
Pentachlorophenol	ND	41.7	"
Phenanthrene	ND	41.7	"
Phenol	ND	41.7	"
Pyrene	ND	41.7	"
Pyridine	ND	167	"

Surrogate: 2-Fluorophenol	1020	"	2520	40.3	20-108
Surrogate: Phenol-d5	994	"	2520	39.4	23-114
Surrogate: Nitrobenzene-d5	671	"	1770	37.8	22-108
Surrogate: 2-Fluorobiphenyl	631	"	1720	36.7	21-113
Surrogate: 2,4,6-Tribromophenol	1050	"	2520	41.9	19-110
Surrogate: Terphenyl-d14	513	"	1670	30.8	24-116

##### LCS (BK70078-BS1)

Prepared & Analyzed: 11/02/2017

1,2,4-Trichlorobenzene	490	41.7	ug/kg wet	833	58.8	23-130
1,2-Dichlorobenzene	453	41.7	"	833	54.3	26-113
1,3-Dichlorobenzene	443	41.7	"	833	53.2	32-113
1,4-Dichlorobenzene	439	41.7	"	833	52.6	28-111
2,4,5-Trichlorophenol	469	41.7	"	833	56.2	14-138
2,4,6-Trichlorophenol	532	41.7	"	833	63.8	27-122
2,4-Dichlorophenol	572	41.7	"	833	68.7	23-133
2,4-Dimethylphenol	584	41.7	"	833	70.1	15-131
2,4-Dinitrophenol	176	83.3	"	833	21.1	10-149
2,4-Dinitrotoluene	555	41.7	"	833	66.6	30-123
2,6-Dinitrotoluene	587	41.7	"	833	70.5	30-125
2-Chloronaphthalene	491	41.7	"	833	59.0	22-115
2-Chlorophenol	519	41.7	"	833	62.3	25-121
2-Methylnaphthalene	548	41.7	"	833	65.8	16-127
2-Methylphenol	461	41.7	"	833	55.3	10-146
2-Nitroaniline	582	83.3	"	833	69.9	24-126
2-Nitrophenol	520	41.7	"	833	62.4	17-129
3- & 4-Methylphenols	411	41.7	"	833	49.3	20-109
3,3-Dichlorobenzidine	472	41.7	"	833	56.6	10-147
3-Nitroaniline	531	83.3	"	833	63.8	23-123
4,6-Dinitro-2-methylphenol	393	83.3	"	833	47.2	10-149
4-Bromophenyl phenyl ether	555	41.7	"	833	66.6	30-138
4-Chloro-3-methylphenol	550	41.7	"	833	66.0	16-138
4-Chloroaniline	465	41.7	"	833	55.8	10-117
4-Chlorophenyl phenyl ether	532	41.7	"	833	63.9	18-132
4-Nitroaniline	558	83.3	"	833	67.0	14-125
4-Nitrophenol	401	83.3	"	833	48.1	10-136





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

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70078 - EPA 3550C

#### LCS (BK70078-BS1)

Prepared & Analyzed: 11/02/2017

Acenaphthene	549	41.7	ug/kg wet	833		65.9	17-124				
Acenaphthylene	526	41.7	"	833		63.2	16-124				
Aniline	441	167	"	833		52.9	10-111				
Anthracene	593	41.7	"	833		71.1	24-124				
Benzo(a)anthracene	586	41.7	"	833		70.3	25-134				
Benzo(a)pyrene	601	41.7	"	833		72.1	29-144				
Benzo(b)fluoranthene	587	41.7	"	833		70.4	20-151				
Benzo(g,h,i)perylene	617	41.7	"	833		74.0	10-153				
Benzo(k)fluoranthene	590	41.7	"	833		70.8	10-148				
Benzyl alcohol	515	41.7	"	833		61.8	17-128				
Benzyl butyl phthalate	576	41.7	"	833		69.1	10-132				
Bis(2-chloroethoxy)methane	539	41.7	"	833		64.7	10-129				
Bis(2-chloroethyl)ether	486	41.7	"	833		58.3	14-125				
Bis(2-chloroisopropyl)ether	478	41.7	"	833		57.3	14-122				
Bis(2-ethylhexyl)phthalate	582	41.7	"	833		69.9	10-141				
Chrysene	574	41.7	"	833		68.9	24-116				
Dibenzo(a,h)anthracene	602	41.7	"	833		72.2	17-147				
Dibenzofuran	521	41.7	"	833		62.5	23-123				
Diethyl phthalate	526	41.7	"	833		63.1	23-122				
Dimethyl phthalate	517	41.7	"	833		62.1	28-127				
Di-n-butyl phthalate	549	41.7	"	833		65.9	19-123				
Di-n-octyl phthalate	590	41.7	"	833		70.8	10-132				
Fluoranthene	590	41.7	"	833		70.8	36-125				
Fluorene	554	41.7	"	833		66.5	16-130				
Hexachlorobenzene	487	41.7	"	833		58.5	10-129				
Hexachlorobutadiene	480	41.7	"	833		57.6	22-153				
Hexachlorocyclopentadiene	335	41.7	"	833		40.2	10-134				
Hexachloroethane	441	41.7	"	833		53.0	20-112				
Indeno(1,2,3-cd)pyrene	583	41.7	"	833		70.0	10-155				
Isophorone	513	41.7	"	833		61.5	14-131				
Naphthalene	514	41.7	"	833		61.6	20-121				
Nitrobenzene	471	41.7	"	833		56.5	20-121				
N-Nitrosodimethylamine	439	41.7	"	833		52.7	10-124				
N-nitroso-di-n-propylamine	427	41.7	"	833		51.2	21-119				
N-Nitrosodiphenylamine	631	41.7	"	833		75.7	10-163				
Pentachlorophenol	414	41.7	"	833		49.6	10-143				
Phenanthrene	584	41.7	"	833		70.1	24-123				
Phenol	574	41.7	"	833		68.9	15-123				
Pyrene	595	41.7	"	833		71.4	24-132				
Pyridine	351	167	"	833		42.1	10-92				
Surrogate: 2-Fluorophenol	1570		"	2520		62.4	20-108				
Surrogate: Phenol-d5	1610		"	2520		63.7	23-114				
Surrogate: Nitrobenzene-d5	1040		"	1770		58.6	22-108				
Surrogate: 2-Fluorobiphenyl	1010		"	1720		58.9	21-113				
Surrogate: 2,4,6-Tribromophenol	1790		"	2520		71.1	30-130				
Surrogate: Terphenyl-d14	854		"	1670		51.2	24-116				





## Organochlorine Pesticides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70023 - EPA 3510C/1311

##### Blank (BK70023-BLK1)

Prepared & Analyzed: 11/01/2017

Chlordane, total	ND	0.200	ug/L								
Endrin	ND	0.0400	"								
gamma-BHC (Lindane)	ND	0.0400	"								
Heptachlor	ND	0.0400	"								
Heptachlor epoxide	ND	0.0400	"								
Methoxychlor	ND	0.0400	"								
Toxaphene	ND	1.00	"								
<i>Surrogate: Tetrachloro-m-xylene</i>	<i>1.60</i>		<i>"</i>	<i>2.00</i>		<i>80.2</i>	<i>30-120</i>				
<i>Surrogate: Decachlorobiphenyl</i>	<i>1.64</i>		<i>"</i>	<i>2.00</i>		<i>81.9</i>	<i>30-120</i>				

##### LCS (BK70023-BS1)

Prepared & Analyzed: 11/01/2017

Endrin	1.17	0.0400	ug/L	1.00		117	40-120				
gamma-BHC (Lindane)	1.19	0.0400	"	1.00		119	40-120				
Heptachlor	1.09	0.0400	"	1.00		109	40-120				
Heptachlor epoxide	1.11	0.0400	"	1.00		111	40-120				
Methoxychlor	1.15	0.0400	"	1.00		115	40-120				
<i>Surrogate: Tetrachloro-m-xylene</i>	<i>1.72</i>		<i>"</i>	<i>2.00</i>		<i>85.9</i>	<i>30-120</i>				
<i>Surrogate: Decachlorobiphenyl</i>	<i>1.63</i>		<i>"</i>	<i>2.00</i>		<i>81.7</i>	<i>30-120</i>				

##### LCS Dup (BK70023-BSD1)

Prepared & Analyzed: 11/01/2017

Endrin	1.08	0.0400	ug/L	1.00		108	40-120		8.47	30	
gamma-BHC (Lindane)	1.18	0.0400	"	1.00		118	40-120		0.758	30	
Heptachlor	1.14	0.0400	"	1.00		114	40-120		4.86	30	
Heptachlor epoxide	1.19	0.0400	"	1.00		119	40-120		7.00	30	
Methoxychlor	1.15	0.0400	"	1.00		115	40-120		0.532	30	
<i>Surrogate: Tetrachloro-m-xylene</i>	<i>1.78</i>		<i>"</i>	<i>2.00</i>		<i>89.1</i>	<i>30-120</i>				
<i>Surrogate: Decachlorobiphenyl</i>	<i>1.74</i>		<i>"</i>	<i>2.00</i>		<i>87.2</i>	<i>30-120</i>				





## Chlorinated Herbicides by GC/ECD - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70088 - EPA 3535A/1311

##### Blank (BK70088-BLK1)

Prepared & Analyzed: 11/02/2017

2,4,5-TP (Silvex)	ND	5.00	ug/L								
2,4-D	ND	5.00	"								
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	130		"	125		104	30-150				

##### LCS (BK70088-BS1)

Prepared & Analyzed: 11/02/2017

2,4,5-TP (Silvex)	22.8	5.00	ug/L	40.0		56.9	40-140				
2,4-D	26.2	5.00	"	40.0		65.6	40-140				
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	90.5		"	125		72.4	30-150				

##### LCS Dup (BK70088-BSD1)

Prepared & Analyzed: 11/02/2017

2,4,5-TP (Silvex)	22.5	5.00	ug/L	40.0		56.2	40-140		1.10	30	
2,4-D	27.2	5.00	"	40.0		68.1	40-140		3.74	30	
Surrogate: 2,4-Dichlorophenylacetic acid (DCAA)	91.5		"	125		73.2	30-150				





## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71606 - EPA 3050B

##### Blank (BJ71606-BLK1)

Prepared: 10/31/2017 Analyzed: 11/01/2017

Aluminum	23.2	5.00	mg/kg wet
Antimony	ND	0.500	"
Arsenic	ND	1.00	"
Barium	ND	1.00	"
Beryllium	ND	0.100	"
Cadmium	ND	0.300	"
Calcium	ND	5.00	"
Chromium	ND	0.500	"
Cobalt	ND	0.500	"
Copper	ND	0.500	"
Iron	ND	2.00	"
Lead	ND	0.500	"
Magnesium	ND	5.00	"
Manganese	ND	0.500	"
Nickel	ND	0.500	"
Potassium	ND	5.00	"
Selenium	ND	1.00	"
Silver	ND	0.500	"
Sodium	ND	10.0	"
Thallium	ND	1.00	"
Vanadium	ND	1.00	"
Zinc	ND	1.50	"

##### Reference (BJ71606-SRM1)

Prepared: 10/31/2017 Analyzed: 11/01/2017

Aluminum	8180	5.00	mg/kg wet	8770	93.2	39.6-160.89
Antimony	122	0.500	"	117	104	19.6-259.6
Arsenic	29.0	1.00	"	29.6	98.0	67-161.9
Barium	200	1.00	"	198	101	72-129.1
Beryllium	89.7	0.100	"	92.0	97.5	73.8-126.4
Cadmium	68.9	0.300	"	71.5	96.4	73.3-126.7
Calcium	6220	5.00	"	6310	98.6	73.9-126.9
Chromium	100	0.500	"	102	98.3	68.2-132
Cobalt	52.7	0.500	"	51.4	102	74.3-125.7
Copper	168	0.500	"	153	110	72.5-131.4
Iron	14500	2.00	"	15200	95.4	36.4-163.9
Lead	133	0.500	"	139	95.9	69.7-130.8
Magnesium	2670	5.00	"	2760	96.7	64.6-135.1
Manganese	267	0.500	"	270	98.9	73.9-126
Nickel	131	0.500	"	129	102	70.3-129.7
Potassium	2180	5.00	"	2420	90.2	60.3-140.1
Selenium	59.5	1.00	"	60.6	98.2	63.2-136.9
Silver	34.8	0.500	"	36.4	95.6	66.8-133.4
Sodium	733	10.0	"	819	89.4	59.2-141.1
Thallium	89.2	1.00	"	101	88.3	68.5-130.9
Vanadium	82.9	1.00	"	81.3	102	53.3-146.5
Zinc	216	1.50	"	223	97.0	69.7-129.8





## Metals by ICP - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BK70119 - EPA 3015A/1311

##### Blank (BK70119-BLK1)

Prepared: 11/02/2017 Analyzed: 11/03/2017

Arsenic	ND	0.004	mg/L
Barium	ND	0.011	"
Cadmium	ND	0.003	"
Chromium	ND	0.006	"
Lead	ND	0.006	"
Selenium	ND	0.011	"
Silver	ND	0.006	"

##### Blank (BK70119-BLK2)

Prepared: 11/02/2017 Analyzed: 11/03/2017

Arsenic	ND	0.004	mg/L
Barium	0.254	0.011	"
Cadmium	ND	0.003	"
Chromium	ND	0.006	"
Lead	ND	0.006	"
Selenium	0.021	0.011	"
Silver	ND	0.006	"

##### Reference (BK70119-SRM1)

Prepared: 11/02/2017 Analyzed: 11/03/2017

Arsenic	0.721	ug/mL	0.740	97.5	84.3-114.3
Barium	0.534	"	0.500	107	85-115
Cadmium	0.239	"	0.240	99.5	84.9-115
Chromium	0.895	"	0.860	104	85-115
Lead	0.650	"	0.640	101	85-115
Selenium	0.650	"	0.680	95.6	85.1-115.1
Silver	0.378	"	0.600	63.0	85-115 Low Bias





## Mercury by EPA 7000/200 Series Methods - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BJ71593 - EPA 7473 soil

##### Blank (BJ71593-BLK1)

Prepared & Analyzed: 10/31/2017

Mercury ND 0.0300 mg/kg wet

##### Reference (BJ71593-SRM1)

Prepared & Analyzed: 10/31/2017

Mercury 12.673 mg/kg 13.8 91.8 51.4-168.8

#### Batch BK70118 - EPA 7473 water

##### Blank (BK70118-BLK1)

Prepared & Analyzed: 11/02/2017

Mercury ND 0.0002000 mg/L

##### Reference (BK70118-SRM1)

Prepared & Analyzed: 11/02/2017

Mercury 0.0057000 mg/L 0.00740 77.0 70-130





**Wet Chemistry Parameters - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BJ71627 - EPA SW 846-1311 TCLP extr. for SVOA/PEST/HERBS**

**Blank (BJ71627-BLK1)**

Prepared: 10/31/2017 Analyzed: 11/01/2017

TCLP Extraction	Completed	1.00	N/A
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**Batch BJ71631 - EPA SW 846-1311 TCLP ext. for metals**

**Blank (BJ71631-BLK1)**

Prepared: 10/31/2017 Analyzed: 11/01/2017

TCLP Extraction	Completed	1.00	N/A
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**Batch BJ71632 - EPA SW 846-1311 TCLP ZHE for VOA**

**Blank (BJ71632-BLK1)**

Prepared: 10/31/2017 Analyzed: 11/01/2017

TCLP Extraction	Completed	1.00	%
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### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
17J1208-01	Sediments from UST	40mL 01_Clear Vial Cool to 4° C
17J1208-01	Sediments from UST	40mL Vial with Stir Bar-Cool 4° C





### Sample and Data Qualifiers Relating to This Work Order

QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
EXT-Temp	Extraction temperture slightly exceeded acceptance range.
EXT-COMP	Completed
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.





2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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## Field Chain-of-Custody Record

Page ( of

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 171208

[illegible]



# UST Sediment Disposal Manifest



<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator ID Number <b>N / A</b>		2. Page 1 of <b>1</b>		3. Emergency Response Phone <b>(267) 406-0083</b>		4. Waste Tracking Number <b>41576</b>		
		5. Generator's Name and Mailing Address <b>GBT Real Estate LLC</b> <b>11-28 31st Drive</b> <b>Long Island City NY 11106</b> Generator's Phone: <b>371 416-2002</b>								
<b>GENERATOR</b>		6. Transporter 1 Company Name <b>Innovative Recycling Technologies, Inc.</b>						U.S. EPA ID Number <b>NYR000134940</b>		
		7. Transporter 2 Company Name <b>Republic Environmental Systems (Trans Group) LLC</b>						U.S. EPA ID Number <b>PAD982661381</b>		
<b>DESIGNATED FACILITY</b>		8. Designated Facility Name and Site Address <b>Republic Environmental Systems (PA), LLC</b> <b>2809 Sandstone Drive</b> <b>Hatfield PA 19440</b> Facility's Phone: <b>215 822-8895</b>						U.S. EPA ID Number <b>PAD085690592</b>		
		9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.			
No.	Type									
<b>TRANSPORTER</b>		1. Non Hazardous Purge Water Non-DOT Regulated Material		1		<	P			
		2. Non Hazardous Sediment Non-DOT Regulated Material		1		20	P			
		3.								
		4.								
<b>INT'L</b>		13. Special Handling Instructions and Additional Information <b>9.1 } 9.2 } Doc#</b>								
		14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.								
<b>TRANSPORTER</b>		Generator's/Offoror's Printed/Typed Name				Signature		Month	Day	Year
<b>DESIGNATED FACILITY</b>		15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
		16. Transporter Acknowledgment of Receipt of Materials								
<b>DESIGNATED FACILITY</b>		Transporter 1 Printed/Typed Name				Signature		Month	Day	Year
		<b>George Man</b>						12	26	18
<b>DESIGNATED FACILITY</b>		Transporter 2 Printed/Typed Name				Signature		Month	Day	Year
<b>DESIGNATED FACILITY</b>		17. Discrepancy								
		17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
<b>DESIGNATED FACILITY</b>		Manifest Reference Number:						U.S. EPA ID Number		
<b>DESIGNATED FACILITY</b>		17b. Alternate Facility (or Generator)						U.S. EPA ID Number		
<b>DESIGNATED FACILITY</b>		Facility's Phone:								
		17c. Signature of Alternate Facility (or Generator)						Month	Day	Year
<b>DESIGNATED FACILITY</b>										
<b>DESIGNATED FACILITY</b>		18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a								
		Printed/Typed Name				Signature		Month	Day	Year
<b>DESIGNATED FACILITY</b>		<b>George Man</b>						12	26	18



**ATTACHMENT Q**  
**Pre and Post-Injection Groundwater Lab  
Reports**



## Pre-Injection Lab Report (Feb 2018)





# Technical Report

prepared for:

## **Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 02/26/2018

**Client Project ID: #170154 11-28 31 Drive, LIC NY**

York Project (SDG) No.: 18B0738

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371



132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)



Report Date: 02/26/2018  
Client Project ID: #170154 11-28 31 Drive, LIC NY  
York Project (SDG) No.: 18B0738

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

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**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 20, 2018 and listed below. The project was identified as your project: **#170154 11-28 31 Drive, LIC NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18B0738-01	MW-1	Water	02/19/2018	02/20/2018
18B0738-02	MW-2	Water	02/19/2018	02/20/2018
18B0738-03	MW-3	Water	02/19/2018	02/20/2018
18B0738-04	MW-4	Water	02/19/2018	02/20/2018
18B0738-05	MW-6	Water	02/19/2018	02/20/2018
18B0738-06	Field Blank	Water	02/19/2018	02/20/2018
18B0738-07	Trip Blank	Water	02/19/2018	02/20/2018



## **General Notes for York Project (SDG) No.: 18B0738**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 02/26/2018







## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 18B0738-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 16:35	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
95-93-2	* 1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 16:35	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 18B0738-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 18B0738-01

**York Project (SDG) No.**

18B0738

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

February 19, 2018 3:00 pm

**Date Received**

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
105-05-5	* p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 16:35	RDS
622-96-8	* p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 16:35	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
127-18-4	<b>Tetrachloroethylene</b>	<b>0.28</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS





## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 18B0738-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 16:35	RDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 16:35	RDS
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	97.4 %			69-130						
2037-26-5	Surrogate: Toluene-d8	99.7 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	102 %			79-122						

## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 18B0738-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 17:02	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
95-93-2	* 1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 18B0738-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 18B0738-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>0.56</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>0.86</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
105-05-5	* p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS
622-96-8	* p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:02	RDS





## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 18B0738-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
127-18-4	<b>Tetrachloroethylene</b>	<b>25</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
79-01-6	<b>Trichloroethylene</b>	<b>0.40</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:02	RDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 17:02	RDS
<b>Surrogate Recoveries</b>		<b>Result</b>		<b>Acceptance Range</b>							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	101 %		69-130							
2037-26-5	Surrogate: Toluene-d8	99.3 %		81-117							
460-00-4	Surrogate: p-Bromofluorobenzene	101 %		79-122							

## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18B0738-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18B0738-03

**York Project (SDG) No.**

18B0738

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

February 19, 2018 3:00 pm

**Date Received**

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 17:29	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
95-93-2	* 1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:29	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18B0738-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18B0738-03

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
105-05-5	* p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:29	RDS
622-96-8	* p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 17:29	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
127-18-4	<b>Tetrachloroethylene</b>	<b>4.1</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 17:29	RDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 17:29	RDS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	101 %	69-130								





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18B0738-03

York Project (SDG) No.

Client Project ID

Matrix

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18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2037-26-5	Surrogate: Toluene-d8	98.8 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	100 %			79-122						

## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 18B0738-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 19:17	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
95-93-2	* 1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 19:17	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS





## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 18B0738-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS





## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 18B0738-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
156-59-2	cis-1,2-Dichloroethylene	0.89		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	02/25/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
105-05-5	* p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 19:17	RDS
622-96-8	* p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 19:17	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 19:17	RDS





## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 18B0738-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
127-18-4	Tetrachloroethylene	70		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
79-01-6	Trichloroethylene	0.66		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:17	RDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 19:17	RDS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: Toluene-d8	97.1 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	101 %	79-122								

## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18B0738-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS





## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18B0738-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

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18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 19:44	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
95-93-2	* 1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 19:44	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS





## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18B0738-05

**York Project (SDG) No.**

18B0738

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

February 19, 2018 3:00 pm

**Date Received**

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>57</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>0.31</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS





## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18B0738-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
105-05-5	* p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 19:44	RDS
622-96-8	* p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 19:44	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
127-18-4	<b>Tetrachloroethylene</b>	<b>75</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>0.22</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
79-01-6	<b>Trichloroethylene</b>	<b>15</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 19:44	RDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 19:44	RDS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %	69-130								
2037-26-5	Surrogate: Toluene-d8	96.5 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	100 %	79-122								





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 18B0738-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 20:11	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
95-93-2	* 1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 20:11	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 18B0738-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
67-64-1	Acetone	5.6		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:11	RDS





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 18B0738-06

**York Project (SDG) No.**

18B0738

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

February 19, 2018 3:00 pm

**Date Received**

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	02/25/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
105-05-5	* p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 20:11	RDS
622-96-8	* p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 20:11	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 20:11	RDS





## Sample Information

**Client Sample ID:** Field Blank

**York Sample ID:** 18B0738-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 20:11	RDS
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	107 %		69-130							
2037-26-5	Surrogate: Toluene-d8	96.8 %		81-117							
460-00-4	Surrogate: p-Bromofluorobenzene	99.5 %		79-122							

## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 18B0738-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 20:38	RDS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
95-93-2	* 1,2,4,5-Tetramethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 20:38	RDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 18B0738-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18B0738

#170154 11-28 31 Drive, LIC NY

Water

February 19, 2018 3:00 pm

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
142-28-9	1,3-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
594-20-7	2,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
95-49-8	2-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
106-43-4	4-Chlorotoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
108-86-1	Bromobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 18B0738-07

**York Project (SDG) No.**

18B0738

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

February 19, 2018 3:00 pm

**Date Received**

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
91-20-3	Naphthalene	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
105-05-5	* p-Diethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 20:38	RDS
622-96-8	* p-Ethyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	02/25/2018 07:30	02/25/2018 20:38	RDS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS





## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 18B0738-07

**York Project (SDG) No.**

18B0738

**Client Project ID**

#170154 11-28 31 Drive, LIC NY

**Matrix**

Water

**Collection Date/Time**

February 19, 2018 3:00 pm

**Date Received**

02/20/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	02/25/2018 07:30	02/25/2018 20:38	RDS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	02/25/2018 07:30	02/25/2018 20:38	RDS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: Toluene-d8	97.7 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	100 %	79-122								





## Analytical Batch Summary

**Batch ID:** BB81103

**Preparation Method:** EPA 5030B

**Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
18B0738-01	MW-1	02/25/18
18B0738-02	MW-2	02/25/18
18B0738-03	MW-3	02/25/18
18B0738-04	MW-4	02/25/18
18B0738-05	MW-6	02/25/18
18B0738-06	Field Blank	02/25/18
18B0738-07	Trip Blank	02/25/18
BB81103-BLK1	Blank	02/25/18
BB81103-BS1	LCS	02/25/18
BB81103-BSD1	LCS Dup	02/25/18
BB81103-MS1	Matrix Spike	02/25/18
BB81103-MSD1	Matrix Spike Dup	02/25/18





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BB81103 - EPA 5030B

#### Blank (BB81103-BLK1)

Prepared & Analyzed: 02/25/2018

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L
1,1,1-Trichloroethane	ND	0.50	"
1,1,2,2-Tetrachloroethane	ND	0.50	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"
1,1,2-Trichloroethane	ND	0.50	"
1,1-Dichloroethane	ND	0.50	"
1,1-Dichloroethylene	ND	0.50	"
1,1-Dichloropropylene	ND	0.50	"
1,2,3-Trichlorobenzene	ND	0.50	"
1,2,3-Trichloropropane	ND	0.50	"
1,2,4,5-Tetramethylbenzene	ND	0.50	"
1,2,4-Trichlorobenzene	ND	0.50	"
1,2,4-Trimethylbenzene	ND	0.50	"
1,2-Dibromo-3-chloropropane	ND	0.50	"
1,2-Dibromoethane	ND	0.50	"
1,2-Dichlorobenzene	ND	0.50	"
1,2-Dichloroethane	ND	0.50	"
1,2-Dichloropropane	ND	0.50	"
1,3,5-Trimethylbenzene	ND	0.50	"
1,3-Dichlorobenzene	ND	0.50	"
1,3-Dichloropropane	ND	0.50	"
1,4-Dichlorobenzene	ND	0.50	"
2,2-Dichloropropane	ND	0.50	"
2-Butanone	ND	0.50	"
2-Chlorotoluene	ND	0.50	"
2-Hexanone	ND	0.50	"
4-Chlorotoluene	ND	0.50	"
4-Methyl-2-pentanone	ND	0.50	"
Acetone	ND	2.0	"
Benzene	ND	0.50	"
Bromobenzene	ND	0.50	"
Bromochloromethane	ND	0.50	"
Bromodichloromethane	ND	0.50	"
Bromoform	ND	0.50	"
Bromomethane	ND	0.50	"
Carbon disulfide	ND	0.50	"
Carbon tetrachloride	ND	0.50	"
Chlorobenzene	ND	0.50	"
Chloroethane	ND	0.50	"
Chloroform	ND	0.50	"
Chloromethane	ND	0.50	"
cis-1,2-Dichloroethylene	ND	0.50	"
cis-1,3-Dichloropropylene	ND	0.50	"
Dibromochloromethane	ND	0.50	"
Dibromomethane	ND	0.50	"
Dichlorodifluoromethane	ND	0.50	"
Ethyl Benzene	ND	0.50	"
Hexachlorobutadiene	ND	0.50	"
Isopropylbenzene	ND	0.50	"
Methyl tert-butyl ether (MTBE)	ND	0.50	"





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BB81103 - EPA 5030B

##### Blank (BB81103-BLK1)

Prepared & Analyzed: 02/25/2018

Methylene chloride	ND	2.0	ug/L
Naphthalene	ND	2.0	"
n-Butylbenzene	ND	0.50	"
n-Propylbenzene	ND	0.50	"
o-Xylene	ND	0.50	"
p- & m- Xylenes	ND	1.0	"
p-Diethylbenzene	ND	0.50	"
p-Ethyltoluene	ND	0.50	"
p-Isopropyltoluene	ND	0.50	"
sec-Butylbenzene	ND	0.50	"
Styrene	ND	0.50	"
tert-Butylbenzene	ND	0.50	"
Tetrachloroethylene	ND	0.50	"
Toluene	ND	0.50	"
trans-1,2-Dichloroethylene	ND	0.50	"
trans-1,3-Dichloropropylene	ND	0.50	"
Trichloroethylene	ND	0.50	"
Trichlorofluoromethane	ND	0.50	"
Vinyl Chloride	ND	0.50	"
Xylenes, Total	ND	1.5	"

Surrogate: 1,2-Dichloroethane-d4	10.2	"	10.0	102	69-130
Surrogate: Toluene-d8	9.90	"	10.0	99.0	81-117
Surrogate: p-Bromofluorobenzene	10.0	"	10.0	100	79-122

##### LCS (BB81103-BS1)

Prepared & Analyzed: 02/25/2018

1,1,1,2-Tetrachloroethane	9.68	ug/L	10.0	96.8	82-126
1,1,1-Trichloroethane	9.39	"	10.0	93.9	78-136
1,1,2,2-Tetrachloroethane	9.66	"	10.0	96.6	76-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.75	"	10.0	97.5	54-165
1,1,2-Trichloroethane	8.97	"	10.0	89.7	82-123
1,1-Dichloroethane	9.38	"	10.0	93.8	82-129
1,1-Dichloroethylene	8.78	"	10.0	87.8	68-138
1,1-Dichloropropylene	9.51	"	10.0	95.1	83-133
1,2,3-Trichlorobenzene	10.4	"	10.0	104	76-136
1,2,3-Trichloropropane	9.53	"	10.0	95.3	77-128
1,2,4,5-Tetramethylbenzene	10.4	"	10.0	104	85-140
1,2,4-Trichlorobenzene	9.92	"	10.0	99.2	76-137
1,2,4-Trimethylbenzene	9.76	"	10.0	97.6	82-132
1,2-Dibromo-3-chloropropane	9.27	"	10.0	92.7	45-147
1,2-Dibromoethane	9.35	"	10.0	93.5	83-124
1,2-Dichlorobenzene	9.45	"	10.0	94.5	79-123
1,2-Dichloroethane	9.42	"	10.0	94.2	73-132
1,2-Dichloropropane	8.95	"	10.0	89.5	78-126
1,3,5-Trimethylbenzene	9.56	"	10.0	95.6	80-131
1,3-Dichlorobenzene	9.78	"	10.0	97.8	86-122
1,3-Dichloropropane	9.18	"	10.0	91.8	81-125
1,4-Dichlorobenzene	9.52	"	10.0	95.2	85-124
2,2-Dichloropropane	9.91	"	10.0	99.1	56-150
2-Butanone	11.6	"	10.0	116	49-152
2-Chlorotoluene	9.62	"	10.0	96.2	79-130
2-Hexanone	9.38	"	10.0	93.8	51-146





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BB81103 - EPA 5030B</b>											
<b>LCS (BB81103-BS1)</b>						Prepared & Analyzed: 02/25/2018					
4-Chlorotoluene	9.30		ug/L	10.0		93.0	79-128				
4-Methyl-2-pentanone	8.78		"	10.0		87.8	57-145				
Acetone	10.6		"	10.0		106	14-150				
Benzene	9.51		"	10.0		95.1	85-126				
Bromobenzene	9.14		"	10.0		91.4	78-129				
Bromochloromethane	9.08		"	10.0		90.8	77-128				
Bromodichloromethane	8.92		"	10.0		89.2	79-128				
Bromoform	9.28		"	10.0		92.8	78-133				
Bromomethane	6.02		"	10.0		60.2	43-168				
Carbon disulfide	9.95		"	10.0		99.5	68-146				
Carbon tetrachloride	9.45		"	10.0		94.5	77-141				
Chlorobenzene	9.39		"	10.0		93.9	88-120				
Chloroethane	10.2		"	10.0		102	65-136				
Chloroform	9.23		"	10.0		92.3	82-128				
Chloromethane	9.63		"	10.0		96.3	43-155				
cis-1,2-Dichloroethylene	9.32		"	10.0		93.2	83-129				
cis-1,3-Dichloropropylene	9.50		"	10.0		95.0	80-131				
Dibromochloromethane	9.53		"	10.0		95.3	80-130				
Dibromomethane	9.05		"	10.0		90.5	72-134				
Dichlorodifluoromethane	12.8		"	10.0		128	44-144				
Ethyl Benzene	9.74		"	10.0		97.4	80-131				
Hexachlorobutadiene	9.15		"	10.0		91.5	67-146				
Isopropylbenzene	9.71		"	10.0		97.1	76-140				
Methyl tert-butyl ether (MTBE)	9.98		"	10.0		99.8	76-135				
Methylene chloride	8.36		"	10.0		83.6	55-137				
Naphthalene	10.2		"	10.0		102	70-147				
n-Butylbenzene	9.77		"	10.0		97.7	79-132				
n-Propylbenzene	9.66		"	10.0		96.6	78-133				
o-Xylene	9.70		"	10.0		97.0	78-130				
p- & m- Xylenes	19.9		"	20.0		99.4	77-133				
p-Diethylbenzene	10.4		"	10.0		104	84-134				
p-Ethyltoluene	10.1		"	10.0		101	88-129				
p-Isopropyltoluene	10.1		"	10.0		101	81-136				
sec-Butylbenzene	10.1		"	10.0		101	79-137				
Styrene	9.31		"	10.0		93.1	67-132				
tert-Butylbenzene	9.71		"	10.0		97.1	77-138				
Tetrachloroethylene	8.84		"	10.0		88.4	82-131				
Toluene	9.38		"	10.0		93.8	80-127				
trans-1,2-Dichloroethylene	9.02		"	10.0		90.2	80-132				
trans-1,3-Dichloropropylene	9.23		"	10.0		92.3	78-131				
Trichloroethylene	9.20		"	10.0		92.0	82-128				
Trichlorofluoromethane	10.3		"	10.0		103	67-139				
Vinyl Chloride	10.7		"	10.0		107	58-145				
Surrogate: 1,2-Dichloroethane-d4	10.1		"	10.0		101	69-130				
Surrogate: Toluene-d8	9.87		"	10.0		98.7	81-117				
Surrogate: p-Bromofluorobenzene	10.0		"	10.0		100	79-122				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BB81103 - EPA 5030B</b>											
<b>LCS Dup (BB81103-BSD1)</b>						Prepared & Analyzed: 02/25/2018					
1,1,1,2-Tetrachloroethane	9.95		ug/L	10.0		99.5	82-126		2.75	30	
1,1,1-Trichloroethane	9.65		"	10.0		96.5	78-136		2.73	30	
1,1,2,2-Tetrachloroethane	9.83		"	10.0		98.3	76-129		1.74	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.71		"	10.0		97.1	54-165		0.411	30	
1,1,2-Trichloroethane	9.39		"	10.0		93.9	82-123		4.58	30	
1,1-Dichloroethane	9.73		"	10.0		97.3	82-129		3.66	30	
1,1-Dichloroethylene	9.09		"	10.0		90.9	68-138		3.47	30	
1,1-Dichloropropylene	9.72		"	10.0		97.2	83-133		2.18	30	
1,2,3-Trichlorobenzene	10.4		"	10.0		104	76-136		0.385	30	
1,2,3-Trichloropropane	9.76		"	10.0		97.6	77-128		2.38	30	
1,2,4,5-Tetramethylbenzene	10.5		"	10.0		105	85-140		0.766	30	
1,2,4-Trichlorobenzene	10.1		"	10.0		101	76-137		1.60	30	
1,2,4-Trimethylbenzene	9.82		"	10.0		98.2	82-132		0.613	30	
1,2-Dibromo-3-chloropropane	9.33		"	10.0		93.3	45-147		0.645	30	
1,2-Dibromoethane	9.63		"	10.0		96.3	83-124		2.95	30	
1,2-Dichlorobenzene	9.58		"	10.0		95.8	79-123		1.37	30	
1,2-Dichloroethane	9.86		"	10.0		98.6	73-132		4.56	30	
1,2-Dichloropropane	9.17		"	10.0		91.7	78-126		2.43	30	
1,3,5-Trimethylbenzene	9.55		"	10.0		95.5	80-131		0.105	30	
1,3-Dichlorobenzene	9.77		"	10.0		97.7	86-122		0.102	30	
1,3-Dichloropropane	9.51		"	10.0		95.1	81-125		3.53	30	
1,4-Dichlorobenzene	9.57		"	10.0		95.7	85-124		0.524	30	
2,2-Dichloropropane	10.2		"	10.0		102	56-150		2.98	30	
2-Butanone	11.3		"	10.0		113	49-152		3.06	30	
2-Chlorotoluene	9.56		"	10.0		95.6	79-130		0.626	30	
2-Hexanone	9.41		"	10.0		94.1	51-146		0.319	30	
4-Chlorotoluene	9.27		"	10.0		92.7	79-128		0.323	30	
4-Methyl-2-pentanone	9.46		"	10.0		94.6	57-145		7.46	30	
Acetone	10.5		"	10.0		105	14-150		1.13	30	
Benzene	9.82		"	10.0		98.2	85-126		3.21	30	
Bromobenzene	9.19		"	10.0		91.9	78-129		0.546	30	
Bromochloromethane	9.49		"	10.0		94.9	77-128		4.42	30	
Bromodichloromethane	9.07		"	10.0		90.7	79-128		1.67	30	
Bromoform	9.56		"	10.0		95.6	78-133		2.97	30	
Bromomethane	7.95		"	10.0		79.5	43-168		27.6	30	
Carbon disulfide	10.4		"	10.0		104	68-146		4.04	30	
Carbon tetrachloride	9.69		"	10.0		96.9	77-141		2.51	30	
Chlorobenzene	9.58		"	10.0		95.8	88-120		2.00	30	
Chloroethane	10.5		"	10.0		105	65-136		2.32	30	
Chloroform	9.67		"	10.0		96.7	82-128		4.66	30	
Chloromethane	9.75		"	10.0		97.5	43-155		1.24	30	
cis-1,2-Dichloroethylene	9.71		"	10.0		97.1	83-129		4.10	30	
cis-1,3-Dichloropropylene	9.79		"	10.0		97.9	80-131		3.01	30	
Dibromochloromethane	9.92		"	10.0		99.2	80-130		4.01	30	
Dibromomethane	9.16		"	10.0		91.6	72-134		1.21	30	
Dichlorodifluoromethane	13.4		"	10.0		134	44-144		4.05	30	
Ethyl Benzene	9.89		"	10.0		98.9	80-131		1.53	30	
Hexachlorobutadiene	9.35		"	10.0		93.5	67-146		2.16	30	
Isopropylbenzene	9.76		"	10.0		97.6	76-140		0.514	30	
Methyl tert-butyl ether (MTBE)	10.6		"	10.0		106	76-135		6.12	30	
Methylene chloride	8.71		"	10.0		87.1	55-137		4.10	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BB81103 - EPA 5030B

##### LCS Dup (BB81103-BSD1)

Prepared & Analyzed: 02/25/2018

Naphthalene	10.6		ug/L	10.0		106	70-147		3.17	30	
n-Butylbenzene	9.77		"	10.0		97.7	79-132		0.00	30	
n-Propylbenzene	9.64		"	10.0		96.4	78-133		0.207	30	
o-Xylene	9.95		"	10.0		99.5	78-130		2.54	30	
p- & m- Xylenes	20.2		"	20.0		101	77-133		1.75	30	
p-Diethylbenzene	10.5		"	10.0		105	84-134		0.958	30	
p-Ethyltoluene	10.1		"	10.0		101	88-129		0.00	30	
p-Isopropyltoluene	10.0		"	10.0		100	81-136		0.299	30	
sec-Butylbenzene	10.1		"	10.0		101	79-137		0.198	30	
Styrene	9.52		"	10.0		95.2	67-132		2.23	30	
tert-Butylbenzene	9.68		"	10.0		96.8	77-138		0.309	30	
Tetrachloroethylene	8.83		"	10.0		88.3	82-131		0.113	30	
Toluene	9.58		"	10.0		95.8	80-127		2.11	30	
trans-1,2-Dichloroethylene	9.41		"	10.0		94.1	80-132		4.23	30	
trans-1,3-Dichloropropylene	9.36		"	10.0		93.6	78-131		1.40	30	
Trichloroethylene	9.36		"	10.0		93.6	82-128		1.72	30	
Trichlorofluoromethane	10.5		"	10.0		105	67-139		2.01	30	
Vinyl Chloride	11.2		"	10.0		112	58-145		4.01	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.3</i>		<i>"</i>	<i>10.0</i>		<i>103</i>	<i>69-130</i>				
<i>Surrogate: Toluene-d8</i>	<i>9.74</i>		<i>"</i>	<i>10.0</i>		<i>97.4</i>	<i>81-117</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>9.85</i>		<i>"</i>	<i>10.0</i>		<i>98.5</i>	<i>79-122</i>				

##### Matrix Spike (BB81103-MS1)

\*Source sample: 18B0738-03 (MW-3)

Prepared & Analyzed: 02/25/2018

1,1,1,2-Tetrachloroethane	19.4		ug/L	20.0	0.00	97.2	45-161				
1,1,1-Trichloroethane	19.6		"	20.0	0.00	98.2	70-146				
1,1,2,2-Tetrachloroethane	18.2		"	20.0	0.00	91.2	74-121				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	16.3		"	20.0	0.00	81.6	21-217				
1,1,2-Trichloroethane	17.5		"	20.0	0.00	87.6	59-146				
1,1-Dichloroethane	18.5		"	20.0	0.00	92.7	54-146				
1,1-Dichloroethylene	17.9		"	20.0	0.00	89.4	44-165				
1,1-Dichloropropylene	19.1		"	20.0	0.00	95.4	82-134				
1,2,3-Trichlorobenzene	20.1		"	20.0	0.00	100	40-161				
1,2,3-Trichloropropane	18.2		"	20.0	0.00	91.2	74-127				
1,2,4,5-Tetramethylbenzene	19.5		"	20.0	0.00	97.4	27-190				
1,2,4-Trichlorobenzene	18.6		"	20.0	0.00	93.2	41-161				
1,2,4-Trimethylbenzene	18.7		"	20.0	0.00	93.5	72-129				
1,2-Dibromo-3-chloropropane	18.2		"	20.0	0.00	91.0	31-151				
1,2-Dibromoethane	18.1		"	20.0	0.00	90.6	75-125				
1,2-Dichlorobenzene	18.1		"	20.0	0.00	90.3	63-122				
1,2-Dichloroethane	18.4		"	20.0	0.00	91.8	68-131				
1,2-Dichloropropane	17.4		"	20.0	0.00	86.8	77-121				
1,3,5-Trimethylbenzene	18.4		"	20.0	0.00	92.0	69-126				
1,3-Dichlorobenzene	18.4		"	20.0	0.00	92.0	74-119				
1,3-Dichloropropane	18.0		"	20.0	0.00	90.1	77-119				
1,4-Dichlorobenzene	17.9		"	20.0	0.00	89.7	70-124				
2,2-Dichloropropane	18.5		"	20.0	0.00	92.4	10-160				
2-Butanone	19.0		"	20.0	0.00	94.8	10-193				
2-Chlorotoluene	18.4		"	20.0	0.00	91.8	70-126				
2-Hexanone	17.2		"	20.0	0.00	85.8	53-133				
4-Chlorotoluene	17.7		"	20.0	0.00	88.4	69-124				
4-Methyl-2-pentanone	17.2		"	20.0	0.00	85.9	38-150				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BB81103 - EPA 5030B</b>											
<b>Matrix Spike (BB81103-MS1)</b>	<b>*Source sample: 18B0738-03 (MW-3)</b>						<b>Prepared &amp; Analyzed: 02/25/2018</b>				
Acetone	13.4		ug/L	20.0	0.860	62.8	13-149				
Benzene	19.0		"	20.0	0.00	94.8	38-155				
Bromobenzene	17.7		"	20.0	0.00	88.6	72-122				
Bromochloromethane	17.4		"	20.0	0.00	87.0	75-121				
Bromodichloromethane	18.1		"	20.0	0.00	90.4	70-129				
Bromoform	18.3		"	20.0	0.00	91.6	66-136				
Bromomethane	15.0		"	20.0	0.00	74.9	30-158				
Carbon disulfide	18.3		"	20.0	0.00	91.6	10-138				
Carbon tetrachloride	19.7		"	20.0	0.00	98.6	71-146				
Chlorobenzene	18.4		"	20.0	0.00	91.8	81-117				
Chloroethane	18.8		"	20.0	0.00	93.8	51-145				
Chloroform	19.0		"	20.0	0.00	95.1	80-124				
Chloromethane	15.7		"	20.0	0.00	78.7	16-163				
cis-1,2-Dichloroethylene	18.6		"	20.0	0.00	93.0	76-125				
cis-1,3-Dichloropropylene	18.3		"	20.0	0.00	91.3	58-131				
Dibromochloromethane	18.9		"	20.0	0.00	94.5	71-129				
Dibromomethane	17.6		"	20.0	0.00	88.2	76-120				
Dichlorodifluoromethane	17.3		"	20.0	0.00	86.6	30-147				
Ethyl Benzene	19.1		"	20.0	0.00	95.6	72-128				
Hexachlorobutadiene	16.0		"	20.0	0.00	80.2	34-166				
Isopropylbenzene	19.2		"	20.0	0.00	96.0	66-139				
Methyl tert-butyl ether (MTBE)	19.2		"	20.0	0.00	95.8	75-128				
Methylene chloride	15.2		"	20.0	0.00	75.8	57-128				
Naphthalene	20.5		"	20.0	0.00	102	39-158				
n-Butylbenzene	17.1		"	20.0	0.00	85.4	61-138				
n-Propylbenzene	18.2		"	20.0	0.00	91.2	66-134				
o-Xylene	19.2		"	20.0	0.00	96.2	69-126				
p- & m- Xylenes	38.6		"	40.0	0.00	96.4	67-130				
p-Diethylbenzene	18.1		"	20.0	0.00	90.4	52-150				
p-Ethyltoluene	18.7		"	20.0	0.00	93.5	76-127				
p-Isopropyltoluene	18.5		"	20.0	0.00	92.6	64-137				
sec-Butylbenzene	18.9		"	20.0	0.00	94.6	53-155				
Styrene	14.6		"	20.0	0.00	72.9	69-125				
tert-Butylbenzene	19.2		"	20.0	0.00	95.9	65-139				
Tetrachloroethylene	20.5		"	20.0	4.10	82.2	64-139				
Toluene	18.5		"	20.0	0.00	92.4	76-123				
trans-1,2-Dichloroethylene	18.1		"	20.0	0.00	90.3	79-131				
trans-1,3-Dichloropropylene	17.8		"	20.0	0.00	88.8	55-130				
Trichloroethylene	18.2		"	20.0	0.00	90.8	53-145				
Trichlorofluoromethane	19.5		"	20.0	0.00	97.4	61-142				
Vinyl Chloride	19.2		"	20.0	0.00	96.0	31-165				
Surrogate: 1,2-Dichloroethane-d4	9.99		"	10.0		99.9	69-130				
Surrogate: Toluene-d8	9.96		"	10.0		99.6	81-117				
Surrogate: p-Bromofluorobenzene	9.88		"	10.0		98.8	79-122				





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BB81103 - EPA 5030B</b>											
<b>Matrix Spike Dup (BB81103-MSD1)</b>		*Source sample: 18B0738-03 (MW-3)				Prepared & Analyzed: 02/25/2018					
1,1,1,2-Tetrachloroethane	20.6		ug/L	20.0	0.00	103	45-161		5.75	30	
1,1,1-Trichloroethane	20.4		"	20.0	0.00	102	70-146		3.85	30	
1,1,2,2-Tetrachloroethane	19.6		"	20.0	0.00	97.8	74-121		6.88	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	17.4		"	20.0	0.00	87.0	21-217		6.52	30	
1,1,2-Trichloroethane	19.4		"	20.0	0.00	97.2	59-146		10.4	30	
1,1-Dichloroethane	19.4		"	20.0	0.00	97.0	54-146		4.53	30	
1,1-Dichloroethylene	18.4		"	20.0	0.00	92.2	44-165		3.08	30	
1,1-Dichloropropylene	19.9		"	20.0	0.00	99.6	82-134		4.31	30	
1,2,3-Trichlorobenzene	21.6		"	20.0	0.00	108	40-161		7.29	30	
1,2,3-Trichloropropane	19.6		"	20.0	0.00	98.0	74-127		7.19	30	
1,2,4,5-Tetramethylbenzene	20.1		"	20.0	0.00	101	27-190		3.23	30	
1,2,4-Trichlorobenzene	19.8		"	20.0	0.00	98.9	41-161		5.99	30	
1,2,4-Trimethylbenzene	19.0		"	20.0	0.00	95.0	72-129		1.64	30	
1,2-Dibromo-3-chloropropane	20.2		"	20.0	0.00	101	31-151		10.4	30	
1,2-Dibromoethane	19.7		"	20.0	0.00	98.7	75-125		8.61	30	
1,2-Dichlorobenzene	18.8		"	20.0	0.00	93.8	63-122		3.75	30	
1,2-Dichloroethane	19.5		"	20.0	0.00	97.4	68-131		5.81	30	
1,2-Dichloropropane	18.6		"	20.0	0.00	92.8	77-121		6.79	30	
1,3,5-Trimethylbenzene	18.6		"	20.0	0.00	92.9	69-126		0.919	30	
1,3-Dichlorobenzene	18.7		"	20.0	0.00	93.6	74-119		1.78	30	
1,3-Dichloropropane	19.5		"	20.0	0.00	97.7	77-119		8.09	30	
1,4-Dichlorobenzene	18.5		"	20.0	0.00	92.3	70-124		2.86	30	
2,2-Dichloropropane	18.7		"	20.0	0.00	93.7	10-160		1.34	30	
2-Butanone	20.1		"	20.0	0.00	101	10-193		5.99	30	
2-Chlorotoluene	18.6		"	20.0	0.00	93.0	70-126		1.19	30	
2-Hexanone	19.7		"	20.0	0.00	98.6	53-133		13.9	30	
4-Chlorotoluene	18.1		"	20.0	0.00	90.6	69-124		2.57	30	
4-Methyl-2-pentanone	19.5		"	20.0	0.00	97.7	38-150		12.9	30	
Acetone	16.0		"	20.0	0.860	75.6	13-149		18.4	30	
Benzene	19.8		"	20.0	0.00	99.2	38-155		4.53	30	
Bromobenzene	18.4		"	20.0	0.00	91.8	72-122		3.66	30	
Bromochloromethane	18.7		"	20.0	0.00	93.4	75-121		7.04	30	
Bromodichloromethane	19.2		"	20.0	0.00	95.8	70-129		5.75	30	
Bromoform	20.0		"	20.0	0.00	100	66-136		8.97	30	
Bromomethane	17.5		"	20.0	0.00	87.6	30-158		15.6	30	
Carbon disulfide	18.9		"	20.0	0.00	94.6	10-138		3.17	30	
Carbon tetrachloride	20.4		"	20.0	0.00	102	71-146		3.20	30	
Chlorobenzene	19.2		"	20.0	0.00	96.2	81-117		4.79	30	
Chloroethane	19.5		"	20.0	0.00	97.4	51-145		3.71	30	
Chloroform	19.8		"	20.0	0.00	98.8	80-124		3.87	30	
Chloromethane	16.5		"	20.0	0.00	82.4	16-163		4.59	30	
cis-1,2-Dichloroethylene	19.4		"	20.0	0.00	97.0	76-125		4.26	30	
cis-1,3-Dichloropropylene	19.3		"	20.0	0.00	96.7	58-131		5.74	30	
Dibromochloromethane	20.3		"	20.0	0.00	102	71-129		7.29	30	
Dibromomethane	19.1		"	20.0	0.00	95.4	76-120		7.95	30	
Dichlorodifluoromethane	17.6		"	20.0	0.00	88.2	30-147		1.77	30	
Ethyl Benzene	19.9		"	20.0	0.00	99.6	72-128		4.00	30	
Hexachlorobutadiene	17.4		"	20.0	0.00	86.8	34-166		7.85	30	
Isopropylbenzene	19.3		"	20.0	0.00	96.4	66-139		0.416	30	
Methyl tert-butyl ether (MTBE)	20.9		"	20.0	0.00	104	75-128		8.54	30	
Methylene chloride	16.1		"	20.0	0.00	80.6	57-128		6.14	30	





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BB81103 - EPA 5030B

Matrix Spike Dup (BB81103-MSD1)		*Source sample: 18B0738-03 (MW-3)					Prepared & Analyzed: 02/25/2018				
Naphthalene	23.1		ug/L	20.0	0.00	115	39-158		11.9	30	
n-Butylbenzene	17.5		"	20.0	0.00	87.3	61-138		2.14	30	
n-Propylbenzene	18.4		"	20.0	0.00	92.2	66-134		1.20	30	
o-Xylene	20.2		"	20.0	0.00	101	69-126		4.62	30	
p- & m- Xylenes	40.2		"	40.0	0.00	100	67-130		4.07	30	
p-Diethylbenzene	18.4		"	20.0	0.00	92.1	52-150		1.81	30	
p-Ethyltoluene	18.9		"	20.0	0.00	94.4	76-127		1.01	30	
p-Isopropyltoluene	18.9		"	20.0	0.00	94.4	64-137		1.82	30	
sec-Butylbenzene	19.1		"	20.0	0.00	95.7	53-155		1.21	30	
Styrene	15.5		"	20.0	0.00	77.4	69-125		5.99	30	
tert-Butylbenzene	19.4		"	20.0	0.00	97.1	65-139		1.24	30	
Tetrachloroethylene	20.9		"	20.0	4.10	84.2	64-139		2.46	30	
Toluene	19.3		"	20.0	0.00	96.6	76-123		4.44	30	
trans-1,2-Dichloroethylene	19.1		"	20.0	0.00	95.4	79-131		5.49	30	
trans-1,3-Dichloropropylene	19.2		"	20.0	0.00	96.0	55-130		7.79	30	
Trichloroethylene	19.1		"	20.0	0.00	95.5	53-145		4.99	30	
Trichlorofluoromethane	19.6		"	20.0	0.00	98.0	61-142		0.716	30	
Vinyl Chloride	20.0		"	20.0	0.00	100	31-165		4.18	30	
Surrogate: 1,2-Dichloroethane-d4	10.2		"	10.0		102	69-130				
Surrogate: Toluene-d8	9.83		"	10.0		98.3	81-117				
Surrogate: p-Bromofluorobenzene	9.77		"	10.0		97.7	79-122				





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18B0738-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18B0738-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18B0738-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18B0738-04	MW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18B0738-05	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18B0738-06	Field Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18B0738-07	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C





## Sample and Data Qualifiers Relating to This Work Order

J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.





For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615  
(203) 325-1371 FAX (203) 357-0166

## Field Chain-of-Custody Record

Page \_\_\_\_ of \_\_\_\_

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 18B0738

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type	
Company: Hydro Tech Env. Corp.	<input checked="" type="checkbox"/> SAME	<input checked="" type="checkbox"/> SAME		Name: Musilma		#170154		RUSH-Same Day	Summary Report	x	
Address: 15 Ocean Ave. 2nd Fl				Company: Hydro Tech Env. Corp.		11-28 31 Drive, LIC NY		RUSH-Next Day	QA Report	x	
Phone.: 718-636-0800				Address: 77 Arkay Dr. Suite G		Purchase Order #		RUSH-Two Day	CT RCP		
Contact: Paul I. Matli				Hauptpaugue Ny		1126		RUSH-Three Day	CT RCP DOA/DUE Pkg		
E-mail: pmatl@hydrotechenv.com				E-mail: mward_hydrotechenv.com		Samples from CT NY NJ		RUSH-Four Day	NY ASP A Package		
								Standard (5-7 day)	NY ASP B Package	x	
									NJDEP Reduced Deliv		
									Excel	x	
									NYSDEC Equis	x	
									NJDEP SRP HazSite		
									Equis		
									GIS/KEY (std)		
									YORK Regulatory Comp Excel		
									compared to:		
									See Comment below		
									OTHER:		
									Container Description		
									6 x 40 mils vials		
									3 x 40 mils vials		
									x		
									x		
									x		
									x		
									2 x 40 mils vials		

Sample Identification	Date/Time Sampled	Matrix	Analysis Requested (List above includes common analysis)									
MW-1 (MS/MSD)	2/19/2018	GW	PCE and TCE via EPA 8260B									
MW-2	x	x	x									
MW-3	x	x	x									
MW-4	x	x	x									
MW-6	x	x	x									
Field Blank	x	DI	x									
Trip Blank	x	x	x									

Comments:	Preservation (check all applicable)	4°C	Frozen	ZnAc	HCl	MeOH	HNO <sub>3</sub>	H <sub>2</sub> O <sub>2</sub>	NaOH
x = same as before Compare to NYSDEC - 1,1,1 TOGS- GQS	Special Instructions Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>								

Samples Relinquished By	Date/Time	Samples Received By	Date/Time	Temperature on Receipt
P. E. Matli	2/20/18	John Matli	2/20/18 12:05	21°C
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time	



## Post-Injection Lab Report (July 2018)





# Technical Report

prepared for:

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue

Brooklyn NY, 11225

**Attention: Paul Matli**

Report Date: 07/31/2018

**Client Project ID: #170154 11-28 31 Drive, LIC NY**

York Project (SDG) No.: 18G1061

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371



132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)



Report Date: 07/31/2018  
Client Project ID: #170154 11-28 31 Drive, LIC NY  
York Project (SDG) No.: 18G1061

**Hydro Tech Environmental (Brooklyn)**

15 Ocean Avenue  
Brooklyn NY, 11225  
Attention: Paul Matli

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**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 25, 2018 and listed below. The project was identified as your project: **#170154 11-28 31 Drive, LIC NY**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18G1061-01	MW-1	Water	07/24/2018	07/25/2018
18G1061-02	MW-2	Water	07/24/2018	07/25/2018
18G1061-03	MW-3	Water	07/24/2018	07/25/2018
18G1061-04	MW-4	Water	07/24/2018	07/25/2018
18G1061-05	MW-6	Water	07/24/2018	07/25/2018
18G1061-06	Trip Blank	Water	07/24/2018	07/25/2018



## **General Notes for York Project (SDG) No.: 18G1061**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 07/31/2018







## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 18G1061-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	0.22	J	ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 03:53	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 03:53	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
	Surrogate Recoveries	Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %			69-130						
2037-26-5	Surrogate: Toluene-d8	101 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	101 %			79-122						

## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 18G1061-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	20		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	0.63		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:25	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
	Surrogate Recoveries	Result			Acceptance Range						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %			69-130						
2037-26-5	Surrogate: Toluene-d8	100 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	100 %			79-122						

## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18G1061-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:





## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 18G1061-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	1.2		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 04:57	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %			69-130						
2037-26-5	Surrogate: Toluene-d8	100 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	101 %			79-122						

## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 18G1061-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	13		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 05:29	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	0.43	J	ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 05:29	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	106 %			69-130						
2037-26-5	Surrogate: Toluene-d8	100 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	102 %			79-122						

## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18G1061-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	43		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 07:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		





## Sample Information

**Client Sample ID:** MW-6

**York Sample ID:** 18G1061-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	0.46	J	ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 07:38	SS
		Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP									
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	108 %	69-130								
2037-26-5	Surrogate: Toluene-d8	98.4 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	101 %	79-122								

## Sample Information

**Client Sample ID:** Trip Blank

**York Sample ID:** 18G1061-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18G1061

#170154 11-28 31 Drive, LIC NY

Water

July 24, 2018 3:00 pm

07/25/2018

### Volatile Organics, 8260 List - Low Level

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 01:46	SS
		Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP									
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	07/27/2018 12:28	07/28/2018 01:46	SS
		Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP									
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	104 %	69-130								
2037-26-5	Surrogate: Toluene-d8	100 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	101 %	79-122								





## Analytical Batch Summary

**Batch ID:** BG81295

**Preparation Method:** EPA 5030B

**Prepared By:** TAB

YORK Sample ID	Client Sample ID	Preparation Date
18G1061-01	MW-1	07/27/18
18G1061-02	MW-2	07/27/18
18G1061-03	MW-3	07/27/18
18G1061-04	MW-4	07/27/18
18G1061-05	MW-6	07/27/18
18G1061-06	Trip Blank	07/27/18
BG81295-BLK1	Blank	07/27/18
BG81295-BS1	LCS	07/27/18
BG81295-BSD1	LCS Dup	07/27/18
BG81295-MS1	Matrix Spike	07/27/18
BG81295-MSD1	Matrix Spike Dup	07/27/18





## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	--------------------	-------	----------------	-------------------	------	----------------	------	-----	--------------	------

#### Batch BG81295 - EPA 5030B

##### Blank (BG81295-BLK1)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	ND	0.50	ug/L								
Trichloroethylene	ND	0.50	"								
Surrogate: 1,2-Dichloroethane-d4	10.4		"	10.0		104	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	10.4		"	10.0		104	79-122				

##### LCS (BG81295-BS1)

Prepared &amp; Analyzed: 07/27/2018

Tetrachloroethylene	8.06		ug/L	10.0		80.6	82-131	Low Bias			
Trichloroethylene	8.83		"	10.0		88.3	82-128				
Surrogate: 1,2-Dichloroethane-d4	9.82		"	10.0		98.2	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.90		"	10.0		99.0	79-122				

##### LCS Dup (BG81295-BSD1)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	8.42		ug/L	10.0		84.2	82-131		4.37	30	
Trichloroethylene	9.24		"	10.0		92.4	82-128		4.54	30	
Surrogate: 1,2-Dichloroethane-d4	10.0		"	10.0		100	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.93		"	10.0		99.3	79-122				

##### Matrix Spike (BG81295-MS1)

\*Source sample: 18G1061-04 (MW-4)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	18.6		ug/L	10.0	12.8	58.2	64-139	Low Bias			
Trichloroethylene	8.41		"	10.0	0.430	79.8	53-145				
Surrogate: 1,2-Dichloroethane-d4	10.4		"	10.0		104	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.72		"	10.0		97.2	79-122				

##### Matrix Spike Dup (BG81295-MSD1)

\*Source sample: 18G1061-04 (MW-4)

Prepared: 07/27/2018 Analyzed: 07/28/2018

Tetrachloroethylene	20.1		ug/L	10.0	12.8	72.8	64-139		22.3	30	
Trichloroethylene	9.00		"	10.0	0.430	85.7	53-145		7.13	30	
Surrogate: 1,2-Dichloroethane-d4	10.4		"	10.0		104	69-130				
Surrogate: Toluene-d8	10.1		"	10.0		101	81-117				
Surrogate: p-Bromofluorobenzene	9.67		"	10.0		96.7	79-122				





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18G1061-01	MW-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-02	MW-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-03	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-04	MW-4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-05	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18G1061-06	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C





## Sample and Data Qualifiers Relating to This Work Order

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

## Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.





For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

---



**YORK**

ANALYTICAL LABORATORIES, INC.  
120 RESEARCH DR. STRATFORD, CT 06615  
(203) 325-1371 FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 1 of 1

York Project No. 18G-1061

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

YOUR INFORMATION		Report to:		Invoice To:		Your Project ID		Turn-Around Time		Report/Deliverable Type	
Company: HydroTech Env. Eng Geol	<input checked="" type="checkbox"/> SAME <input type="checkbox"/>	Name: <u>Paul I. Matli</u>	Address: <u>15 Ocean Ave. 2nd Fl</u>	Company: <u>Bklyn, NY 11225</u>	Address: <u>718-636-0800</u>	Contact: <u>Paul I. Matli</u>	E-mail: <u>pmatli@hydrotechenvironmental.com</u>	Volatiles: <u>8260 full</u>	Metals: <u>RCRA8</u>	Misc. Org: <u>TPH GRO</u>	Summary Report <input checked="" type="checkbox"/>
								Metals: <u>624</u>	Metals: <u>TPH DRO</u>	Misc. Org: <u>TPH DRO</u>	QA Report <input checked="" type="checkbox"/>
								Metals: <u>STAR5 list</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	CT RCP
								Metals: <u>BTEX</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	CT RCP DQA/DUE Pkg
								Metals: <u>MTBE</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	NY ASP A Package
								Metals: <u>TCL list</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	NY ASP B Package
								Metals: <u>TAGM list</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	NUDEP Reduced Deliv
								Metals: <u>CT RCP list</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	
								Metals: <u>Arom. only</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	
								Metals: <u>Halog. only</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	
								Metals: <u>App. IX list</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	
								Metals: <u>8021B list</u>	Metals: <u>CTE/TPH</u>	Misc. Org: <u>CTE/TPH</u>	

Print Clearly and Legibly. All Information must be complete.  
Samples will NOT be logged in and the turn-around time  
clock will not begin until any questions by York are resolved.

Paul I. Matli  
Samples Collected/Authorized By (Signature)  
Paul I. Matli  
Name (printed)

Sample Identification	Date/Time Sampled	Matrix	Preservation	Analysis	Container Description
MW-1	7/24/2018	GW		PCE and TCE via EPA 8260B	3 x 40 mils vials
MW-2	x	x			x
MW-3	x	x			x
MW-4 (MS/MSD)	x	x			6 x 40 mils vials
MW-6	x	x			3 x 40 mils vials
Trip Blank	x	DI			2 x 40 mils vials
Relinquished x <u>7/25/18</u>					
Received by <u>Lab</u>					

Comments: x = same as before Compare to NYSDEC - 1.1.1 TOGS - GQS	Preservation (check all applicable)		4°C <input type="checkbox"/> Frozen <input type="checkbox"/> HCl <input type="checkbox"/> MeOH <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> O <input type="checkbox"/> NaOH <input type="checkbox"/>		
	Special Instructions		Date/Time		
Samples Relinquished By <u>Paul I. Matli</u>		Date/Time <u>7/25/18</u>		Samples Received By <u>Lab</u>	Date/Time <u>7/25/18</u>
Temperature on		Date/Time		Date/Time	



# **ATTACHMENT R**

## **Monitoring Well Construction Logs**





# HYDRO TECH ENVIRONMENTAL CORP.

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77 ARKAY DRIVE, SUITE G  
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NYC OFFICE:  
15 OCEAN AVENUE, SECOND FLOOR  
BROOKLYN, NEW YORK 11238

## WELL CONSTRUCTION LOG

Job No: 130030 Date: 04-24-2013 Page: 1 OF 1

Location: 11-28 31st DRIVE, QUEENS NY

Well Number: MW-1

Screen Size: 0.020"

Drilling Method: DIRECT PUSH

Screen Interval: 15.00'

Total Depth: 18.00'

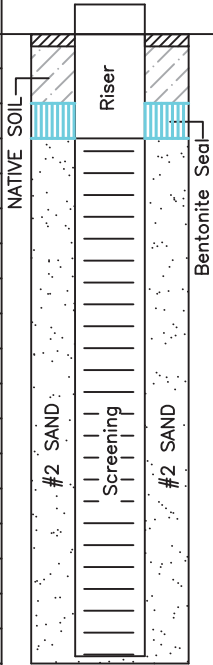
Diameter: 1"

Depth to Water: 8.5' TO 10'

Riser Length: 6.90"

Manhole Size: N/A

Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2			
4			0'-2.00' - Native Soil.
6			2.00'-3.00' - Bentonite Seal.
8			3'-18.00' - #2 Sand.
10			0'-3.00' - Riser
12			3'-18.00' - Screen
14			
16			
18			
20			
22			
24			
26			
28			
30			
32			
34			
36			

DRILLER: CAMERON  
GEOLOGIST: PAUL





# HYDRO TECH ENVIRONMENTAL CORP.

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NYC OFFICE:  
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BROOKLYN, NEW YORK 11238

## WELL CONSTRUCTION LOG

Job No: 130030 Date: 04-24-2013 Page: 1 OF 1

Location: 11-28 31st DRIVE, QUEENS NY

Well Number: MW-2

Screen Size: 0.020"

Drilling Method: DIRECT PUSH

Screen Interval: 15.00'

Total Depth: 18.00'

Diameter: 1"

Depth to Water: 8.5' TO 10'

Riser Length: 5.70"

Manhole Size: N/A

Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2			0'-2.00' - Native Soil.
4			2.00'-3.00' - Bentonite Seal.
6			3'-18.00' - #2 Sand.
8			0'-3.00' - Riser
10			3'-18.00' - Screen
12			
14			
16			
18			
20			
22			
24			
26			
28			
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32			
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36			

DRILLER: CAMERON  
GEOLOGIST: PAUL





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BROOKLYN, NEW YORK 11238

## WELL CONSTRUCTION LOG

Job No: 130030 Date: 04-24-2013 Page: 1 OF 1

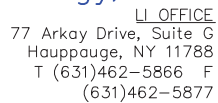
Location: 11-28 31st DRIVE, QUEENS NY

Well Number: MW-3 Screen Size: 0.020"  
Drilling Method: DIRECT PUSH Screen Interval: 15.00'  
Total Depth: 18.00' Diameter: 1"  
Depth to Water: 8.5' TO 10' Riser Length: 4.50"  
Manhole Size: N/A Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2			0'-2.00' - Native Soil.
4			2.00'-3.00' - Bentonite Seal.
6			3'-18.00' - #2 Sand.
8			0'-3.00' - Riser
10			3'-18.00' - Screen
12			
14			
16			
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22			
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28			
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32			
34			
36			

DRILLER: CAMERON  
GEOLOGIST: PAUL

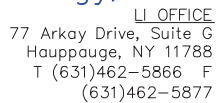




Manhole Size: N/A Sand Size: #1

[illegible]





Manhole Size: N/A Sand Size: #1

[illegible]









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## WELL CONSTRUCTION LOG

Job No: 140344 Date: 02-08-2015 Page: 1 OF 1

Location: 11-28 31st DRIVE, QUEENS NY

Well Number: MW-4 Screen Size: 0.020"

Drilling Method: DIRECT PUSH Screen Interval: 15.00'

Total Depth: 20.00' Diameter: 2"

Depth to Water: 10.5' Riser Length: 5'

Manhole Size: 5" Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2			0'-2.00' - Native Soil.
4			4.00'-5.00' - Bentonite Seal.
6			5'-20.00' - #2 Sand.
8			0'-5.00' - Riser
10			5'-20.00' - Screen
12			
14			
16			
18			
20			
22			
24			
26			
28			
30			
32			
34			
36			

DRILLER: OSCAR  
GEOLOGIST: NICK





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BROOKLYN, NEW YORK 11238

## WELL CONSTRUCTION LOG

Job No: 140344 Date: 02-08-2015 Page: 1 OF 1

Location: 11-20 31st DRIVE, QUEENS NY

Well Number: MW-5

Screen Size: 0.020"

Drilling Method: DIRECT PUSH

Screen Interval: 15.00'

Total Depth: 20.00'

Diameter: 2"

Depth to Water: 10.5'

Riser Length: 5'

Manhole Size: 5"

Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2			0'-2.00' - Native Soil.
4			4.00'-5.00' - Bentonite Seal.
6			5'-20.00' - #2 Sand.
8			0'-5.00' - Riser
10			5'-20.00' - Screen
12			
14			
16			
18			
20			
22			
24			
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28			
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36			

DRILLER: OSCAR  
GEOLOGIST: NICK





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## WELL CONSTRUCTION LOG

Job No: 140344 Date: 02-08-2015 Page: 1 OF 1

Location: 11-35 31st DRIVE, QUEENS NY

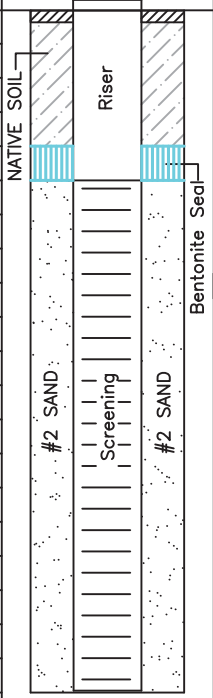
Well Number: MW-6 Screen Size: 0.020"

Drilling Method: DIRECT PUSH Screen Interval: 15.00'

Total Depth: 20.00' Diameter: 2"

Depth to Water: 10.5' Riser Length: 5'

Manhole Size: 5" Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2			0'-2.00' - Native Soil.
4			4.00'-5.00' - Bentonite Seal.
6			5'-20.00' - #2 Sand.
8			0'-5.00' - Riser
10			5'-20.00' - Screen
12			
14			
16			
18			
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22			
24			
26			
28			
30			
32			
34			
36			

DRILLER: OSCAR  
GEOLOGIST: NICK





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BROOKLYN, NEW YORK 11238

## WELL CONSTRUCTION LOG

Job No: 140344 Date: 02-08-2015 Page: 1 OF 1

Location: 11-44 31st DRIVE, QUEENS NY

Well Number: MW-7

Screen Size: 0.020"

Drilling Method: DIRECT PUSH

Screen Interval: 15.00'

Total Depth: 20.00'

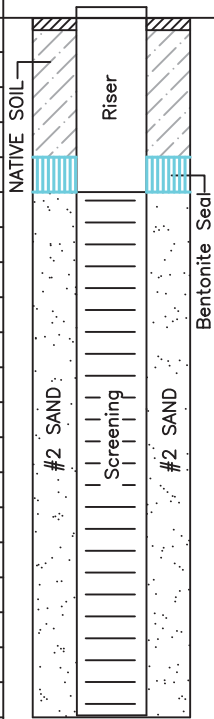
Diameter: 2"

Depth to Water: 10.5'

Riser Length: 5'

Manhole Size: 5"

Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2			
4			0'-2.00' - Native Soil.
6			4.00'-5.00' - Bentonite Seal.
8			5'-20.00' - #2 Sand.
10			0'-5.00' - Riser
12			5'-20.00' - Screen
14			
16			
18			
20			
22			
24			
26			
28			
30			
32			
34			
36			

DRILLER: OSCAR  
GEOLOGIST: NICK





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## WELL CONSTRUCTION LOG

Job No: 140344 Date: 02-08-2015 Page: 1 OF 1

Location: 11-25 BROADWAY, QUEENS NY

Well Number: MW-8 Screen Size: 0.020"

Drilling Method: DIRECT PUSH Screen Interval: 15.00'

Total Depth: 20.00' Diameter: 2"

Depth to Water: 10.5' Riser Length: 5'

Manhole Size: 5" Sand Size: #2

Depth Below Grade (ft.)	Sample Interval (ft.)	Well Construction	Description
2		<p>The diagram illustrates the well's construction from the surface down to 36 feet. It shows a central riser pipe extending from the surface to 5 feet depth, surrounded by screening. The well is filled with #2 sand from 5 feet to 20 feet depth. A bentonite seal is located between the native soil (0-2 feet) and the sand (5-20 feet). The riser pipe is shown as a vertical cylinder within the sand and soil layers.</p>	0'-2.00' - Native Soil.
4			4.00'-5.00' - Bentonite Seal.
6			5'-20.00' - #2 Sand.
8			0'-5.00' - Riser
10			5'-20.00' - Screen
12			
14			
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DRILLER: OSCAR  
GEOLOGIST: NICK



**ATTACHMENT S**  
**Approved ISCO Design Document**



**11-28 31<sup>st</sup> Drive  
QUEENS, NEW YORK  
Block 502 Lot 22**

---

**IN SITU CHEMICAL OXIDANT DESIGN  
DOCUMENT**

*Prepared for:*  
Mr. George Man  
11-28 31st Drive,  
Queens, NY 11106

*Prepared By:*



**AMC Engineering PLLC**  
38-20 32nd Street  
Long Island City, NY 11101  
Phone: (516) 417-8588

August 2016

---



## CERTIFICATIONS

---

I, Ariel Czemerinski, certify that I am currently a NYS registered professional engineer and that this IN SITU CHEMICAL OXIDANT Design Document was prepared in accordance accepted engineering practices.

076508  
NYS Professional Engineer #

9/2/216  
Date



Signature



**TABLE OF CONTENTS**  
**IN SITU CHEMICAL OXIDANT DESIGN DOCUMENT**  
**11-28 31st Drive, Queens**

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<b>1.0</b>	<b>SITE BACKGROUND .....</b>	<b>1</b>
<b>2.0</b>	<b>SITE DESCRIPTION AND HISTORY .....</b>	<b>3</b>
<b>3.0</b>	<b>IN SITU CHEMICAL OXIDANT SYSTEM DESCRIPTION .....</b>	<b>5</b>

***LIST OF FIGURES***

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Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	ISCO System Layout
Figure 4	GW Results Parameters

***ATTACHMENTS***

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Attachment A	ISCO System Specifications and Instructions
Attachment B	Injection Calculations



## 1.0 SITE BACKGROUND

AMC Engineering, PLLC (AMC) has been retained by Mr. George Mann to conduct environmental remediation activities for a commercial property located 11-28 31st Drive in the Long Island City section of Queens (**Figure 1**). Site has formally entered into to the New York State Department of Environmental Conservation (NYSDEC) Brownfields Cleanup Program (BCP) and given Site Number C241159. The applicant has applied to this program as a Volunteer. The proposed future use of the Site will consist of residential use. The Site will be developed into 6-story building with slab on grade, plus stair/elevator and bulkhead.

The Site is 2,416.40-square feet and is bounded by 31st Drive to the north-northeast, a vacant land and a 1-story manufacturing building to the south-southwest, a 1-story cabinet manufacturing facility to the east-southeast and a vacant 1-story warehouse to the west-northwest. Currently, the Site is vacant and contains a 1-story building that was until most recently occupied by a manufacturing facility of wood cabinets

The Remedial Investigation (RI) conducted by Hydro Tech Environmental (HYDRO TECH) in July 2013 and subsequent monitoring activities on and offsite has revealed elevated levels of chlorinated volatile organic compounds (CVOCs), including tetrachloroethene (PCE) and trichloroethene (TCE), in soil gas above mitigation levels established within the State DOH soil vapor guidance matrix. TCE concentrations in soil gas ranged from 9.3  $\mu\text{g}/\text{m}^3$  to a high of 15  $\mu\text{g}/\text{m}^3$  onsite and 130  $\mu\text{g}/\text{m}^3$  offsite. PCE concentrations ranged from 140  $\mu\text{g}/\text{m}^3$  to 1600  $\mu\text{g}/\text{m}^3$  onsite and 1600  $\mu\text{g}/\text{m}^3$  offsite (see figure 4)

PCE, TCE and cis-1,2 Dichloroethylene (1,2 DCE) were also detected in groundwater samples obtained from one indoor and three outdoor monitoring wells. As depicted in Figure 4, MW3 resulted in 83 ug/L of PCE (2013) and 20.83 ug/L (2015); MW4 yielded 3799.83 ug/L of PCE, 17ug/L of TCE and 20 ug/L of 1,2 DCE; MW6 resulted in 85.83 ug/L of PCE, 8.9ug/L of TCE and 40 ug/L of 1,2 DCE. No other VOCs were detected.

Groundwater flow direction could not be thoroughly estimated, therefore there are injections wells located of both sides of the assumed source to account for uncertainty in the groundwater



flow direction. NYSDEC has determined that an existing onsite UST in the NE area of the site is the source of groundwater contamination.

An IN SITU CHEMICAL OXIDANT (ISCO) system has been proposed as part of the remedy outlined in the approved Remedial Action Work Plan (RAWP), to reduce the potential risk of vapor intrusion. The ISCO system will be installed beneath the slab. The chemical oxidant will be injected into the subsurface to destroy the contaminants in the NE portion of the site, where the UST is located.



## 2.0 SITE DESCRIPTION AND HISTORY

1. Elevation of the property is approximately 11 feet.
2. Depth to groundwater ranges from 8.47 to 10.03 feet at the Site.
3. Depth to bedrock is in excess of 40 feet at the Site.
4. The stratigraphy of the site, from the surface down, consists of historic fill (sand with traces of pebbles, silt, and ash) at variable depths ranging in thickness from zero to 5 feet. The fill layer is underlain by clayey sand to variable depths ranging from 2 to 10 feet. This layer is underlain by granular soils to 40 feet.
5. Soil samples collected during the RI indicated that Pesticides and PCBs were not detected in any of the soil samples. Trace concentrations VOCs including acetone, methylene chloride and PCE (3.9 ppb) was detected in 1 of 3 shallow soil samples at the Site. No other VOCs were detected in any soil samples. Trace levels of several SVOC's were detected in shallow soil samples (maximum total SVOCs of 6.33 ppm). No SVOC compounds exceeded Unrestricted Use SCOs. Metals including copper (maximum of 54.6 mg/kg), lead (maximum of 191 mg/kg), zinc (maximum of 111 mg/kg), chromium trivalent (maximum of 37.2 mg/kg) and chromium Hexavalent (maximum of 1.47 mg/kg) were detected in shallow soil samples at concentrations that exceeded the Track 1 Unrestricted SCOs. No metals exceeded Restricted Residential SCOs. Metal concentrations in deeper soils were all below Track 1 Unrestricted Use SCOs. Data collected during the RI is sufficient to delineate the vertical and horizontal distribution of contaminants in soil/fill at the Site.
6. Groundwater samples collected during the RI showed two chlorinated VOC, including PCE (maximum of 83 ug/l) and chloroform (maximum of 4.7 ug/l), acetone (4 ug/l) and methylene chloride (4 ug/l) in 1 of 3 monitoring wells installed at the Site. Only PCE concentrations exceeded 6NYCRR Part 703.5 Class GA Groundwater Quality Standards (GQS). One SVOC, Di-n-butyl phthalate, which is a common laboratory contaminant, was detected in one sample at a concentration (11.2 ppb), below its GQS. No pesticides or PCBs were detected in groundwater samples. Two dissolved metals, Sodium and magnesium were detected in groundwater above their GQS..
7. Soil vapor samples collected during the RI showed a wide range of compounds throughout the property including BTEX and associated derivative compounds and chlorinated hydrocarbons. BTEX were found in all soil vapor samples and included a wide number of compounds. These



compounds were not identified in soil or groundwater on the property. PCE was detected in all vapor samples at concentrations of 140 ug/m<sup>3</sup>, 1,400 ug/m<sup>3</sup> and 1,600 ug/m<sup>3</sup>. TCE was detected in 2 of 3 vapor samples at a concentration of 9.5 ug/m<sup>3</sup> and 15 ug/m<sup>3</sup>. TCA and carbon tetrachloride was not detected in any sample. Other chlorinated hydrocarbon compounds included chloroform (18 ug/m<sup>3</sup>), methylene chloride (maximum 29 ug/m<sup>3</sup>) and acetone (maximum 900 ug/m<sup>3</sup>). PCE (NYSDOH AGV of 100 µg/m<sup>3</sup>) and TCE (AGV of 5 µg/m<sup>3</sup>) concentrations detected in soil vapor at the site are above the NYSDOH guidance matrix.

Based upon the review of the Fire Insurance Maps and Regulatory Agency documents from the Phase I Environmental Site Assessment (ESA) Report prepared by Hydro Tech in March 2013, the Site was utilized as an auto repair shop between 1934 and 1936, a machine shop between 1945 and 1970 and commercial facility between 1977 and 2006. Until most recently, the site was utilized as a manufacturing facility of wood cabinets and then became vacant during the last quarter of 2012.



### **3.0 IN SITU CHEMICAL OXIDANT SYSTEM DESCRIPTION**

Remediation of chlorinated solvents present in groundwater will be accomplished through a chemical oxidant injection program. The proposed area of injection surrounds the UST in every direction given the uncertainty of groundwater flow. Injections at these locations will deliver oxidant to the subsurface allowing it to flow with groundwater, treating both residual contaminants in soil and the groundwater.

#### 3.1 Chemical Oxidant Treatment of Soil Excavation Area

Dry sodium persulfate may be utilized to treat residual VOCs in soil which may remain following the excavation procedure and tank removal. Sodium persulfate and a chelated iron activator will be delivered to the site as a dry powder and applied directly to the open excavation at a ratio of 9 lbs of FeEDTA powder to each 55 lb bag of sodium persulfate. The amount of oxidant to be applied will be dependent on the size of the excavation and the degree of residual contamination remaining. It is anticipated that approximately 5-6 bags of persulfate will be applied in this situation. If application is on dry soil, it will then be wetted with water prior to backfilling. Wetting is not required if the material is applied on wet soil or at or below the water table.

Activated sodium persulfate will be broadcast directly into the open excavation or trench (as a dry powder) prior to backfilling. The activated sodium persulfate powder will be thoroughly mixed into subsurface soil utilizing a mini excavator bucket.

#### 3.2 Injections: Probe injection or Well Installation

Six injection wells have been proposed; they will be located in the proximity of the UST. Their location is depicted in figure 3, attached.

Injections will be done either via injection probe or through the installation of 1" PVC injection wells. Chemical oxidant will be applied from 8 ft below the water table to 2 ft above the water table. If injections are conducted through PVC wells, then No. 1 Morie gravel pack will be placed around the screen to a depth of approximately 1 ft above the screen followed by a 1 ft hydrated bentonite pellet seal. The injection wells will be finished at the surface with a 5-inch



bold down manhole cover. In this case, and since remediation injection points for chemical oxidation are considered Class V UIC wells and are regulated through the USEPA UIC program, EPA will be notified of the construction of the injection well by filing form OMB No. 2040-0042 with the Region 1 USEPA office 30 days prior to performing any oxidant injection into oxidant injection wells.

If injections are done through an injection probe, then a small Geoprobe will be mobilized to the site and drive the injection point to 6 ft below water. An injection pump will inject the Klorur solution while slowly lifting the injection probe a total of 8 ft.

### 3.3 Oxidant Injection Events

The oxidant selected for this project is FeEDTA-activated sodium persulfate. Sodium persulfate is a robust oxidant which has a long residence time (anion lifetime) in the subsurface. Persulfate activation through iron provides fast contaminant reaction kinetics capable of destroying a wide range of organics including the petroleum VOCs present at the Site.

Sodium persulfate will be delivered to the site as a dry powder; it will be mixed with water on-site to provide a 9.3lb/gal solution. FeEDTA will be delivered to the site in 55 lb bags. The manufacturer's instructions for using FeEDTA-activated Klorur are attached.

The initial injection will consist of approximately 34 gallons of activated persulfate solution per injection point. The need for subsequent injections and the number/ location of injection points to be utilized for subsequent injections will be determined following the collection and analysis of performance monitoring samples.

MW3 is located in the immediate vicinity of the UST. It is not anticipated that MW3 will be damaged during the UST removal process. There will be additional inspections of MW3 during and after tank removal to assess its usability. If MW3 is rendered unusable, a new monitoring well will be installed nearby the original location of MW3 in consultation with the DEC and remedial engineer.



### 3.4 Basis of Calculation

Stoichiometric relation for full oxidation of PCE is 3 pounds of persulfate per pound of PCE. Variable field conditions and presence of other parameters increases this amount. Attachment B contains the calculations and characteristics of the injected material. In designing the injection, we assume the impacted GW to contain 3.8 mg/L and the soil concentration 10.5 mg/Kg of PCE. It is assumed that the treatment zone is 500 ft<sup>2</sup> and the thickness is 7 ft. Including an assumed 1 g Klorur per kg of soil, the calculated persulfate demand is 1,886 lb.

For activation, Peroxychem recommends a 200 ppm of Fe in groundwater. Based on the GW volume, 117 lbs of FeEDTA will be required. Attachment A contains additional information.

### 3.5 Pre- and post- injection control

Prior to commencement of injection activities, a round of sampling of groundwater will be conducted to establish background levels and be able to adjust the injected quantities based on these results. Samples will be obtained from MW1, MW2, MW3, MW4, MW5, and MW6.

Another round of sampling will be conducted six and twelve weeks after the initial injection event; this will assess the effectiveness of remedial action. If these results show presence of PCE in exceedance of 5 ug/L, another round of injections will be conducted and the QC protocol as described herein repeated.

During sampling events subsequent to chemical injections, the groundwater will be analyzed to determine the amount of oxidant remaining. The manufacturer Peroxychem sells Klorur Persulfate Field Test Kits; the instruments rely on iron reactions with the persulfate oxidant. The test kit is considered a reliable measure of persulfate in the groundwater. The specifications are included in Appendix A.

Location of injection locations will be modified if, as a result of the sampling, it is established that the PCE concentrations are different than anticipated.

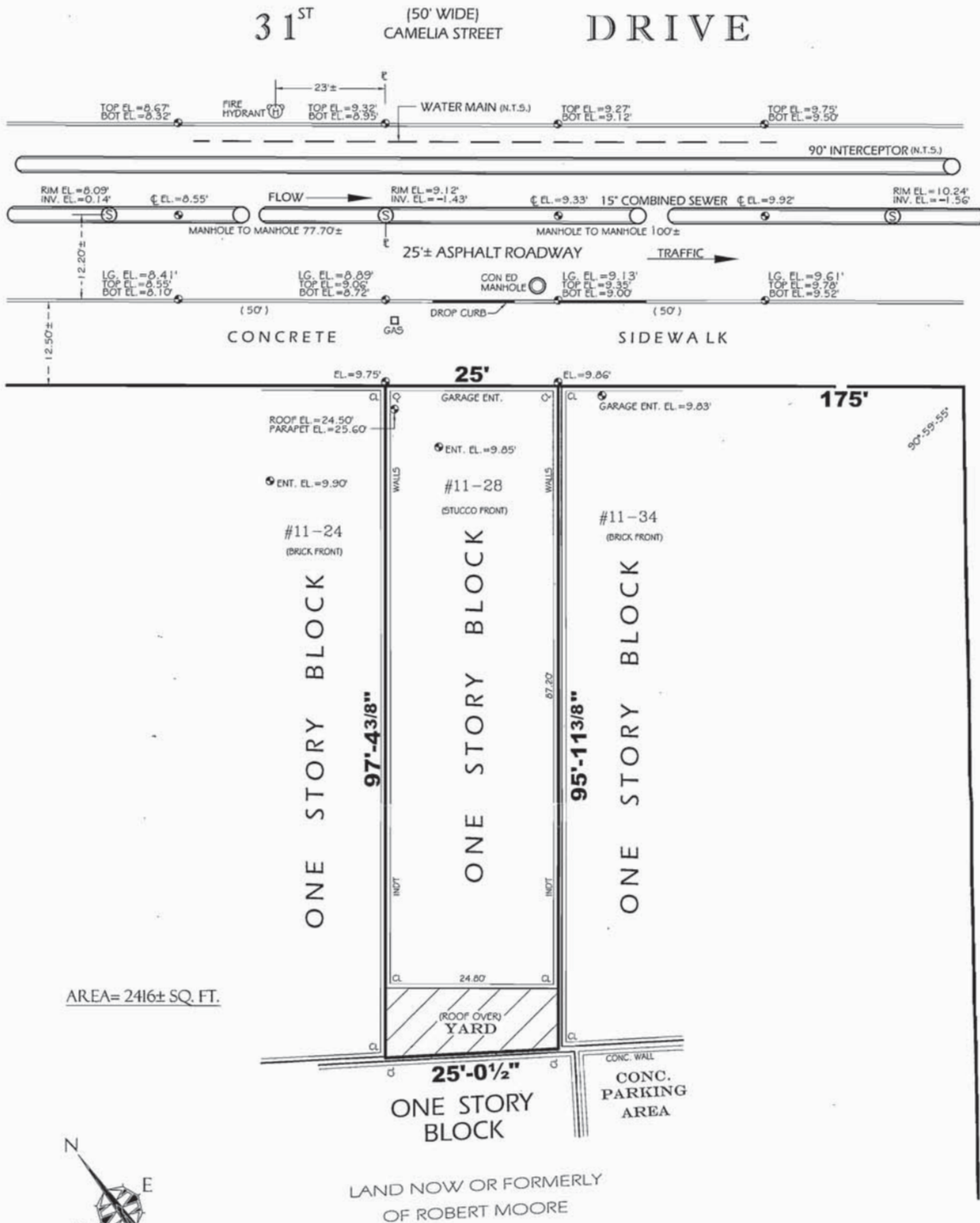


# **FIGURES**









UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY. GUARANTEES OR CERTIFICATIONS INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES OR CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

BLOCK: 502  
LOT: 22  
SECTION: 4  
COUNTY: QUEENS  
DWG BY: P.S.  
CHK'D BY:

SURVEYED

NOVEMBER 9, 2012

VINCENT J. DICCE L.S., P.E.

### ARCHITECTURAL SURVEY

(NOT FOR TITLE PURPOSES)

CAUTION: BEFORE PERFORMING ANY DIGGING OR DRILLING ON THIS SITE, IT IS REQUIRED THAT SUBSURFACE SERVICES, INCLUDING THE UNDERGROUND MAINS BE MARKED AND IDENTIFIED BY THE UTILITY INVOLVED IN COMPLIANCE WITH INDUSTRIAL CODE 53 OF NEW YORK STATE.

- 1) ALL ELEVATIONS REFER TO QUEENS TOPOGRAPHICAL DATUM WHICH IS 2.725 FEET ABOVE U.S. COASTAL & GEODETIC SURVEY DATUM AT SANDY HOOK NEW JERSEY.
- 2) UNDERGROUND UTILITY INFORMATION SHOWN WAS OBTAINED FROM VARIOUS COMPANIES AND CITY AGENCIES AND IS NOT GUARANTEED FOR ACCURACY OR COMPLETENESS. CONSULT CONSOLIDATED EDISON COMPANY AND KEYSpan FOR DETAILED INFORMATION ON THEIR RESPECTIVE SERVICES.
- 3) THIS IS TO CERTIFY THAT THERE ARE NO APPARENT STREAMS NOR NATURAL WATER COURSES IN THE PROPERTY AS SHOWN ON THIS SURVEY.

SCALE: 1"=15'

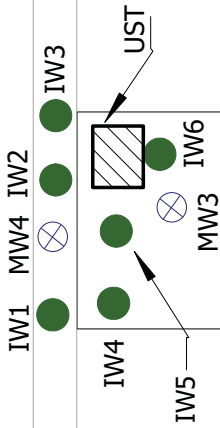
**BORO LAND SURVEYING, P.C.**

353 COURT STREET  
BROOKLYN, N.Y. 11231  
TEL. (718) 624-BORO (2676)



31st DRIVE

MW5



N.T.S

Key

- Injection Well
- Monitoring Well
- UST
- Other Obstructions



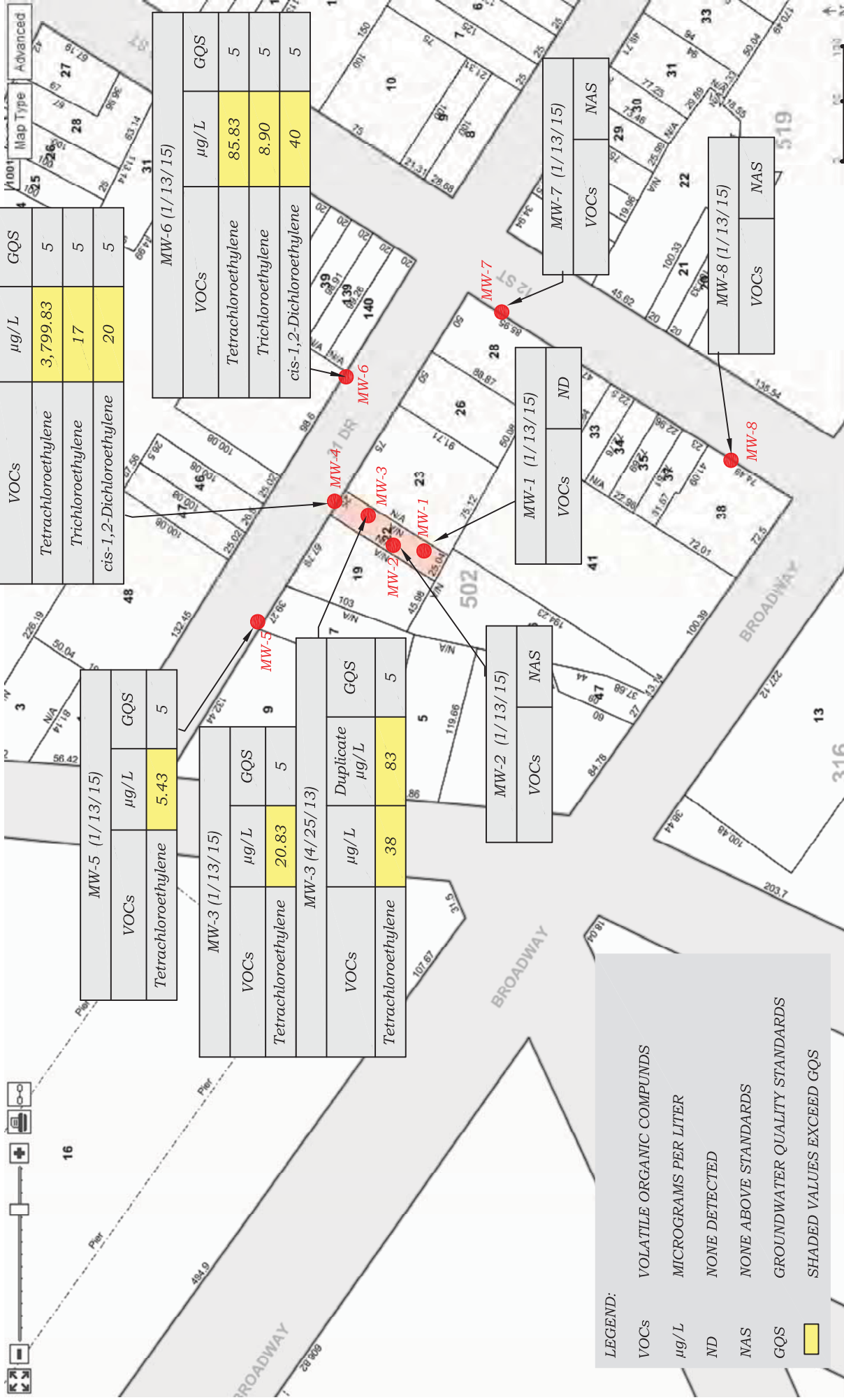
AMC ENGINEERING PLLC  
38-20 32nd Street, Unit 102  
Long Island City, NY 11101  
Office: 516-417-8588

PROJECT  
39-40 30th Street  
Long Island City, NY 11101

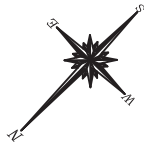
DATE AUG 31, 2016 DRAWING BY AC

Fig 3: Well Locations









SV-4		$\mu\text{g}/\text{m}^3$
VOCs		
1,2,4-Trimethylbenzene		18
Ethyl Benzene		10
Benzene		14
n-Heptane		8.1
n-Hexane		30
o-Xylene		13
p- & m- Xylenes		45
Toluene		46
Isopropanol		20
2-Butanone		17
Carbon disulfide		41
Acetone		91
Methylene chloride		23
Tetrachloroethylene		1,600
Trichloroethylene		130

SV-3		$\mu\text{g}/\text{m}^3$
VOCs		
1,2,4-Trimethylbenzene		29
Toluene		22
Ethyl Benzene		9.8
n-Heptane		32
o-Xylene		12
p- & m- Xylenes		41
Cyclohexane		44
Carbon disulfide		7.0
Isopropanol		79
Tetrahydrofuran		20
Acetone		82
Chloroform		18
Methylene chloride		9.4
Tetrachloroethylene		1,400
Trichloroethylene		15

SV-2		$\mu\text{g}/\text{m}^3$
VOCs		
1,2,4-Trimethylbenzene		35
Toluene		33
Ethyl Benzene		12
n-Heptane		55
o-Xylene		15
p- & m- Xylenes		50
2-Butanone		15
Carbon disulfide		8.4
Isopropanol		210
Tetrahydrofuran		25
Acetone		520
Methylene chloride		29
Tetrachloroethylene		1,600
Trichloroethylene		9.3

SV-1		$\mu\text{g}/\text{m}^3$
VOCs		
Toluene		48
Ethyl Benzene		10
n-Heptane		820
n-Hexane		9.0
o-Xylene		14
p- & m- Xylenes		43
2-Butanone		40
Ethyl acetate		230
Isopropanol		2,200
Tetrahydrofuran		23
Acetone		90
Methylene chloride		17
Tetrachloroethylene		140

## LEGEND:

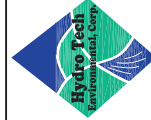
▲ SOIL VAPOR SAMPLE (SV) - COLLECTED ON APRIL 25, 2013

△ SOIL VAPOR SAMPLE (SV) - COLLECTED ON JULY 8, 2013

$\mu\text{g}/\text{m}^3$  MICROGRAMS PER CUBIC METER

VOC VOLATILE ORGANIC COMPOUNDS

0' 20' 40'  
SCALE IN FEET (FT.)



**HYDRO TECH ENVIRONMENTAL CORP.**  
 MAIN OFFICE:  
 77 ARKAY DRIVE, SUITE C  
 HAUPPAUGE, NEW YORK 11788  
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 www.hydrotechenvironmental.com

11-28 31st Drive  
 Long Island City, NY  
 HTE Job# 120029

Drawn By: C.O.  
 Reviewed By: M.R.  
 Approved By: M.R.  
 Date: 08/14/13  
 Scale: AS NOTED

TITLE:

FIGURE 5 SPIDER MAP OF SOIL VAPOR DATA



# **ATTACHMENT A** ***ISCO Specifications***



## The Field Proven and Versatile ISCO Solution to Address Soil & Groundwater Contamination

Klozur® persulfate is the oxidant of choice for *in situ* chemical oxidation (ISCO), because of its ability to treat a wide range of contaminants including chlorinated solvents, petroleum and PAHs. Klozur persulfate is ideal for contaminated source zones and hot spots that require rapid treatment. When properly activated, Klozur persulfate provides an unmatched combination of oxidative power, versatility, and control that can be delivered both safely and cost effectively.

Successful field applications of Klozur activated persulfate have been performed globally. These applications demonstrate the ability of Klozur activated persulfate to treat diverse organic contaminants of concern including: chlorinated ethenes (TCE, PCE, DCE and vinyl chloride), chlorinated ethanes (TCA and DCA), chlorinated methanes (carbon tetrachloride and methylene chloride), BTEX, MTBE, polyaromatic hydrocarbons (PAHs), petroleum hydrocarbons (TPHs, GRO, DRO), 1,4-dioxane and pesticides.

### The benefits of Klozur Persulfate

When used with PeroxyChem's proprietary activation methods, Klozur persulfate provides a powerful multi-radical attack for the rapid destruction of recalcitrant compounds.



Multiple activation options and methods of delivery provide for a flexible and custom solution based on site conditions. With a solubility limit of up to 40 wt%, Klozur can be applied as a fully soluble solution. Klozur persulfate is a remarkable stable oxidant given its high oxidation potential, with a typical active lifetime in the subsurface of 3-6 months, providing an extended radius of influence. Klozur persulfate is safe to handle with PeroxyChem's recommended use guidelines; does not generate heat or gas.

Examples of Contaminants of Concern
<b>CHLORINATED SOLVENTS</b> PCE, TCE, DCE, VC, TCA, DCA, Methylene Chloride, Carbon Tetrachloride, Chlorobenzene
<b>PETROLEUM</b> TPH, BTEX, DRO, GRO
<b>PAHs</b> Creosote, MGP residuals 1,4-dioxane, MTBE, TBA, energetics, Chlorinated pesticides

### The sound science of Klozur Activated Persulfate

Klozur activated persulfate has a long history of documented success. Site and laboratory data prove successful treatment of some of the most recalcitrant compounds, such as chlorinated ethanes, and emerging contaminants, such as 1,4-dioxane and PFOS/PFOA.

### Application methods

- Direct push injection
- Fixed well injection
- Soil blending





## Measurement of Persulfate in Solution

The determination of persulfate concentration in groundwater post *in situ* application is critical in determining parameters such as the persulfate radius of influence (ROI) achieved and the residence time of the persulfate in the contaminated zone. In general, measurement of persulfate concentration in the field is problematic. Metals, either native to the soil or added for persulfate activation, may interfere with various persulfate analytical methods, yielding variable, inaccurate or misleading results. In addition, some methods, which may be suitable for the laboratory, may not be suitable for field application due to the need of sensitive or expensive detection equipment. In this edition of *Peroxygen Talk*, the measurement of persulfate in ground water is explored. A more detailed review, including comparisons between various persulfate analytical methods, can be found in Reference 1.

### Analytical Methods Involving Persulfate – Iron Reactions

Persulfate anion will oxidize divalent iron [Fe(II)] to form trivalent iron [Fe(III)] in the reaction:



Quantitative determination of persulfate concentration can be achieved by first adding in excess a known amount of Fe (II) to the persulfate solution. A portion of the Fe(II) is then converted to Fe(III) via Equation 1. The remaining Fe (II) is then titrated with either a known concentration of potassium permanganate [KMnO<sub>4</sub>] to a pink end-point or ceric sulfate [Ce(SO<sub>4</sub>)<sub>2</sub>] to a Ferroin indicator end-point (a color change from orange to clear or light blue). As an example, for permanganate:



Using the volume of permanganate or ceric sulfate needed to reach the endpoint (which occurs when all of the remaining Fe (II) is oxidized), allows for the determination of how much persulfate was originally present :

$$\text{Fe (II) reacted with persulfate} = \text{Fe (II) total} - \text{Fe (II) reacted with permanganate} \quad \text{Equation 3}$$

then:

$$\text{Moles of persulfate} = \text{moles of Fe (II) reacted with persulfate} / 2 \quad \text{Equation 4}$$

As this method is dependent upon a known quantity of Fe (II) in the test solution, naturally occurring iron and other reduced metals and residual contaminant that may react with the permanganate or ceric sulfate, in the groundwater can significantly impact the quantification of the persulfate concentration. Also, additives such as chelates, as when using chelated metal activation for persulfate, may cause interference with the titration. For example, Fe(III)-EDTA will interfere with the permanganate titration, but not so with the ceric sulfate titration. Addition of other oxidants, such as hydrogen peroxide likewise will impact the accuracy of the method, as additional oxidant will also oxidize the Fe(II), making it difficult to determine the persulfate contribution. For hydrogen peroxide – persulfate combinations, it is possible to react the peroxide with ceric sulfate first, to a Ferroin end-point, as the ceric sulfate will preferentially react with hydrogen peroxide over persulfate. When the end-point is reached, the hydrogen peroxide will have been consumed (which will also give a quantifiable measurement of the peroxide in solution). Then the permanganate or ceric sulfate back-titration of Fe (II) can be utilized to quantify the remaining





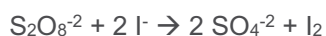
persulfate. The above titration method can provide a very accurate measurement of persulfate in solution. But typically it is only applicable in a laboratory, due to the instrumentation and chemicals required.

#### *Application in the field*

We have developed an easy-to-use, onsite titration kit for the measurement of persulfate in groundwater that addresses the limitations mentioned above, the new Klozur® Persulfate Field Test Kits. Two kits are currently available, one for use when activating Klozur persulfate with either high pH or with iron sulfate, and a second kit for use when activating Klozur persulfate with chelated iron. If hydrogen peroxide is being used as the activator, please contact us for additional support.

### **Iodimetric Methods**

Persulfate anion will react with potassium iodide as:



Equation 5

I<sub>2</sub> forms a brown color. In the laboratory, this method can be made quantitative by titrating the resulting solution with thiosulfate, reducing the I<sub>2</sub> back to I<sup>-</sup>, the end-point identified by the disappearance of the brown color. This can be enhanced by the addition of starch, which will form an intense blue complex with I<sub>2</sub> in the presence of I<sup>-</sup>. Disappearance of the blue color indicates the end-point when I<sup>-</sup> has been consumed. This method will have less interference from native metals as compared to the persulfate - iron method described above. However, accuracy will be affected by the instability of I<sub>2</sub> and the sensitivity of the reaction to the timing of the addition of the starch indicator.

#### *Application in the field*

The presence of persulfate can be qualitatively assessed by looking for a color change when starch is added to a solution of the groundwater and potassium iodide. If persulfate is present, a blue color will appear. However, instability of thiosulfate solutions, oxidation of I<sup>-</sup> by air and sunlight and the sensitivity of the end-point on the addition timing of the starch limit the use of this method as a *quantitative* assessment tool in the field for persulfate concentration.

### **Spectroscopic Methods**

Huang, et al<sup>2</sup> developed a laboratory spectroscopic method for the quantification of persulfate. The method is based on the oxidation of Fe(II) by persulfate to Fe(III). The Fe (III) is then complexed with thiocyanate (SCN<sup>-</sup>), which forms an intense red color. A spectrophotometer is then used to determine the concentration of the iron - thiocyanate complex as a function of absorbance at a wavelength of 450 nm. As this method is dependent upon Equation 1, it is subject to the same interferences from background iron concentrations and chelating agents as described for the persulfate – iron methods.

Several other spectroscopic methods have been developed for persulfate as well. These have been reported in reference 1 and by Williams<sup>3</sup>. In general, spectroscopic methods can obtain a high degree of quantification in a laboratory setting. However, the applicability to use in the field is somewhat limited due to the need of spectrophotometers. These methods may be suitable to mobile field labs equipped with the appropriate devices.





## Novel Techniques for Future Development

Gillian<sup>1</sup>, in work supported by Arcadis, developed a couple of new spectroscopic methods for the analytical determination of persulfate concentration. One of these includes the use of indole as a reactant with persulfate, forming a distinctive blue-colored compound. A second method utilizes the reaction of persulfate with promethazine-HCL, which forms a red-colored compound. Gillian<sup>1</sup> reports that in particular, the promethazine-HCL procedure has potential to be developed into a field test method, provided that iron concentrations in the groundwater are not high. Rossabi<sup>4</sup> et al described a novel approach to using ion chromatography to measure aqueous persulfate concentrations, and reported a measurement range of 0 – 500 mg persulfate / liter.

## Other Field Measurement Methods

There are commercially available persulfate test kits on the market. These are predominately based on the permanganate back-titration of Fe (II), Equation 1, which relies on matching a shade of purple to a subsequent persulfate concentration. Such kits can have significant interference from native groundwater iron or residual contaminant. In addition, these kits can be too sensitive in that they may indicate the presence of persulfate into the mg / L range, far below the effective persulfate dosing for most contaminated sites.

Secondary parameters, such as conductivity and sulfate concentration can be used to monitor the effective movement of persulfate in the subsurface. Persulfate injection will significantly increase the conductance of groundwater due to the increase in ion concentrations. Down-well conductivity probes and direct-push rod probes have been used successfully to determine the presence of persulfate in groundwater. Commercially available sulfate concentration kits have also been used to determine the presence of persulfate in down-gradient monitoring wells, as persulfate is consumed through reaction, it generates sulfate. Dissolved oxygen, ORP and pH measurement can also be used to track persulfate in the subsurface through its impact on groundwater parameters.

1. Lai, Gillian. "Development of Analytical Methods for Estimation of Oxidants Concentrations". Master's thesis, Imperial College, London, September, 2007.
2. Huang, K.C., Couttenye, R.A. and Hoag, G.E. "Kinetics of heat-assisted persulfate oxidation of methyl terty-butyl ether (MTEBE)". **Chemosphere** 49, p 413-420, 2002.
3. Williams, W. J. **Handbook of Anion Determination**. 1979, London, Butterworths.
4. Rossabi, J. and B. Fassolt. "Ion Chromotography for Persulfate and Total Oxidant Demand Analysis". 1<sup>st</sup> Annual Southeastern *In Situ* Soil and Groundwater Remediation Conference, Raleigh, NC 2007.

The content in this document was originally published in Peroxygen Talk dated August 2010.

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# MATERIAL SAFETY DATA SHEET

Klozür™



MSDS Ref. No.: 7775-27-1-12

Date Approved: 02/22/2005

Revision No.: 1

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This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the Canada's Workplace Hazardous Materials Information System (WHMIS) and, the EC Directive, 2001/58/EC.

---

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>PRODUCT NAME:</b>	Klozür™
<b>SYNONYMS:</b>	Sodium Persulfate, Sodium Peroxydisulfate; Disodium Peroxydisulfate
<b>GENERAL USE:</b>	In situ and ex situ chemical oxidation of contaminants and compounds of concern for environmental remediation applications.

### MANUFACTURER

FMC CORPORATION  
Active Oxidants Division  
1735 Market Street  
Philadelphia, PA 19103  
(215) 299-6000 (General Information)

### EMERGENCY TELEPHONE NUMBERS

(800) 424-9300 (CHEMTREC - U.S.)  
(303) 595-9048 (Medical - Call Collect)

---

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

- White, odorless, crystals
- Oxidizer.
- Decomposes in storage under conditions of moisture (water/water vapor) and/or excessive heat causing release of oxides of sulfur and oxygen that supports combustion. Decomposition could form a high temperature melt. See Section 10 ("Stability and Reactivity").

**POTENTIAL HEALTH EFFECTS:** Airborne persulfate dust may be irritating to eyes, nose, lungs, throat and skin upon contact. Exposure to high levels of persulfate dust may cause difficulty in breathing in sensitive persons.



---

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. %	EC No.	EC Class
Sodium Persulfate	7775-27-1	>99	231-892-1	Not classified as hazardous

---

### 4. FIRST AID MEASURES

**EYES:** Flush with plenty of water. Get medical attention if irritation occurs and persists.

**SKIN:** Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

**INGESTION:** Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

**INHALATION:** Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

**NOTES TO MEDICAL DOCTOR:** This product has low oral toxicity and is not irritating to the eyes and skin. Flooding of exposed areas with water is suggested, but gastric lavage or emesis induction for ingestions must consider possible aggravation of esophageal injury and the expected absence of system effects. Treatment is controlled removal of exposure followed by symptomatic and supportive care.

---

### 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Deluge with water.

**FIRE / EXPLOSION HAZARDS:** Product is non-combustible. On decomposition releases oxygen which may intensify fire. Presence of water accelerates decomposition.

**FIRE FIGHTING PROCEDURES:** Do not use carbon dioxide or other gas filled fire extinguishers; they will have no effect on decomposing persulfates. Wear full protective clothing and self-contained breathing apparatus.

**FLAMMABLE LIMITS:** Non-combustible

**SENSITIVITY TO IMPACT:** No data available



**SENSITIVITY TO STATIC DISCHARGE:** Not available

---

## 6. ACCIDENTAL RELEASE MEASURES

**RELEASE NOTES:** Spilled material should be collected and put in approved DOT container and isolated for disposal. Isolated material should be monitored for signs of decomposition (fuming/smoking). If spilled material is wet, dissolve with large quantity of water and dispose as a hazardous waste. All disposals should be carried out according to regulatory agencies procedures.

---

## 7. HANDLING AND STORAGE

**HANDLING:** Use adequate ventilation when transferring product from bags or drums. Wear respiratory protection if ventilation is inadequate or not available. Use eye and skin protection. Use clean plastic or stainless steel scoops only.

**STORAGE:** Store (unopened) in a cool, clean, dry place away from point sources of heat, e.g. radiant heaters or steam pipes. Use first in, first out storage system. Avoid contamination of opened product. In case of fire or decomposition (fuming/smoking) deluge with plenty of water to control decomposition. For storage, refer to NFPA Bulletin 430 on storage of liquid and solid oxidizing materials.

**COMMENTS:** VENTILATION: Provide mechanical general and/or local exhaust ventilation to prevent release of dust into work environment. Spills should be collected into suitable containers to prevent dispersion into the air.

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMITS

Chemical Name	ACGIH	OSHA	Supplier
Sodium Persulfate	0.1 mg/m <sup>3</sup> (TWA)		

**ENGINEERING CONTROLS:** Provide mechanical local general room ventilation to prevent release of dust into the work environment. Remove contaminated clothing immediately and wash before reuse.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Use cup type chemical goggles. Full face shield may be used.

**RESPIRATORY:** Use approved dust respirator when airborne dust is expected.



**PROTECTIVE CLOTHING:** Normal work clothes. Rubber or neoprene footwear.

**GLOVES:** Rubber or neoprene gloves. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>ODOR:</b>	None
<b>APPEARANCE:</b>	White crystals
<b>AUTOIGNITION TEMPERATURE:</b>	Not applicable. No evidence of combustion up to 800°C. Decomposition will occur upon heating.
<b>BOILING POINT:</b>	Not applicable
<b>COEFFICIENT OF OIL / WATER:</b>	Not applicable
<b>DENSITY / WEIGHT PER VOLUME:</b>	Not available
<b>EVAPORATION RATE:</b>	Not applicable (Butyl Acetate = 1)
<b>FLASH POINT:</b>	Non-combustible
<b>MELTING POINT:</b>	Decomposes
<b>ODOR THRESHOLD:</b>	Not applicable
<b>OXIDIZING PROPERTIES:</b>	Oxidizer
<b>PERCENT VOLATILE:</b>	Not applicable
<b>pH:</b>	typically 5.0 - 7.0 @ 25 °C (1% solution)
<b>SOLUBILITY IN WATER:</b>	73 % @ 25 °C (by wt.)
<b>SPECIFIC GRAVITY:</b>	2.6 (H <sub>2</sub> O=1)
<b>VAPOR DENSITY:</b>	Not applicable (Air = 1)
<b>VAPOR PRESSURE:</b>	Not applicable

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## 10. STABILITY AND REACTIVITY

<b>CONDITIONS TO AVOID:</b>	Heat, moisture and contamination.
<b>STABILITY:</b>	Stable (becomes unstable in presence of heat, moisture and/or contamination).
<b>POLYMERIZATION:</b>	Will not occur
<b>INCOMPATIBLE MATERIALS:</b>	Acids, alkalis, halides (fluorides, chlorides, bromides and iodides), combustible materials, most metals and heavy metals, oxidizable materials, other oxidizers, reducing agents, cleaners, and organic or carbon containing compounds. Contact



with incompatible materials can result in a material decomposition or other uncontrolled reactions.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxygen that supports combustion and oxides of sulfur.

**COMMENTS:** PRECAUTIONARY STATEMENT: Pumping and transport of Klozür persulfate requires appropriate precautions and design considerations for pressure and thermal relief.

Decomposing persulfates will evolve large volumes of gas and/or vapor, can accelerate exponentially with heat generation, and create significant and hazardous pressures if contained and not properly controlled or mitigated.

Use with alcohols in the presence of water has been demonstrated to generate conditions that require rigorous adherence to process safety methods and standards to prevent escalation to an uncontrolled reaction.

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## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** Non-irritating (rabbit) [FMC Study Number: ICG/T-79.029]

**SKIN EFFECTS:** Non-irritating (rabbit) [FMC Study Number: ICG/T-79.029]

**DERMAL LD<sub>50</sub>:** > 10 g/kg [FMC Study Number: ICG/T-79.029]

**ORAL LD<sub>50</sub>:** 895 mg/kg (rat) [FMC Study Number: ICG/T-79.029]

**INHALATION LC<sub>50</sub>:** 5.1 mg/l (rat) [FMC I95-2017]

**SENSITIZATION:** May be sensitizing to allergic persons. [FMC Study Number: ICG/T-79.029]

**TARGET ORGANS:** Eyes, skin, respiratory passages

**ACUTE EFFECTS FROM OVEREXPOSURE:** Dust may be harmful and irritating. May be harmful if swallowed.

**CHRONIC EFFECTS FROM OVEREXPOSURE:** Sensitive persons may develop dermatitis and asthma [Respiration 38:144, 1979]. Groups of male and female rats were fed 0, 300 or 3000 ppm sodium persulfate in the diet for 13 weeks, followed by 5000 ppm for 5 weeks. Microscopic examination of tissues revealed some injury to the gastrointestinal tract at the high dose (3000 ppm) only. This effect is not unexpected for an oxidizer at high concentrations. [Ref. FMC I90-1151, Toxicologist 1:149, 1981].



**CARCINOGENICITY:**

<b>NTP:</b>	Not listed
<b>IARC:</b>	Not listed
<b>OSHA:</b>	Not listed
<b>OTHER:</b>	ACGIH: Not listed

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## 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:**

Bluegill sunfish, 96-hour  $LC_{50}$  = 771 mg/L [FMC Study I92-1250]  
Rainbow trout, 96-hour  $LC_{50}$  = 163 mg/L [FMC Study I92-1251]  
Daphnia, 48-hour  $LC_{50}$  = 133 mg/L [FMC Study I92-1252]  
Grass shrimp, 96-hour  $LC_{50}$  = 519 mg/L [FMC Study I92-1253]

**CHEMICAL FATE INFORMATION:** Biodegradability does not apply to inorganic substances.

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## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose as a hazardous waste in accordance with local, state and federal regulatory agencies.

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## 14. TRANSPORT INFORMATION

**U.S. DEPARTMENT OF TRANSPORTATION (DOT)**

<b>PROPER SHIPPING NAME:</b>	Sodium Persulfate
<b>PRIMARY HAZARD CLASS / DIVISION:</b>	5.1 (Oxidizer)
<b>UN/NA NUMBER:</b>	UN 1505
<b>PACKING GROUP:</b>	III
<b>LABEL(S):</b>	5.1 (Oxidizer)
<b>PLACARD(S):</b>	5.1 (Oxidizer)
<b>MARKING(S):</b>	Sodium Persulfate, UN 1505
<b>ADDITIONAL INFORMATION:</b>	Hazardous Substance/RQ: Not applicable



49 STCC Number: 4918733

This material is shipped in 225 lb. fiber drums, 55 lb. poly bags and 1000 - 2200 lb. IBC's (supersacks).

## **INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)**

**PROPER SHIPPING NAME:**

Sodium Persulfate

## **INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)**

**PROPER SHIPPING NAME:**

Sodium Persulfate

### **OTHER INFORMATION:**

Protect from physical damage. Do not store near acids, moisture or heat.

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## **15. REGULATORY INFORMATION**

### **UNITED STATES**

#### **SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

##### **SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):**

Not applicable

##### **SECTION 311 HAZARD CATEGORIES (40 CFR 370):**

Fire Hazard, Immediate (Acute) Health Hazard

##### **SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):**

The Threshold Planning Quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.:

None

##### **SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):**

Not listed

#### **CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)**

##### **CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):**

Unlisted, RQ = 100 lbs., Ignitability

#### **TSCA (TOXIC SUBSTANCE CONTROL ACT)**

##### **TSCA INVENTORY STATUS (40 CFR 710):**



Listed

**RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)**  
**RCRA IDENTIFICATION OF HAZARDOUS WASTE (40 CFR 261):**  
Waste Number: D001

**CANADA****WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):**

Product Identification Number: 1505  
Hazard Classification / Division: Class C (Oxidizer), Class D, Div. 2, Subdiv. B. (Toxic)  
Ingredient Disclosure List: Listed

**INTERNATIONAL LISTINGS**

Sodium persulfate:  
Australia (AICS): Listed  
China: Listed  
Japan (ENCS): (1)-1131  
Korea: KE-12369  
Philippines (PICCS): Listed

**HAZARD, RISK AND SAFETY PHRASE DESCRIPTIONS:**

EC Symbols: (Not classified as hazardous)  
EC Risk Phrases: (Not classified as hazardous)  
EC Safety Phrases: (Not classified as hazardous)

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## 16. OTHER INFORMATION

**HMIS**

Health	1
Flammability	0
Physical Hazard	1
Personal Protection (PPE)	J

Protection = J (Safety goggles, gloves, apron & combination dust & vapor respirator)

HMIS = Hazardous Materials Identification System

Degree of Hazard Code:  
4 = Severe



3 = Serious  
2 = Moderate  
1 = Slight  
0 = Minimal

**NFPA**

Health	1
Flammability	0
Reactivity	1
Special	OX

SPECIAL = OX (Oxidizer)

NFPA = National Fire Protection Association

Degree of Hazard Code:

4 = Extreme  
3 = High  
2 = Moderate  
1 = Slight  
0 = Insignificant

**REVISION SUMMARY:**

New MSDS

Klozür and FMC Logo - FMC Trademarks

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**INVENTORY OF INJECTION WELLS****UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF GROUND WATER AND DRINKING WATER**

(This information is collected under the authority of the Safe Drinking Water Act)

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The public reporting burden for this collection of information is estimated at about 0.5 hour per response including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, Director, Collection Strategies Division (2622), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, and to the Office of Management and Budget, Paperwork Reduction Project, Washington, DC 20503.

**1. DATE PREPARED** (Year, Month, Day)**2. FACILITY ID NUMBER****3. TRANSACTION TYPE** (Please mark one of the following)☐ Deletion☐ First Time Entry☐ Entry Change☐ Replacement**4. FACILITY NAME AND LOCATION****A. NAME** (last, first, and middle initial)**C. LATITUDE****DEG**  **MIN**  **SEC** **E. TOWNSHIP/RANGE****B. STREET ADDRESS/ROUTE NUMBER****D. LONGITUDE****DEG**  **MIN**  **SEC** **TOWNSHIP**  **RANGE**  **SECT**  **1/4 SECT** **F. CITY/TOWN****G. STATE****H. ZIP CODE****I. NUMERIC  
COUNTY CODE****J. INDIAN LAND  
(mark "x")**☐ Yes ☐ No**5. LEGAL CONTACT:****A. TYPE** (mark "x")☐ Owner ☐ Operator**B. NAME** (last, first, and middle initial)**C. PHONE**  
(area code and number)**D. ORGANIZATION****E. STREET/P. O. BOX****I. OWNERSHIP** (mark "x")☐ PRIVATE☐ PUBLIC☐ SPECIFY OTHER☐ STATE☐ FEDERAL**F. CITY/TOWN****G. STATE****H. ZIP CODE****6. WELL INFORMATION:**

A. CLASS AND TYPE		B. NUMBER OF WELLS		C. TOTAL NUMBER OF WELLS	D. WELL OPERATION STATUS						
		COMM	NON-COMM		UC	AC	TA	PA	AN		
				0							
				0							
				0							
				0							
				0							
				0							



**SECTION 1. DATE PREPARED:** Enter date in order of year, month, and day.

**SECTION 2. FACILITY ID NUMBER:** In the first two spaces, insert the appropriate U.S. Postal Service State Code. In the third space, insert one of the following one letter alphabetic identifiers:

- D - DUNS Number,
- G - GSA Number, or
- S - State Facility Number.

In the remaining spaces, insert the appropriate nine digit DUNS, GSA, or State Facility Number. For example, A Federal facility (GSA - 123456789) located in Virginia would be entered as : VAG123456789.

**SECTION 3. TRANSACTION TYPE:** Place an "x" in the applicable box. See below for further instructions.

**Deletion.** Fill in the Facility ID Number.

**First Time Entry.** Fill in all the appropriate information.

**Entry Change.** Fill in the Facility ID Number and the information that has changed.

**Replacement.**

**SECTION 4. FACILITY NAME AND LOCATION:**

- A. Name.** Fill in the facility's official or legal name.
- B. Street Address.** Self Explanatory.
- C. Latitude.** Enter the facility's latitude (all latitudes assume North Except for American Samoa).
- D. Longitude.** Enter the facility's longitude (all longitudes assume West except Guam).
- E. Township/Range.** Fill in the complete township and range. The first 3 spaces are numerical and the fourth is a letter (N,S,E,W) specifying a compass direction. A township is North or South of the baseline, and a range is East or West of the principal meridian (e.g., 132N, 343W).
- F. City/Town.** Self Explanatory.
- G. State.** Insert the U.S. Postal Service State abbreviation.
- H. Zip Code.** Insert the five digit zip code plus any extension.

**SECTION 4. FACILITY NAME & LOCATION (CONT'D.):**

- I. Numeric County Code.** Insert the numeric county code from the Federal Information Processing Standards Publication (FIPS Pub 6-1) June 15, 1970, U.S. Department of Commerce, National Bureau of Standards. For Alaska, use the Census Division Code developed by the U.S. Census Bureau.
- J. Indian Land.** Mark an "x" in the appropriate box (Yes or No) to indicate if the facility is located on Indian land.

**SECTION 5. LEGAL CONTACT:**

- A. Type.** Mark an "x" in the appropriate box to indicate the type of legal contact (Owner or Operator). For wells operated by lease, the operator is the legal contact.
- B. Name.** Self Explanatory.
- C. Phone.** Self Explanatory.
- D. Organization.** If the legal contact is an individual, give the name of the business organization to expedite mail distribution.
- E. Street/P.O. Box.** Self Explanatory.
- F. City/Town.** Self Explanatory.
- G. State.** Insert the U.S. Postal Service State abbreviation.
- H. Zip Code.** Insert the five digit zip code plus any extension.
- I. Ownership.** Place an "x" in the appropriate box to indicate ownership status.

**SECTION 6. WELL INFORMATION:**

- A. Class and Type.** Fill in the Class and Type of injection wells located at the listed facility. Use the most pertinent code (specified below) to accurately describe each type of injection well. For example, 2R for a Class II Enhanced Recovery Well, or 3M for a Class III Solution Mining Well, etc.
- B. Number of Commercial and Non-Commercial Wells.** Enter the total number of commercial and non-commercial wells for each Class/Type, as applicable.
- C. Total Number of Wells.** Enter the total number of injection wells for each specified Class/Type.
- D. Well Operation Status.** Enter the number of wells for each Class/Type under each operation status (see key on other side).

**CLASS I** Industrial, Municipal, and Radioactive Waste Disposal Wells used to inject waste below the lowermost Underground Source of Drinking Water (USDW).

<b>TYPE</b>	<b>1I</b>	Non-Hazardous Industrial Disposal Well.
	<b>1M</b>	Non-Hazardous Municipal Disposal Well.
	<b>1H</b>	Hazardous Waste Disposal Well injecting below the lowermost USDW.
	<b>1R</b>	Radioactive Waste Disposal Well.
	<b>1X</b>	Other Class I Wells.

**CLASS II** Oil and Gas Production and Storage Related Injection Wells.

<b>TYPE</b>	<b>2A</b>	Annular Disposal Well.
	<b>2D</b>	Produced Fluid Disposal Well.
	<b>2H</b>	Hydrocarbon Storage Well.
	<b>2R</b>	Enhanced Recovery Well.
	<b>2X</b>	Other Class II Wells.

**CLASS III** Special Process Injection Wells.

<b>TYPE</b>	<b>3G</b>	<i>In Situ</i> Gasification Well
	<b>3M</b>	Solution Mining Well.

**CLASS III (CONT'D.)**

<b>TYPE</b>	<b>3S</b>	Sulfur Mining Well by Frasch Process.
	<b>3T</b>	Geothermal Well.
	<b>3U</b>	Uranium Mining Well.
	<b>3X</b>	Other Class III Wells.

**CLASS IV** Wells that inject hazardous waste into/above USDWs.

<b>TYPE</b>	<b>4H</b>	Hazardous Facility Injection Well.
	<b>4R</b>	Remediation Well at RCRA or CERCLA site.

**CLASS V** Any Underground Injection Well not included in Classes I through IV.

<b>TYPE</b>	<b>5A</b>	Industrial Well.
	<b>5B</b>	Beneficial Use Well.
	<b>5C</b>	Fluid Return Well.
	<b>5D</b>	Sewage Treatment Effluent Well.
	<b>5E</b>	Cesspools (non-domestic).
	<b>5F</b>	Septic Systems.
	<b>5G</b>	Experimental Technology Well.
	<b>5H</b>	Drainage Well.
	<b>5I</b>	Mine Backfill Well.
	<b>5J</b>	Waste Discharge Well.



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## Activating Klozur® Persulfate with Iron-EDTA

### BACKGROUND

Klozur® Persulfate can be activated with iron–EDTA (FeEDTA), a chelated iron, for the oxidative destruction of organic contaminants of concern, including PCE, TCE, DCE, vinyl chloride, BTEX, low molecular weight aromatic hydrocarbons, methyl-tert-butyl ether (MTBE), 1,4-dioxane, and others.

For the FeEDTA activation of Klozur Persulfate, the iron concentration in the groundwater needs to be maintained between 150 mg / L (ppm) and 600 mg / L (ppm). Iron concentrations below 150 ppm will result in kinetics that may not be favorable for the oxidation of various contaminants, and concentrations in excess of 600 ppm may lead to increased persulfate decomposition. FeEDTA is 13% iron by weight, thus requiring between 1,154 ppm and 4,615 ppm FeEDTA to maintain the desired groundwater iron concentrations.

PeroxyChem recommends the addition of FeEDTA as an activator when iron activation is selected, even if there is iron already present in the subsurface. Measured iron concentrations present in soils may not be available for persulfate activation or the iron may not be distributed evenly enough through the treatment zone to insure adequate activation of the persulfate.

### SAFETY AND HANDLING

FeEDTA is a yellowish-green powder with slight health hazards. Appropriate Personal Protective Equipment (PPE), including chemical goggles and a respirator for dust is required when handling this product.

**Review the Safety Data Sheets (SDS) with all workers prior to use and follow guidance within the SDS when handling FeEDTA.**

**PeroxyChem does not recommend combining FeEDTA with persulfate in the same batching tank, as persulfate decomposition may occur with subsequent generation of heat and oxidant loss.**

PeroxyChem recommends the use of separate batch tanks to make up the persulfate solution and the FeEDTA solution. The solutions may then be mixed inline prior to the well-head and co-injected or injected separately in a serial fashion.

### DETERMINING THE AMOUNT OF ACTIVATOR NEEDED

1. Determine the volume of groundwater to be treated with FeEDTA activated persulfate.
2. The minimum amount of FeEDTA needed to achieve 150 ppm of Fe in the groundwater can be determined by:

$$\text{Lbs FeEDTA} = \# \text{ gallons of groundwater} * 150 * 6.38 \times 10^{-5}$$

At room temperature (20 C), FeEDTA is soluble up to a concentration of 90 g/L (0.75 lb/gallon).



# **Attachment B**

## ***Injection Calculations***



# Klozur® Activated Persulfate Demand Calculations



25-Apr-2016

**Customer:** AMC Engineering  
**Contact:** Ariel Czemerinski  
**Site Location:** Queens, NY  
**Proposal Number:** PeroxyChem Proposal-19279

**Prepared by:** Ravi Srirangam PhD  
**1-312-480-5250**  
**Ravi.Srirangam@peroxychem.com**

## PRODUCT OVERVIEW

Klozur® Activated Persulfate has been delivered safely and cost effectively to treat a wide variety of common contaminants of concern with an unmatched combination of power and control. With proper activation, Klozur activated persulfate can generate oxidative, reductive and nucleophilic pathways, giving Klozur Persulfate the power to destroy the most recalcitrant of contaminants.

For more information on Klozur Activated Persulfate, please contact your PeroxyChem representative or [www.klozur.com](http://www.klozur.com).



## SITE INFORMATION

	<u>Value</u>	<u>Unit</u>	<u>Note</u>
Area of Treatment	500	ft <sup>2</sup>	customer supplied
Treatment Zone Thickness	7	ft	customer supplied
Treatment Volume	3,500	ft <sup>3</sup>	calculated value
Porosity	35	%	default value
Ground Water Volume	9,162	USG	calculated value
Soil Density	110	lbs/ft <sup>3</sup>	default value
Soil Mass	385,000	lb	calculated value
Fraction Soil Mass Contacted*	100	%	default value
Base Buffering Capacity (Alkaline Activation only)	3	g 25 percent NaOH / kg soil	estimated value, it is recommend that this be analytically determined
Soil Oxidant Demand	1	g Klozur / kg soil	estimated value, it is recommend that this be analytically determined

\* Fraction soil mass contacted may be less for sites with contact limitations such as fractured bedrock or those with low permeable materials.



## CONTAMINANTS OF CONCERN\* (COCs)

### Concentrations:

The following are estimates of the contaminant concentration in soil and groundwater within the target area. The total COC mass was calculated including estimated COC mass in groundwater, soil and NAPL, if present, within the targeted area.

<u>Constituent</u>	<u>GW (mg/L)</u>	<u>Soil (mg/kg)</u>	<u>NAPL (lbs)</u>	<u>Total COC Mass** (lb)</u>
PCE	3.8	10.5	0.0	4.3

### Remedial Goals and Target Mass Reductions:

The target demand is determined by also accounting for remedial goals for each contaminant and represents the estimated mass reductions targeted for each constituent.

<u>Constituent</u>	<u>GW (mg/L)</u>	<u>Soil (mg/kg)</u>	<u>NAPL (lbs)</u>	<u>Total COC Mass Targeted*** (lbs)</u>
PCE	0	0	0	4.3

\*Unless provided, sorbed concentrations were roughly estimated based on expected groundwater concentrations,  $f_{oc}$  and  $K_{oc}$  values. For a more refined estimate, it is recommended that actual values be verified via direct sampling of the targeted treatment interval.

\*\* Includes estimated contaminant mass in soil, groundwater, and NAPL (if provided) at the site.

\*\*\* Includes estimated contaminant mass in soil, groundwater, and NAPL (if provided) at the site with the remedial goals subtracted from the total mass onsite.

## KLOZUR PERSULFATE DEMAND

The estimated mass of Klozur accounts for target demand with the COCs, non-target demand associated with the soils (SOD) and a safety factor applied to each. The safety factor is intended to account for potential variability in the COC and SOD estimates and any other uncertainties associated with the application or site.

The demand from COCs was estimated using: Degradation Ratio

The degradation ratio should be determined/verified in a bench or field test

	<u>Persulfate Demand</u>	<u>Safety Factor</u>	<u>Persulfate Demand with Factor</u>
Demand from COCs	87	4.0	346 lb
Demand from SOD	385	4.0	1,540 lb
<b>Total Klozur Persulfate Demand:</b>	<b>1,886</b>	<b>lb</b>	



## KLOZUR PERSULFATE PACKAGING OPTIONS AND PRICING

Klozur Persulfate can be delivered to your site in a variety of packages including in bags, or two sizes of super sacks for your handling convenience.

Available Packaging Types	# of packages / pallet	lb Klozur® / pallet	# of packages needed
55.1 # bags	42	2,314	35
1,102 # super sacks	2	2,204	2
2,204 # super sacks	1	2,204	1

Available Packaging Types	Unit Rate (\$ / lb)	Total Mass (lbs)	Cost in USD (FOB Tonawanda, NY)
55.1 # bags	1.59	1,929	\$3,066
1,102 # super sacks	1.48	2,204	\$3,262
2,204 # super sacks	1.46	2,204	\$3,218

1) Number of packages needed is rounded up to nearest whole unit.

2) Price valid for 90 days from date at top of document. Terms: net 30 days.

3) Any applicable taxes not included. Please provide a copy of your tax exempt certificate or resale tax number when placing your order. In accordance with the law, applicable state and local taxes will be applied at the time of invoicing if PeroxyChem has not been presented with your fully executed tax exemption documentation.

4) Shipping not included. Freight rates from Tonawanda NY available upon request. Standard delivery time can vary from 1-3 weeks from time of order, depending upon volume. Expedited transport can be arranged at extra cost.

5) Return Policy: Within 90 days after sale, following approval by PeroxyChem, products in their unopened containers, which by analysis meet the original specifications under which they were shipped, will be accepted for return at invoiced price, less 25% handling charge and return freight, excluding original freight paid by buyer. Products made to order or custom blended are non-returnable.

6) All sales are per PeroxyChem's Terms and Conditions.

### Disclaimer:

The estimated dosage and recommended application methodology described in this document are based on the site information provided to PeroxyChem, but are not meant to constitute a guaranty of performance or a predictor of the speed at which a given site is remediated. Klozur® persulfate and activator demand calculations do not take into account the kinetics, speed of the reaction, or ability to establish contact between the reagents and contamination in the subsurface. These calculations represent the minimum anticipated amount needed to treat the constituents of concern (COCs). As a result, these calculations should be used as a general approximation for purposes of an initial economic assessment. PeroxyChem recommends that oxidant demand and treatability testing be performed to verify the quantities of oxidant needed.



## KLOZUR ACTIVATION CHEMISTRIES

Klozur Persulfate activation chemistries are used to convert Klozur Persulfate into the highly reactive radicals. Choosing the right activator chemistry for your contaminants of concern is important in obtaining a successful site remediation. The choice of activator will be dependent upon the target contaminants, site lithology and hydrogeology, and other site conditions. While activator demand quantities for all methods are given, not all activation methods are recommended for your given contaminant or site conditions. Please consult with an PeroxyChem Environmental Solutions technologist for proper selection of activation chemistry.

**Note:** Only one type of activator is typically needed.

**Recommended methods to activate Klozur Persulfate:**      **FeEDTA**                      **high pH**                      **hydrogen peroxide**

\*PeroxyChem LLC is the owner or licensee under various patent applications relating to the use of activation chemistries

### Calculation for FeEDTA demand:

Recommended concentration of Fe available in the groundwater	200	ppm
Calculated FeEDTA demand based on gw volume	117	lb
# of bags of FeEDTA needed (55.1 lb / 25 kg bags)	3	bags
Pricing	\$4.10	\$ / lb
Cost in USD (FOB Tonawanda, NY)	\$677.73	

### Calculation for NaOH (high pH) demand:

NaOH demand = NaOH to neutralize generate HSO<sub>4</sub> from persulfate decomposition + amount needed to raise ground water / soil to a pH > 10.5

NaOH demand for HSO <sub>4</sub> neutralization	634	lb @ 100% basis
Soil buffering amount	289	lb @ 100% basis
Total NaOH demand	923	lb @ 100% basis

PeroxyChem recommends using a 25 wt% or less NaOH concentration \*\*

Amount of	25	wt% solution needed	348	gal
			3,690	lb

25% NaOH Solution is available from PeroxyChem directly for convenience or from a third party:

### **Estimated Pricing from Third Party^:**

25% NaOH Solution Price Estimate	0.255	\$/lb	in drums
(^Please contact PeroxyChem for updated estimate at time of order)	0.235	\$/lb	in totes
	0.145	\$/lb	in tankers

### **Klozur Caustic provided directly from PeroxyChem:**

Klozur Caustic Pricing (25% NaOH solution)	0.390	\$/lb	in 560 # drums
FOB, Tonawanda, NY. Freight quote upon request	0.520	\$/lb	in 2800 # totes

**\*\* note:** the addition of concentrated NaOH to water is very exothermic. Add NaOH slowly to water, and allow for excess heat to dissipate.



**Attachment C**  
***Methodology to calculate residual  
Persulfate in Groundwater***



# Klozur<sup>®</sup> Field Test Kits

## Technical Data Sheet

### Introduction

Klozur<sup>®</sup> Field Test kits provide an accurate quantitative measurement of remaining persulfate in the groundwater at a remediation site. There are two test kits available, depending on which activation method is used.

	Klozur Persulfate Activator Chemistries	Activator Examples	Primary Titration Chemistry
Kit "K"	High pH	Klozur <sup>®</sup> Caustic, sodium hydroxide, lime, Klozur <sup>®</sup> CR, Percarbonate	Permanganate back-titration of ferrous ammonium sulfate
	Iron	Iron Sulfate, FeSO <sub>4</sub>	
	Heat	Steam, hot water	
Kit "C"	Chelated iron	Dissolvine <sup>®</sup> E-FE-13, iron EDTA, FeEDTA, iron citrate	Cerric sulfate titration to a Ferroin end-point
	Hydrogen peroxide*	Hydrogen peroxide*	

\*Please contact PeroxyChem for more information



### Kit Contents

Each kit contains materials for measuring ten (10) aqueous measurements of persulfate concentration.

Item	Kit "K"	Kit "C"
15 mL plastic vials	10	10
filters	11	11
Plastic syringes	11	11
Plastic pipettes	35	35
Centrifuge tubes containing Ferrous ammonium sulfate	10	10
Sulfuric acid (6N) 2 ml vials	10	10
Potassium Permanganate (0.1 N) 20 mL bottle	5	Not applicable
Ceric Sulfate solution (0.1N) 20 mL bottle	Not applicable	5
Ferroin Indicator 2 mL vial	Not applicable	1

### Specifications

Measurement Range: 1 g / L to 100 g / L  
 Accuracy: Range 1 – 50 g / L +/- 1 g / L  
 Range 50 – 100 g / L +/- 2 g / L  
 Shelf Life: one year  
 Storage: cool, dry conditions  
 Operating Ranges:  
 Water temperature: 5 – 50 °C  
 pH ≤ 12  
 Fe(II): 0-500 mg/L

### Prior to working with Klozur Field Test Kit consult the Safety Data Sheet and to understand proper safety, handling, storage and disposal procedures.

This information contained herein is, to our knowledge, true and accurate. Because conditions of use are beyond our control, we make no warranty or representation, expressed or implied, except that the products discussed herein conform to the chemical descriptions shown on their labels. Nothing contained herein should be construed as permission or recommendation to infringe any patent. No agent, representative or employee of this company is authorized to vary any of the terms of this notice.

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## Klozur® Persulfate Test C-Kit

Each kit contains enough supplies for 10 tests:

11 each	Syringes
11 each	Filters
10 vials	6.0 N H <sub>2</sub> SO <sub>4</sub>
5 vials	0.1 N Ceric Sulfate
35 each	Pipettes
1 vial	Ferroun Indicator
10 each	10mL clear vials
10 each	Centrifuge tubes with Ferrous Ammonium Sulfate

### **Instructions**

Procedure for Klozur quantification 0-25 g/L & 25-50 g/L, Pages 2 – 6

Procedure for Klozur quantification 50-75 g/L & 75-100 g/L, Pages 7 – 11

### **Safety Data Sheet Package**

- 1) Sulfuric Acid, 6.0 N
- 2) Ferrous Ammonium Sulfate
- 3) Ceric Sulfate, 0.1 N
- 4) Ferroun Indicator



## Klozur® Persulfate Test C-Kit

### Procedure for Quantification of Klozur Persulfate in Groundwater

Quantification Range: 0 – 25 g/L and 25 – 50 g/L

Suitable for use with the following Klozur Persulfate activation methods:

- Heat
- High pH (alkaline activation)
- Iron Sulfate
- Iron-EDTA

**NOT** suitable for use with the following Klozur Persulfate activation methods

- Hydrogen Peroxide

**SAFETY:** Personal protective equipment must be worn, including acid-resistant gloves and safety goggles for eye protection. Review the SDS's prior to use.

### **Procedure:**

- 1) Step 1 must be performed first. Transfer enough Sulfuric Acid with provided pipette into the purple-topped graduated tube to bring the level to the 2mL mark.





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## Klozur® Persulfate Test C-Kit

- 2) Fill a syringe with site groundwater\* containing Klozur Persulfate.

\*Important: If the groundwater is muddy, let it stand for approximately five minutes to allow the dirt to settle. Use the top water to fill the syringe.



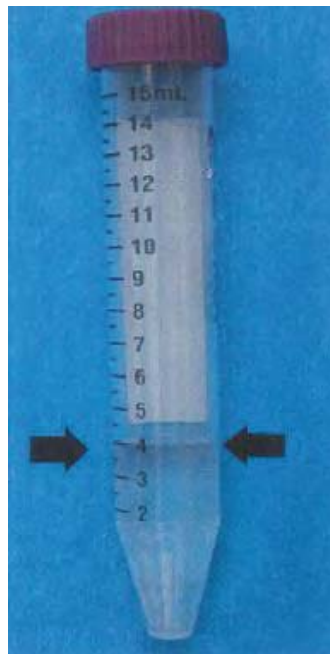


## Klozur® Persulfate Test C-Kit

- 3) Screw on a filter disk to the end of the syringe and push the plunger slowly to collect about 5mL of filtered groundwater in a provided 10mL clear vial equipped with a Teflon-lined cap.



- 4) Carefully transfer **2mL** of filtered groundwater from Step 3, **using a new pipette**, to the graduated tube from Step 1 until the total volume reaches the **4mL** mark. Cap the graduated tube and shake until the solids are completely dissolved.





## Klozur® Persulfate Test C-Kit

- 5) Add 2 drops of Ferroin indicator to the solution, cap the graduated tub, and shake well. The should should be orange.

**Note:** If the solution remains blue / light blue for more than 1 minute after shaking, the concentration of Klozur Persulfate in the groundwater is greater than 50 g/L. Follow the procedure for quantification of Klozur Persulfate, quantification range 50 – 75 g/L and 75 – 100 g/L.



- 6) Drop wise add the Ceric Sulfate, **using a new pipette**. Shake the graduated tube during the addition of Ceric Sulfate.
- 7) When the orange color disappears and light blue color shows up upon shaking, stop adding Ceric Sulfate and note the final volume.

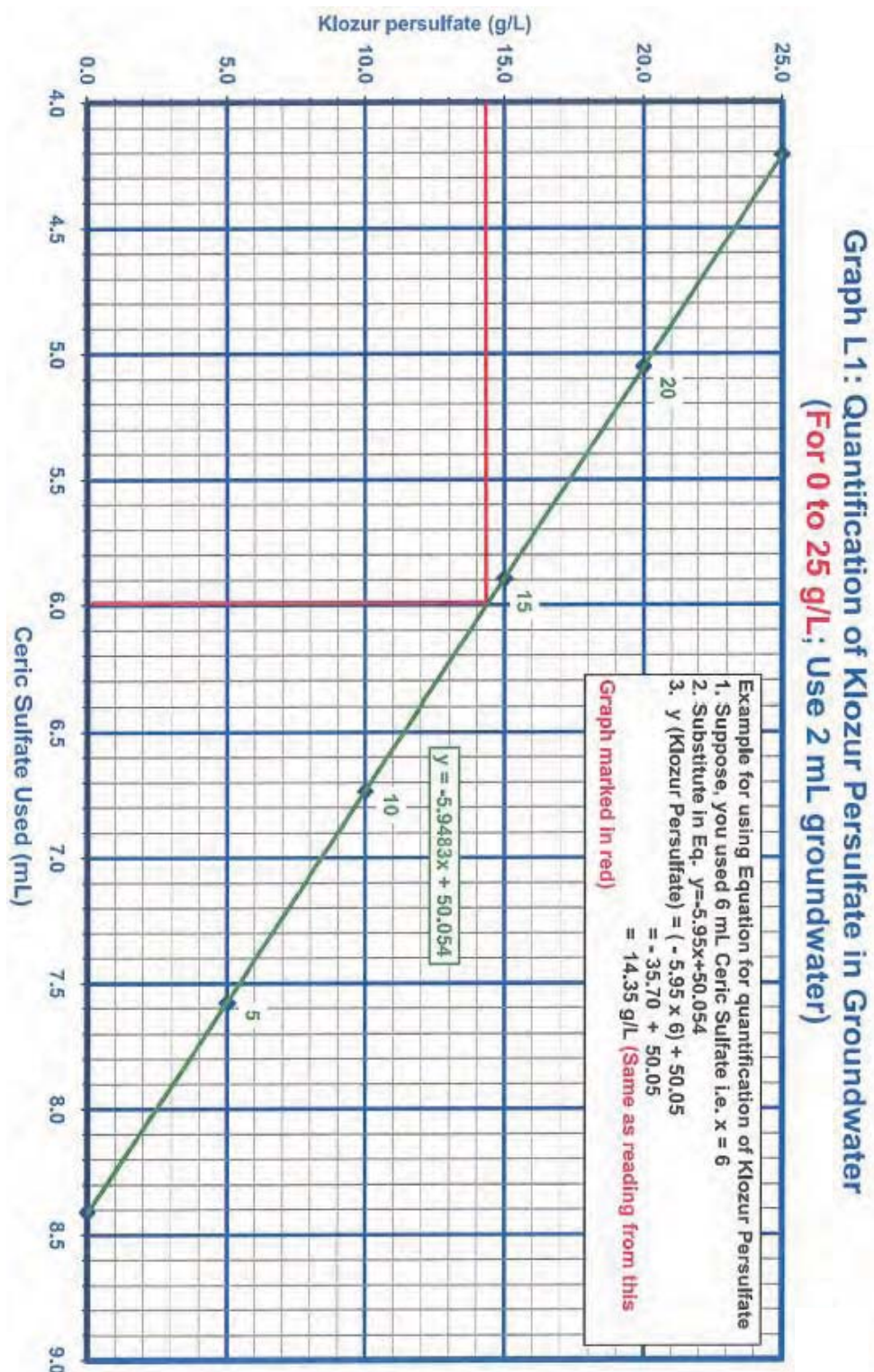


- 8) Calculate the volume of Ceric Sulfate used:  
**Ceric Sulfate used (mL) = Final Volume – 4**
- 9) Use this volume with the provided graphs (L1 or L2) to find the concentration of Klozur Persulfate in the groundwater sample.

**DISPOSAL OF UNUSED REAGENTS:** Remaining unused reagents should be disposed per local, state, and federal regulations. Please review SDS's for disposal information.

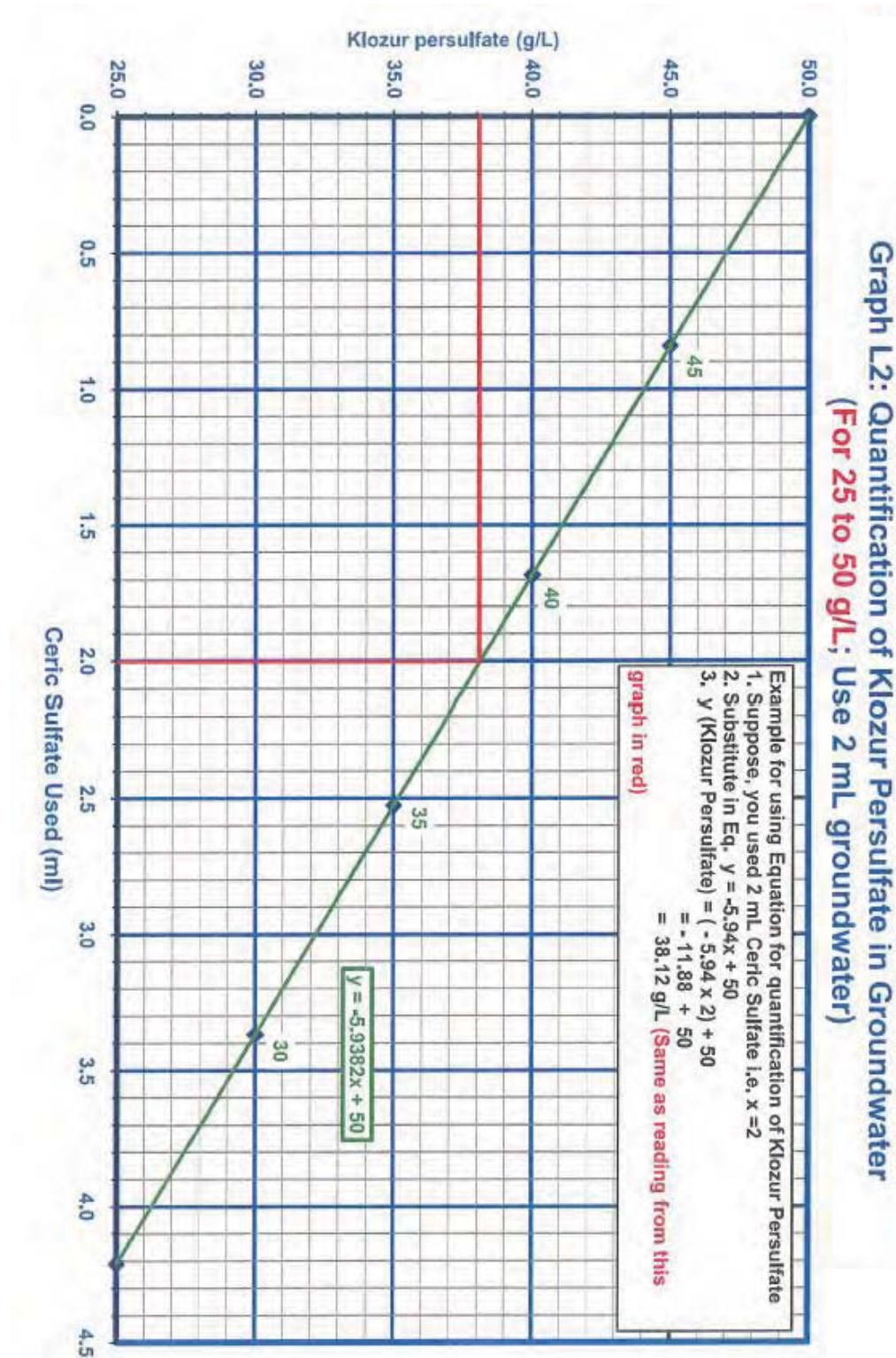


## Klozur® Persulfate Test C-Kit





## Klozur® Persulfate Test C-Kit





## Klozur® Persulfate Test C-Kit

### Procedure for Quantification of Klozur Persulfate in Groundwater

Quantification Range: 50 – 75 g/L and 75 – 100 g/L

Suitable for use with the following Klozur Persulfate activation methods:

- Heat
- High pH (alkaline activation)
- Iron Sulfate
- Iron-EDTA

**NOT** suitable for use with the following Klozur Persulfate activation methods

- Hydrogen Peroxide

**SAFETY:** Personal protective equipment must be worn, including acid-resistant gloves and safety goggles for eye protection. Review the SDS's prior to use.

### **Procedure:**

- 1) Step 1 must be performed first. Transfer enough Sulfuric Acid with provided pipette into the purple-topped graduated tube to bring the level to the 2mL mark.





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## Klozur® Persulfate Test C-Kit

- 2) Fill a syringe with site groundwater\* containing Klozur Persulfate.

\*Important: If the groundwater is muddy, let it stand for approximately five minutes to allow the dirt to settle. Use the top water to fill the syringe.



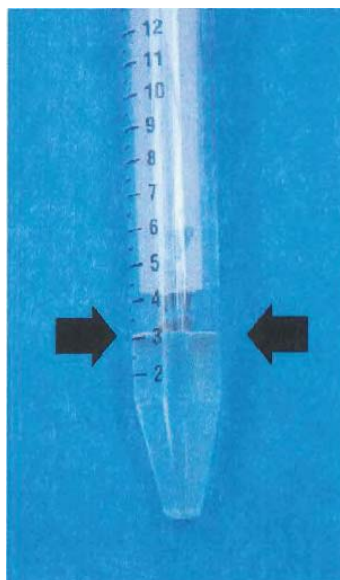


## Klozur® Persulfate Test C-Kit

- 3) Screw on a filter disk to the end of the syringe and push the plunger slowly to collect about 5mL of filtered groundwater in a provided 10mL clear vial equipped with a Teflon-lined cap.



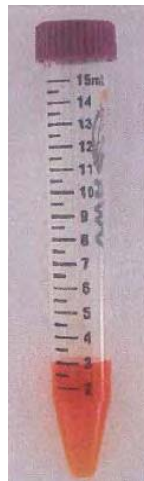
- 4) Carefully transfer **1mL** of filtered groundwater from Step 3, **using a new pipette**, to the graduated tube from Step 1 until the total volume reaches the **3mL** mark. Cap the graduated tube and shake until the solids are completely dissolved.





## Klozur® Persulfate Test C-Kit

- 5) Add 2 drops of Ferroin indicator to the solution, cap the graduated tub, and shake well. The should should be orange.



- 6) Drop wise add the Ceric Sulfate, **using a new pipette**. Shake the graduated tube during the addition of Ceric Sulfate.



- 7) When the orange color disappears and light blue color shows up upon shaking, stop adding Ceric Sulfate and note the final volume.

- 8) Calculate the volume of Ceric Sulfate used:

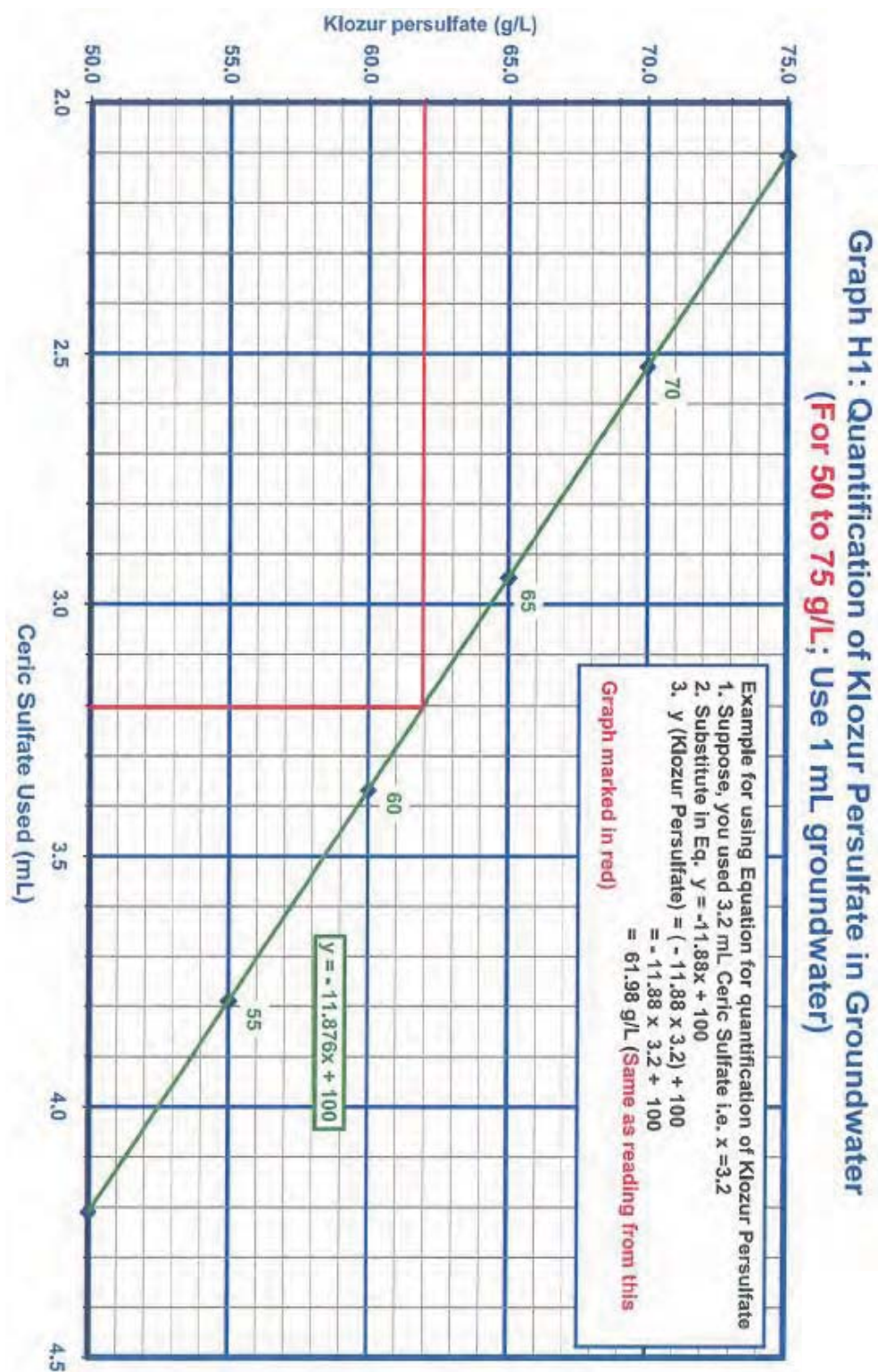
$$\text{Ceric Sulfate used (mL)} = \text{Final Volume} - 3$$

- 9) Use this volume with the provided graphs (H1 or H2) to find the concentration of Klozur Persulfate in the groundwater sample.

**DISPOSAL OF UNUSED REAGENTS:** Remaining unused reagents should be disposed per local, state, and federal regulations. Please review SDS's for disposal information.

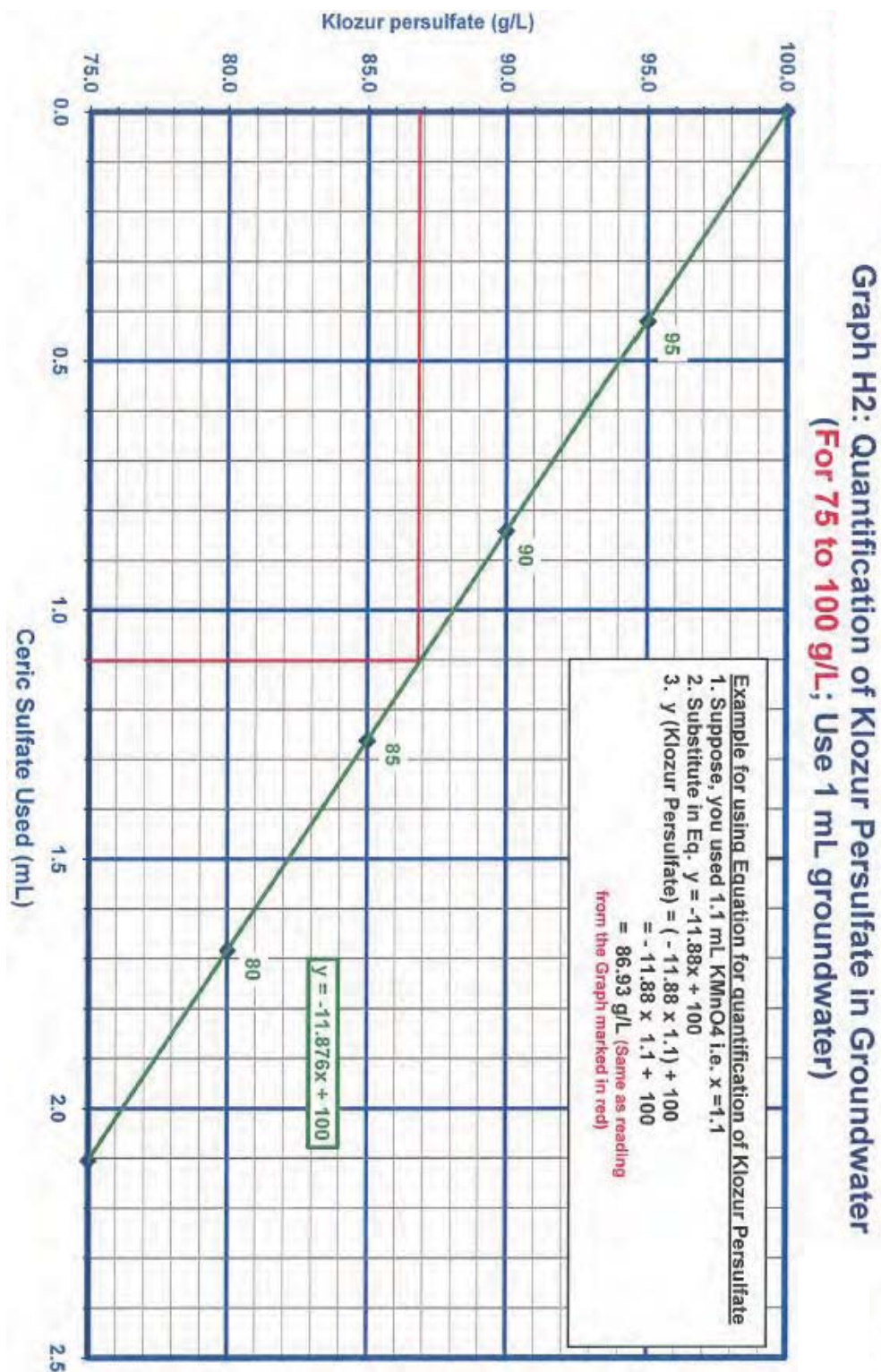


## Klozur® Persulfate Test C-Kit





## Klozur® Persulfate Test C-Kit





**ATTACHMENT T**  
**EPA Authorization to Inject**



## Paul Matli

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**From:** Kim, Lisa <Kim.Lisa@epa.gov>  
**Sent:** Friday, November 17, 2017 3:01 PM  
**To:** Paul Matli  
**Subject:** Property - 11-28 31st Drive (UICID: 18NY04799009)

**Property - 11-28 31st Drive (NYSDEC Brownfield Cleanup Program Site No. 241159) (UICID: 18NY04799009)**

11-28 31<sup>st</sup> Drive, Queens, NY 11106, Queens County, Authorization to Inject

The U.S. Environmental Protection Agency is in receipt of inventory information addressing a well authorized by rule located at the above-referenced facility in accordance with 40 Code of Federal Regulations (CFR) §144.26. The operation of the following Underground Injection Control well is authorized by rule, pursuant to 40 CFR §144.24:

***In situ* chemical oxidation injection of a total of 1,886 pounds of persulfate along with a total of 117 pounds of FeEDTA for persulfate activation into six (6) injection points in the northern portion of the Site.**

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Lisa Kim Pelcyger, M.Eng.  
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