

**SECOND ANNUAL**  
**SITE MONITORING REPORT**  
**AND**  
**IC/EC CERTIFICATION**  
**FOR THE**  
**FORMER**  
**CLINTON TERRACE SHOPPING CENTER**  
**78 CROTON AVENUE**  
**OSSINING, NEW YORK**

**NYSDEC BROWNFIELD # 360110**

Prepared for: Ms. Sally Krauss, V.P.  
Real Estate Transactions Manager  
DLC Management, LLC  
570 White Plains Road, 3rd Floor, Tarrytown, NY10591  
Phone: (914) 631-3131  
URL: [www.dlcmgmt.com](http://www.dlcmgmt.com)

Prepared by: Dave Pelletier, P.E., Project Engineer  
Jade Environmental, Inc.  
59 Circle Drive, Hopewell Junction, NY 12533  
Phone: (845) 897-2188  
Fax: (845) 897-2189  
E-mail: [jadeenv@gmail.com](mailto:jadeenv@gmail.com)

NYSDEC Case Manager: John Miller, Project Supervisor  
NYSDEC  
Division of Environmental Remediation  
625 Broadway, Albany, NY 12233-7014  
(518) 402-9662

Report Date: June 15, 2014

## EXECUTIVE SUMMARY

The following “*Second Annual Site Monitoring Report and IC/EC Certification*” is being submitted in accordance with the site specific “*Site Management Plan*” issued for the former Clinton Terrace Shopping Center (Site), Brownfield file number 360110, approved on or about May 15, 2012.

In addition to the requirement of documenting the integrity of the IC/EC systems that apply for this Site; this certification details additional investigation work conducted with the approval of the New York State Department of Environmental Conservation (“NYSDEC”) with consultation by the New York State Department of Health (“NYSDOH”) in their letter dated February 18, 2014 (the “Letter”), attached hereto as Appendix B.

As can be seen in the Letter, additional investigation was conducted to ascertain whether the SMP should continue in its current form or whether reductions are possible. It also details select revisions to the *Site Management Plan*” all ready put in place since the First Annual Certification including, but not necessarily limited to:

1. permanent closing of monitoring wells MW-1 and MW-5;
2. a reduction in groundwater monitoring from quarterly to annual.

**Based on the results of our fifth quarterly groundwater sampling and most recent Site inspection, Jade certifies the Site is in compliance with all requirements of the Site Management Plan. The SMP is being implemented as required, is working as intended and residual contamination continues to degrade rapidly towards accepted regulatory criteria.** As such, Jade makes no recommendation for further action at this time other than a reduction in the SMP requirements as detailed below.

Moreover, based on the most recent groundwater, indoor air and soil gas testing results, Jade concludes neither the groundwater monitoring program in its current form nor continued operation of the SSDS are cost effective. Based on details provided herein, **Jade recommends the NYSDEC consider reducing the groundwater monitoring program for this Site to the annual sampling of MW—2 and converting the SSDS from “active” (in-line fan operation) to “passive” mode (remove in-line fan and operate as vent utilizing static atmospheric pressure).**

The Site consists of a 1-acre corner parcel of land known as 78 Croton Avenue, in a local business/residential area of the City of Ossining, New York. The Site was cleaned up under the state Brownfield program after it was determined during routine predevelopment due diligence that the Site was contaminated as a result of historical dry cleaner operations at the shopping center. Via the Brownfield Program, redevelopment continued under the auspices of the NYSDEC, who is mandated to manage/oversee the clean-up of contaminated sites in New York State, with a bias towards those properties such is this, which would not likely have been redeveloped due the complications caused by contamination.

The Site was tenanted by a Westinghouse Coin Operated dry cleaning establishment between 1961 and 1974. While in operation, it utilized a leaky PCE collection system, designed to collect any spilled PCE and direct it to a temporary storage tank beneath ten PCE washing machines it utilized. Based upon our investigation, a weld in the copper plumbing that connected the floor drain to the tank had failed, resulting in the chronic discharge of small quantities of PCE every time PCE was spilled inside the containment and entered the floor drain. The chronic small spillages created a plume starting at the failed pipe elbow joint just beneath the floor slab, that extended down through the soil strata about 10 feet where it entered the upper aquifer. Once it entered the water column, the dissolved PCE was carried with groundwater current in a northwesterly direction beneath the parking lot of the former shopping center. Extensive testing indicates that overall, the plume remained on-site beneath the parking, and had not reached any down gradient adjoining properties. The testing documented very little if any of the contamination left the site.

## **EXECUTIVE SUMMARY – CONT.**

Generally, the remedial work included the

1. excavation and off-site disposal of contaminated soil “source” beneath the leaky PCE storage system down as deep as 17-18’ below grade (7-8 feet into saturated zone) while
2. dewatering to the municipal sewer under permit to lower the water table, remove dissolved PCE in the water column;
3. Groundwater “polishing” via hydrogen based dechlorination by propagating a biological community under anaerobic conditions via a proprietary lactic acid based formulation referred to as HRC®. The polishing included subsurface manipulation to insure the best distribution of the HRC throughout the subsurface as detailed below.

Please refer to a Well Location Map provided as Appendix A for a depiction of the Site including but not limited to the current building footprint, monitoring wells, property bounds and the conceptual model of the original plume. Please refer to the Site Management Plan provided as Appendix C to review the original requirements of this annual certification and the required Site Management Program “Checklist”, which is a site specific document prepared by the NYSDEC to aid in the implementation of the plan. Conceptually, if this Site Management Plan is maintained effectively, the utmost level of health and safety will exist for this Site and the surrounding community, with respect to the historical environmental impact and the Sites continued use for retail purposes.

# 1. BACKGROUND

## 1.1 Introduction / Project History

The following “*Second Annual Site Monitoring Report and IC/EC Certification*” summarizes the results of our prior 2 years of groundwater monitoring at the Former Clinton Terrace Shopping Center (“Walgreens”) located at the corner of Croton and Clinton Avenues in the City of Ossining, Westchester County, New York. Remedial efforts were completed in the summer of 2011, groundwater well installation was completed in the summer of 2012 and our most recent groundwater sampling in July 2013 documents conditions a little over 2 years after active remedial efforts were discontinued.

### 1.1.1 *The Historical Source*

The original Clinton Corners Shopping Center replaced two lots improved with residential dwellings with ground floor retail space in 1950. The original 1950 structure included a single unit grocery space. An addition in 1960 to the south side of the structure doubled the size of the building and provided several new slab on grade retail units (the grocery had a full basement). The southern most end unit of the new addition (closest to Clinton Avenue) was occupied by a “state of the art” Westinghouse coin operated dry cleaning establishment. The northwest corner of that end unit was fitted with two rows of Westinghouse coin operated dry cleaning machines, just left inside the front door. All ten machines were reportedly inside a containment designed to collect any spilled PCE (at that time not only inhaling the fumes but contacting the substance without skin, eye or respiratory protection was acceptable). The spill containment directed the spilled PCE through a floor drain at the center of the containment, down into copper plumbing that directed the PCE into a 550 gallon steel tank buried beneath the solvent machines. The start of the remedial efforts in Spring 2011 included the removal of the tank, which was filled with a mix of PCE/water (no holes).

During the tank system removal it became apparent that the floor drain inside the containment was connect to the tank via copper drain pipe, which traversed from the center of the containment, north just below the floor slab towards the interior partition wall, then down into the subsurface and back south to the top of the tank. During removal of the slab, a soldered elbow was found to have failed along the bottom of the plumbing at the interior wall (u-turn). Based on the nature of the failure, it was clear that every time PCE entered the floor drain and flowed through the drain, a portion leaked out through the failed soldered connection and entered site soils.

Although anticipated to be relatively small discharges, the chronic and continuous nature of the discharges over the years resulted in a plume of chlorinated solvent beginning just beneath the leaky piping, extending down and into the saturated zone. Once in the water column, the dissolved PCE was carried on groundwater currents in an overall northwest direction beneath the parking lot in front of the building (our inspection revealed the tank did not leak and was filled almost to capacity with PCE when uncovered).

Monitoring well MW-2 was installed in front of the new building (current improvements utilize similar footprint as prior improvements) directly down gradient of and within 30’ of the point of release.

## 1. BACKGROUND – CONT.

### *1.1.2 Summary of Remedial Efforts*

As noted above, during the late spring and summer of 2011, Jade oversaw the dewatering of the site to the municipal sewer under permit which dropped the water table 5+ feet from its static level and allowed for removal of soils much deeper than would have been possible without dewatering. Once the pumping level had been established, Jade proceeded to excavate and beneath the former machines from just below the slab to a depth of 7+ feet below the natural static water level (16'+ below grade). Dewater was treated to reduce suspended solids and discharged to the county sewer with daily chemical analysis. Contaminated soil was disposed as either hazardous waste at StableX, Canada or non-hazardous landfill cover in a landfill located in western New York State.

Jade directed the excavation of all soil first by removing all soil exhibiting an odor of PCE and then by removing all soil emitting elevated levels of PCE via a calibrated 11.7 eV photo ionization detector (PID). Once the PID revealed impacted soils had all be removed, end point samples were collected for confirmatory analysis by a licensed chemistry lab. Once end point soil samples revealed all of the source contamination had been removed (soil contaminated above the regulatory limit of 1,300 ppb), the excavation stopped. The excavation was then backfilled with highly permeable ¾" crushed stone to an elevation of approximately 2' above the water table. Prior to covering the gravel with geo-textile and shutting down the dewatering system, the gravel was inoculated with 150 gallons of HRC.

### *1.1.3 Post Remedial Monitoring Well Installation and Layout*

After the active remediation was complete in June 2011, it cleared the way for redevelopment. In accordance with our final approval with the NYSDEC, once development was complete, Jade returned to the Site in July 2012 and installed three (3) new 2" monitoring wells across the front of the new building and a fourth further out in the parking lot, in a position directly down gradient of the point of release based on the measured direction of groundwater flow.

In addition to the installation of the permanent dewatering system behind the new building, the entire foundation was sealed with a very expensive liner to protect the interior in the event the pump system failed. In addition to monitoring wells installed for the purposes of monitoring, the NYSDEC requested we also test the buildings permanent dewatering system since it discharged into the site stormwater control system which ultimately discharged into Sing Sing Creek, a tributary of the Hudson River. The specifications associated with that liner far exceeded general specifications for a liner to be used to retard vapor migration.

Despite the ability to draw in contaminated groundwater, to date, only trace levels of PCE have been detected in the pump effluent, well below the discharge standards. In addition to the four newly installed wells and the pump system, Jade salvaged a former 2" well drilled in the northeast most corner of the site and included it in the monitoring program, for a total of five (5) wells and one catch basin. The map provided in Appendix A depicts these sample locations as well as the building and dewatering pit.

## **1. BACKGROUND – CONT.**

### *1.1.4 Engineering and Institutional Controls EC/IC*

In addition to the groundwater monitoring, the Site Management Plan required operation of an active sub-slab depressurization system (“SSDS”) and an intact site “cap” comprised of concrete or blacktop finished surfaces or a minimum of 1’ thick layer of clean top soil where no hardscapes’ were applied (landscaped areas). The SMP required annual certification that the “caps” were not breached, allowing contact with underlying soils.

### **1.2 Purpose and Objective**

The primary purpose of this SMP is to:

1. monitor the effectiveness of the remedial efforts and the groundwater polishing program put in place;
2. minimize the potential for impact to interior atmospheres of new development;
3. certify controls remain intact and minimize the potential for human exposure as intended:

The objective of these efforts was to provide for the continued future use of this site for commercial retail purposes in a cost effective manner that is and remains protective of human health and the environment with the ultimate goal of Full Site Closure being issued by the NYSDEC indicating the remedial efforts have successfully brought the Site back into compliance with state environmental quality laws and regulations and no longer pose any health and safety concern.

## 2.0 SECOND BIENNIAL CERTIFICATION

### 2.1 Groundwater Monitoring

The most labor and cost intensive aspect of the Site Management Plan is the groundwater monitoring program. It is also the most important data used in the decision making process as to the need for continued operation of all aspects of the SMP. As such, considerable focus is placed on groundwater quality and how it is changing over time.

\*\*Based on discussions with the NYSDEC, they would consider closing the Site Management Plan once groundwater concentrations of contaminants approach regulatory requirements over the course of three consecutive sampling events.

#### 2.1.1 Field Screening / Sampling

At each sampling event, Jade first purged the wells of a minimum 5 gallons (multiple well volumes) using dedicated bailers. The samples were then transferred from dedicated bailer directly into lab supplied/preserved 40 ml VOA bottles without head space, labeled and placed in a cooler with blue ice for preservation during overnight courier delivery under proper chain of custody to a NYSDOH certified lab for chemical analysis. Specifically, via chain of custody, Jade ordered the analysis of all water samples in accordance with EPA Analytical method 8010 which utilizes a GC/MS analysis that only reports halogenated compounds including PCE and many of its degradation products.

#### 2.1.2 Sample Management / Analytical Results

Sample analysis results are summarized below, (<) indicates constituent not detected above the labs method detection limit (MDL). The Reportable Detection Limit (RDL) was generally 5 ppb for all constituents and is also the regulatory level used for this assessment process. The presence of HRC or an expected residual thereof, appears to be reaching down gradient well MW-2 and resulting in sample dilution by the lab and higher RDL as can be noted in the Lab report appended hereto.

Concentrations above the detection limit are bolded. The cells shaded yellow indicate constituent concentrations between 5 and 50 parts per billion – within order of magnitude of criteria, orange between 50 and 500 ppb– within one and two orders of magnitude of criteria and cells shaded red indicate constituent concentrations exceeding 500 ppb– two order of magnitude of criteria. Please refer to the complete report in Appendix C for the complete list of parameters and associated detection limits.

From the summary table its clear MW-2 located directly down gradient although slightly, remains the only well impacted with PCE above regulatory levels. No other areas appear to be contaminated at levels exceeding the states groundwater quality criteria. All other wells exhibited groundwater concentrations of PCE below the groundwater quality criteria for PCE of 5 ppb, including the pump effluent. Based on the presence of degradation products, Jade concludes the enhanced natural attenuation is working as intended. A copy of the lab report is provided in Appendix D and includes a 3<sup>rd</sup> party validation.

## 2.0 SECOND BIENNIAL CERTIFICATION - CONT

The summary table below depicts changes in groundwater impact as a result of the PCE spill post remediation between April 2012 and July 2013.

| Groundwater Monitoring Summary Table                               |                  |                 |                |                  |                 |
|--|------------------|-----------------|----------------|------------------|-----------------|
| Constituent Detected   | Date Sampled     |                 |                |                  |                 |
|  | Q1<br>April 2012 | Q2<br>Sept 2012 | Q3<br>Jan 2013 | Q4<br>March 2013 | Q5<br>July 2013 |
| MW-1   |                  |                 |                |                  |                 |
| Tetrachloroethylene  | 3.7              | 2.7             | NS             | <5               | 1.5             |
| Trichloroethylene  | <2               | <5              | NS             | <5               | <5              |
| Cis 1-2 Dichloroethylene   | <2               | <5              | NS             | <5               | <5              |
| Cis 1-3 Dichloroethylene   | <2               | <5              | NS             | <5               | <5              |
| Vinyl Chloride   | <2               | <5              | NS             | <5               | <5              |
| MW-2 (directly down gradient of point of release)                  |                  |                 |                |                  |                 |
| Tetrachloroethylene  | 280              | 12              | 32             | 25 J             | 11              |
| Trichloroethylene  | <5               | <5              | <10            | <120 –no J       | <25             |
| Cis 1-2 Dichloroethylene   | <5               | <5              | 770            | 450              | 350             |
| Cis 1-3 Dichloroethylene   | <5               | <5              | <5             | <120 – no J      | <25             |
| Vinyl Chloride   | <5               | <5              | 55             | 36 J             | <25             |
| MW-3   |                  |                 |                |                  |                 |
| Tetrachloroethylene  | <10              | <5              | <10            | <10              | <5              |
| Trichloroethylene  | <10              | <5              | <10            | <10              | <5              |
| Cis 1-2 Dichloroethylene   | <10              | <5              | <10            | 0.85 j           | 1.9             |
| Cis 1-3 Dichloroethylene   | <10              | <5              | <10            | <10              | <5              |
| Vinyl Chloride   | <10              | <5              | <10            | <10              | <5              |
| MW-4 (further directly down gradient of MW-2 and point of release) |                  |                 |                |                  |                 |
| Tetrachloroethylene  | <5               | <5              | 1.5            | 20               | <5              |
| Trichloroethylene  | <5               | <5              | <1             | 1.8              | <5              |
| Cis 1-2 Dichloroethylene   | <5               | 2.6             | <1             | 86               | 0.99            |
| Cis 1-3 Dichloroethylene   | <5               | <5              | <0.5           | <1               | <5              |
| Vinyl Chloride   | <5               | <5              | <1             | 5.8              | 3.3             |
| MW-5   |                  |                 |                |                  |                 |
| Tetrachloroethylene  | 4.9              | 2.5             | 1.5            | NS               | 1.4             |
| Trichloroethylene  | <2               | <5              | <1             | NS               | <5              |
| Cis 1-2 Dichloroethylene   | <2               | <5              | <1             | NS               | <5              |
| Cis 1-3 Dichloroethylene   | <2               | <5              | <0.5           | NS               | <5              |
| Vinyl Chloride   | <2               | <5              | <1             | NS               | <5              |
| Pump Effluent/Storm Drain  |                  |                 |                |                  |                 |
| Tetrachloroethylene  | 1.1              | <5              | 1.5            | <1               | <5              |
| Trichloroethylene  | <1               | <5              | <1             | <1               | <5              |
| Cis 1-2 Dichloroethylene   | <1               | <5              | <1             | <1               | <5              |
| Cis 1-3 Dichloroethylene   | <1               | <5              | <1             | <1               | <5              |
| Vinyl Chloride   | <1               | <5              | <1             | <1               | <5              |

Notes:

1. All concentrations provided in ppb / µg/L;
2. Detection limits of 5 ppb or better maintained;
3. Shading indicates exceeding yellow within order of magnitude, orange two orders of mag, red three orders:



## **2.0 SECOND BIENNIAL CERTIFICATION - CONT**

Based on these favorable results last July, Jade formerly requested the NYSDEC consider some favorable revisions in the Site Management Plan. Specifically, Jade requested:

1. Two wells be permanently closed and removed from the sampling scheme, as well as the pump effluent sampling as these three sampling points have been consistently free of contamination.
2. The sampling schedule be reduced from quarterly to annual. Based on this request, the next sampling event is due August 2014.

In June 2014, MW-1 and MW-5 were grouted with a neat cement tremied in-place to eliminate the potential short circuiting of contamination from grade (e.g. leaking auto/truck fluids) to the groundwater aquifer.

In addition to approving these changes, Jade requested the additional investigation detailed below for the purposes of evaluating a Full Closure of the cased as it was apparent groundwater results were approaching regulatory levels.

### **2.2 Site Inspection / Cap Integrity**

Jade thoroughly inspected the entire site on multiple occasions between the day of sampling and the completion of the soil gas survey on June 10, 2014 and did not identify any evidence of any existing or prior breach in the cap had occurred. At all times, flatwork was intact without evidence of patching or any other indication that the buried vapor barrier, which is not inspect-able, may have been penetrated.

### **2.3 Sub-surface Depressurization**

As part of the building construction plan, a Sub-slab Depressurization System was installed that includes a perforated 4" pipe buried in sub-slab base gravel that extends from the front of the building to the rear of the building. At the rear of the building the perforated pipe penetrates the foundation wall and than an elbow connects the perforated pipe to solid 4" PVC riser that extends up to grade where it is fitted with an in-line fan, which exhausts via 2" PVC above the roof line.

A manometer installed in July 2013 confirms a significant vacuum of 3: of water column exists inside the perforated pipe. Based on the characteristic of the highly permeable crushed stone bedding beneath the floor slab and the impermeable barrier between the floor slab and gravel pack, Jade expects a measurable differential exists between the basement atmosphere and the sub-slab which would result in a downward migration of gas in the event communication between the basement and sub slab occurred. Based on the type of liner installed, Jade does not anticipate such a breach exists or will exist in the near future. As can be seen in the Final Engineering Report, the very expensive liner is warrantee against the passage of water even under pressure. Jade anticipates such a property would also result in a significant if not complete barrier to vapor migration.

## 2.0 SECOND BIENNIAL CERTIFICATION - CONT

### 2.4 Soil Gas Analysis

At the direction of the NYSDOH under observation by the NYSDEC, Jade prepared and implemented a work plan that called for the closure of select wells that were consistently providing clean results as well as discontinuing the sampling of the dewatering pump effluent. In addition, it included turning off the SSDS a minimum 30 days prior to collecting soil gas and indoor air samples for the purposes of assessing residual contaminations impact (indoor air) or potential impact (soil gas) on the building atmosphere. The in-line fan was turned off and locked out in March 2014.

The soil vapor quantification effort was conducted in two phases. The first phase included the collection of indoor air samples from the backroom of the first floor, and storage room of basement as well as a soil gas sample being collected from just outside the northwest corner of the building, via a well gravel filled boring from 1' to 10' below grade (approximately equal depth to invert of adjacent basement floor). No interior soil gas sampling was conducted to protect applicable warranties on the liner system.

The second phase included the collection of a second soil gas sample from just outside the southwest corner of the building, very close to the original dry cleaner spill from a well gravel filled boring that extended from 1' to 3.5' below grade, well below the adjacent building floor slab.

After probing to depth, a stainless steel soil gas probe screen connected to polypropylene tubing was lowered to within 12" of the bottom of the boring and then the open boring was filled to within 12" of grade with highly permeable #2 well gravel. The remaining annulus was filled with hydrated bentonite to form an impermeable plug.

While the bentonite expanded, Jade connected the polytubing to a vacuum pump and removed multiple volumes of air from the bore hole before connecting the tubing to a helium detector and flooding the space around the tubing where it entered the bentonite with helium. At both locations no helium was detected indicating the plug was competent and as such, the tests were conducted. Each test continued for approximately 7 hours before the tubing was disconnected and regulators removed and the sample labeled and couriered to the lab for analysis. The lab reports associated with this testing is provided in Appendix E.

The results are summarized below, concentrations are provided in  $\mu\text{g}/\text{m}^3$ .

## 2.0 SECOND BIENNIAL CERTIFICATION - CONT

### 2.4 Soil Gas Analysis – cont.

| Soil Gas Analysis Results Summary Table |                        |                       |
|---|------------------------|-----------------------|
| Volatiles by TO15                       | SW Corner<br>1' – 3.5' | NW Corner<br>1' – 10' |
| 1,2,4-Trimethylbenzene                  | 187                    | 360                   |
| 1,3,5-Trimethylbenzene                  | 57.5                   | 76                    |
| 4-Ethyltoluene                          | 35.2                   | <14                   |
| 4-Isopropyltoluene                      | 9.49                   | <10                   |
| 4-Methyl-2-pentanone(MIBK)              | 10.6                   | ND                    |
| Acetone                                 | 264                    | 1200                  |
| Benzene                                 | 45                     | 130                   |
| Carbon Disulfide                        | 3.42                   | 10                    |
| Carbon Tetrachloride                    | 0.50                   | <4.6                  |
| Chloroform                              | 17.1                   | 17                    |
| Cyclohexane                             | 40.2                   | 59                    |
| Dichlorodifluoromethane                 | 2.37                   | <14                   |
| Ethanol                                 | 21,300                 | ND                    |
| Ethyl acetate                           | 48.6                   | ND                    |
| Ethylbenzene                            | 180                    | 310                   |
| Heptane                                 | 99.5                   | 260                   |
| Hexane                                  | 69                     | 300                   |
| Isopropylbenzene                        | 16.2                   | ND                    |
| m,p-Xylene                              | 634                    | 890                   |
| Methyl Ethyl Ketone                     | 16.6                   | ND                    |
| Methylene Chloride                      | 1.28                   | <20                   |
| n-Butylbenzene                          | 18.7                   | ND                    |
| o-Xylene                                | 222                    | 260                   |
| Propylene                               | 46.8                   | 34                    |
| sec-Butylbenzene                        | 8.12                   | ND                    |
| Styrene                                 | 3.11                   | <12                   |
| Tetrachloroethene                       | 45.7                   | 93                    |
| Toluene                                 | 1,610                  | 2300                  |
| Trichloroethene                         | 0.59                   | <3.9                  |
| Trichlorofluoromethane                  | 3.37                   | <16                   |

Notes:

1. Detection limits of 1 ppbv or better maintained.
2. Only constituents detected provided. Full species list provided in appendices.
3. < = conc. below noted detection limit , ND – not detected/reported

As can be seen in the summary table, a significant quantity of volatiles were identified in both soil vapor samples, however, close inspection reveals concentrations of chlorinated solvents (shaded yellow), the “contaminant of concern” for this Site, were below the applicable guidelines of 100 µg/m<sup>3</sup>. Specifically, the only halogens identified:

1. Tetrachloroethene (a.k.a. Perchloroethylene) at 45.7 and 93 µg/m<sup>3</sup>
2. Trichloroethene at 0.59 and below the detection limit of 3.9 at northwest corner.

## 2.0 SECOND BIENNIAL CERTIFICATION - CONT

### 2.5 Indoor Air Analysis

As noted previously, in addition to the soil gas sampling, Jade collected indoor air samples from the back storage room and also from a closed storage room in the basement. Our chemical survey indicated no open or previously opened and closed containers of chemicals other than floor stock, which was all well sealed. Based on the survey, jade concludes the only gases present were emitted by the buildings mechanical systems/fluids/lubricants and/or building materials (e.g. paints, caulking, carpets, furniture, adhesives, etc.). Products found in any retail and/or even residential type dwellings. The results of the two indoor air samples are summarized below:

| Soil Gas Analysis Results Summary Table       |          |          |
|---|----------|----------|
| Volatiles by TO15                             | Basement | Backroom |
| Toluene                                       | 16       | 11       |
| Tetrahydrofuran                               | 1.2      | ND       |
| Trichloroethylene                             | ND       | 1.1      |
| Tetrachloroethylene                           | 3.7      | 2.1      |
| Styrene                                       | 1.2      | 0.73     |
| p-Ethyltoluene                                | 1.4      | 0.77     |
| p- & m- Xylenes                               | 4.0      | 2.0      |
| o-Xylene                                      | 2.0      | 0.99     |
| n-Hexane                                      | 2.0      | 1.2      |
| n-Heptane                                     | 1.1      | 0.99     |
| Methylene chloride                            | 5.8      | 3.0      |
| 4-Methyl-2-pentanone                          | 0.7      | 0.58     |
| Isopropanol                                   | 25       | 57       |
| Ethyl Benzene                                 | 1.4      | 11       |
| Ethyl acetate                                 | 9.0      | 27       |
| Cyclohexane                                   | 1.4      | 0.69     |
| Chloromethane                                 | 2.1      | 1.4      |
| Carbon tetrachloride                          | 1.3      | 0.9      |
| Benzene                                       | 1.7      | 1.0      |
| Acetone                                       | 50 B     | 43 B     |
| 2-Butanone                                    | 6.3      | 3.7      |
| 1,3-Butadiene                                 | 1.6      | 0.86     |
| 1,2-Dichloroethane                            | 1.9      | 1.7      |
| 1,2,4-Trimethylbenzene                        | 1.7      | 0.98     |
| Trichlorofluoromethane (Freon 11)             | 2.2      | 1.3      |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (freon) | 0.94     | ND       |
| Dichlorodifluoromethane                       | 2.0      | 1.4      |

Notes: 1. Same notes apply

As can be seen in the table, concentrations of PCE and TCE (shaded yellow) are well below applicable indoor air quality guideline of 30 µg/m<sup>3</sup>.

### 3. CONCLUSIONS

#### 3.1 *Groundwater Monitoring*

The results of the most recent groundwater sampling in July 2013 reveal PCE continues to degrade rapidly at the Site and concentrations of PCE in all but one well have dropped well below the state regulatory criteria of 5 ppb. The one remaining PCE contaminated well, MW-2, was found to contain PCE at only 11 ppb, just slightly above the regulatory level of 5 ppb. However, that analysis also revealed the presence of DCE at MW-2 (a degradation product of PCE) at 350 ppb, indicating rapid degradation of PCE but in complete degradation and the residual degradation product remains well in excess of the groundwater quality criteria of 5 ppb for that constituent. Jade expects that this DCE concentration will also degrade rapidly via:

1. dissolution now that the source has been removed; and,
2. dechlorination as a result of the continued hydrogen generation via the anaerobic conditions generated via the HRC application.

The next sampling in accordance with the revised sampling plan in July 2014.

#### 3.2 *Vapor Barrier/Sub-slab Depressurization*

Our inspections reveal no evidence that the vapor barrier beneath the building has been breeched or compromised in any way since first installed. In addition, several weeks after the SSDS was turned off and soil gas migration allowed to return to natural paths, PCE and its degradation products were measured below the floor slab on both the north and south sides of the building at concentrations well below the state soil gas guidance value for PCE of 100  $\mu\text{g}/\text{m}^3$ . The favorable results are further supported by the concentrations of CVOCs measured in indoor air again at levels well below the state indoor air guidelines value of 30  $\mu\text{g}/\text{m}^3$  for PCE. Based on readings, when in “active” operation (fan running), the manometer confirms a vacuum is being imposed on the atmosphere beneath the building.

#### 3.3 *Site Wide Cover System (SWCS) Integrity*

The site wide cover, which covers every portion of the Site, consists of concrete slab, asphalt pavement or a 1' thick layer of topsoil. Based on our most recent inspection in June 2014, Jade concludes that the cap has not been breached in anyway other than by the two 2" probe penetrations advanced as part of the soil gas sampling detailed herein.

#### **4. RECOMMENDATIONS**

Based on the conclusions provided herein, Jade recommends the NSYDEC consider approving the following modifications to the Sites, Site Management Plan:

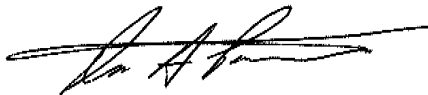
1. Disconnecting the power supply to the SSDS and revising its use from “active” to “passive”;
2. Discontinuing groundwater sampling in all wells except MW-2 on an annual basis (due next month);
3. Permanently closing wells MW-3 and MW-4, in addition to MW-1 and MW-5:

## 5. IC/EC CERTIFICATION / SIGNATURE PAGE

Based on multiple inspections of the Site, the most recent in June 2013, Jade certifies that no site activities have occurred that have compromised the integrity of the Institutional or Engineering Controls that apply to the Site. The Site Wide Cover System remains intact and sampling indicates residual levels of CVOCS are at or approaching applicable criteria and guidelines.

The activities detailed herein were planned and supervised by Dave Pelletier, P.E. an Environmental Engineer working in the environmental engineering field since 1984. Mr. Pelletier holds a Bachelors degree in Civil Engineering from Rensselaer Polytechnic Institute, and graduate level training from both Rensselaer Polytechnic Institute and Manhattan College with concentrations in geotechnical and water resource engineering. Mr. Pelletier is a New York State licensed professional engineer and holds multiple certifications in asbestos, Cathodic Protection System Testing and petroleum storage system development, testing and assessment.

Jade Environmental, Inc. further certifies that the conclusions and recommendations provided herein are based on sound engineering principles, commercially accepted standards and NYS Brownfield requirements all having the ultimate goal of reestablishing conditions protective of human health and the environment.



---

**Dave Pelletier, P.E.**  
**Project Engineer**



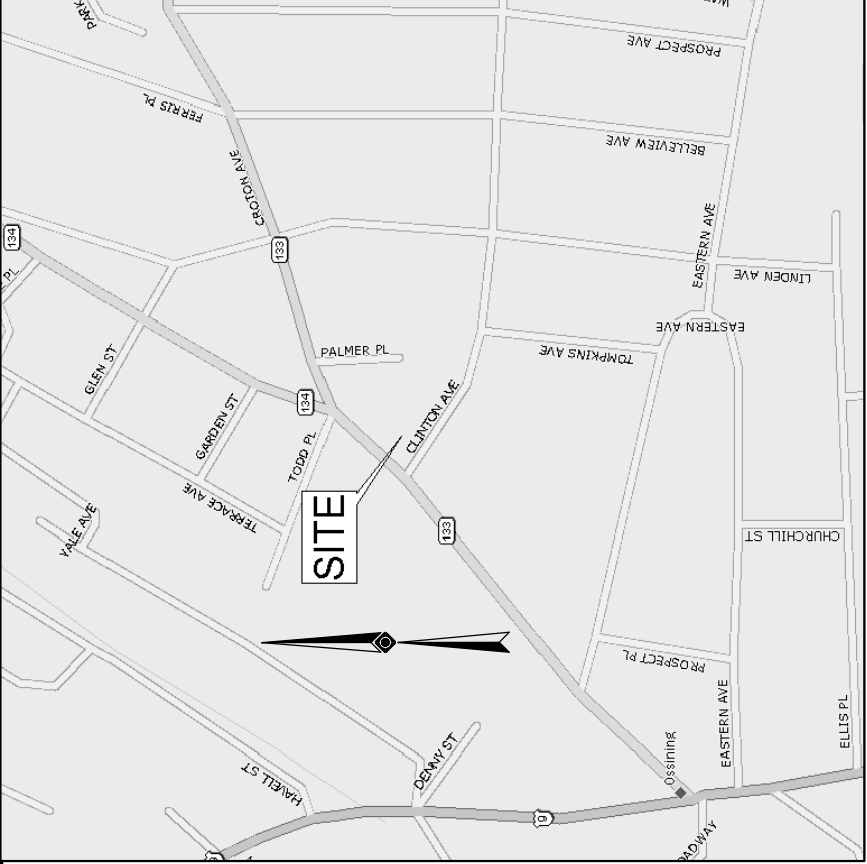
---

**Seal**

# **APPENDIX A**

## **SITE MAP**



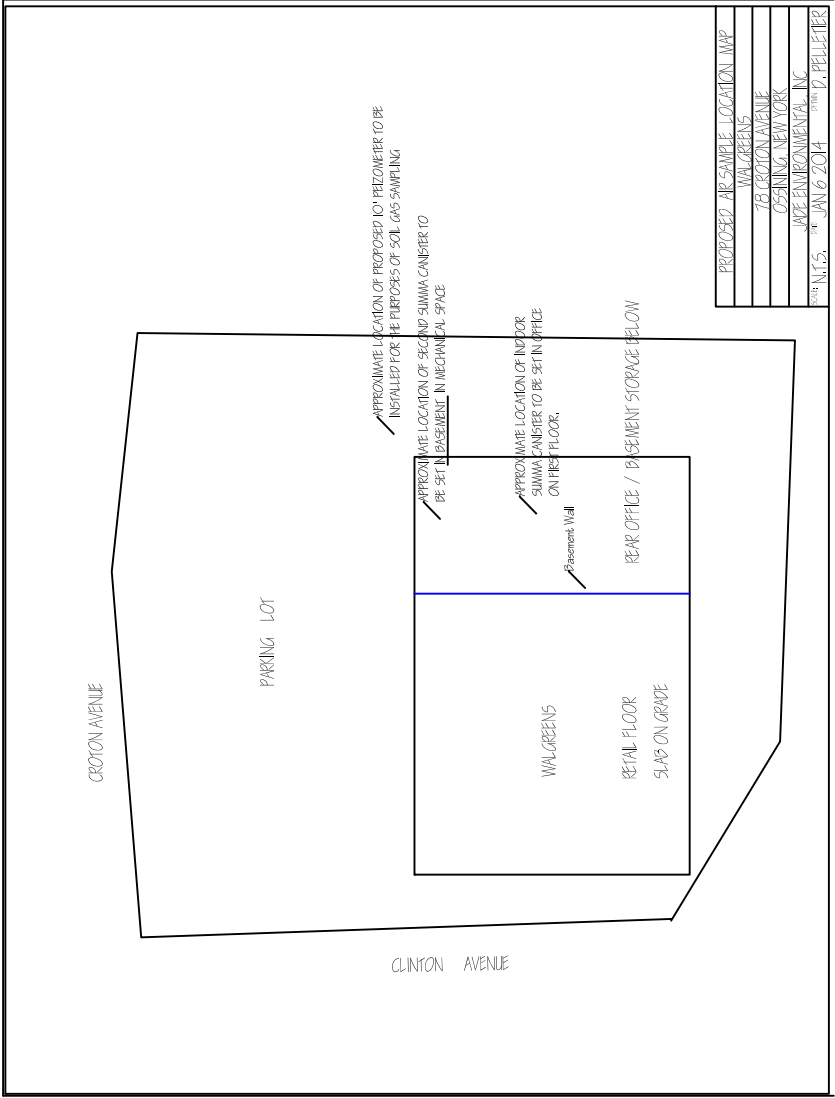


VICINITY MAP  
© 2008 DeLorme, Street Atlas USA

- NOTES:
1. PROPERTY KNOWN AS LOT 1, BLOCK 7, SECTION 89.16, MAP 0056, VILLAGE OF OSSINING, TOWN OF OSSINING, WESTCHESTER COUNTY, STATE OF NEW YORK.
  2. AREA = 39,271 SF. OR 0.902 AC.
  3. UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN. BEFORE ANY SITE EVALUATION, PREPARATION OF DESIGN DOCUMENTS OR EXCAVATION IS TO BEGUN, THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE PROPER UTILITY COMPANIES.
  4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
  5. THIS SURVEY IS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY ROYAL ABSTRACT OF NEW YORK, LLC, AGENT FOR STEWART TITLE INSURANCE COMPANY, TITLE NO. 901727, DATED FEBRUARY 23, 2012, WHERE THE FOLLOWING SURVEY RELATED EXCEPTIONS APPEAR IN SCHEDULE B:
    - ⑤ RECIPROCAL EASEMENT AGREEMENT IN CONTROL NO. 509333107 - CROSS ACCESS EASEMENT BETWEEN LOT 17 AND LOT 37, MAP 0036 - SHOWN.
    - ⑦ TERMS, CONDITIONS AND PROVISIONS IN THAT ENVIRONMENTAL EASEMENT PER ARTICLE 71, RECIPROCAL EASEMENT AGREEMENT IN CONTROL NO. 509333107, MAP 0036, CONTROL NO. 512923533 - RIGHT TO ENTER SUBJECT PREMISES FOR REMEDIATION PURPOSES - BLANKET IN NATURE.
  6. BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2.
  7. ELEVATIONS ARE BASED UPON BENCHMARKS SHOWN ON REF. #3 REPUTED TO BE NAD 88.
  8. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.

- REFERENCES:
1. THE OFFICIAL TAX MAP OF THE VILLAGE OF OSSINING, TOWN OF OSSINING, WESTCHESTER COUNTY, NEW YORK, MAP NO. 0036 & 0067.
  2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP FOR WESTCHESTER COUNTY, NEW YORK, 1986, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 2684, 2685, 2686, 2687, 2688, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2696, 2697, 2698, 2699, 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2714, 2715, 2716, 2717, 2718, 2719, 2720, 2721, 2722, 2723, 2724, 2725, 2726, 2727, 2728, 2729, 2730, 2731, 2732, 2733, 2734, 2735, 2736, 2737, 2738, 2739, 2740, 2741, 2742, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2751, 2752, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2760, 2761, 2762, 2763, 2764, 2765, 2766, 2767, 2768, 2769, 2770, 2771, 2772, 2773, 2774, 2775, 2776, 2777, 2778, 2779, 2780, 2781, 2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 2948, 2949, 2950, 2951, 2952, 2953, 2954, 2955, 2956, 2957, 2958, 2959, 2960, 2961, 2962, 2963, 2964, 2965, 2966, 2967, 2968, 2969, 2970, 2971, 2972, 2973, 2974, 2975, 2976, 2977, 2978, 2979, 2980, 2981, 2982, 2983, 2984, 2985, 2986, 2987, 2988, 2989, 2990, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 2999, 3000, 3001, 3002, 3003, 3004, 3005, 3006, 3007, 3008, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 3020, 3021, 3022, 3023, 3024, 3025, 3026, 3027, 3028, 3029, 3030, 3031, 3032, 3033, 3034, 3035, 3036, 3037, 3038, 3039, 3040, 3041, 3042, 3043, 3044, 3045, 3046, 3047, 3048, 3049, 3050, 3051, 3052, 3053, 3054, 3055, 3056, 3057, 3058, 3059, 3060, 3061, 3062, 3063, 3064, 3065, 3066, 3067, 3068, 3069, 3070, 3071, 3072, 3073, 3074, 3075, 3076, 3077, 3078, 3079, 3080, 3081, 3082, 3083, 3084, 3085, 3086, 3087, 3088, 3089, 3090, 3091, 3092, 3093, 3094, 3095, 3096, 3097, 3098, 3099, 3100, 3101, 3102, 3103, 3104, 3105, 3106, 3107, 3108, 3109, 3110, 3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3119, 3120, 3121, 3122, 3123, 3124, 3125, 3126, 3127, 3128, 3129, 3130, 3131, 3132, 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3149, 3150, 3151, 3152, 3153, 3154, 3155, 3156, 3157, 3158, 3159, 3160, 3161, 3162, 3163, 3164, 3165, 3166, 3167, 3168, 3169, 3170, 3171, 3172, 3173, 3174, 3175, 3176, 3177, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3193, 3194, 3195, 3196, 3197, 3198, 3199, 3200, 3201, 3202, 3203, 3204, 3205, 3206, 3207, 3208, 3209, 3210, 3211, 3212, 3213, 3214, 3215, 3216, 3217, 3218, 3219, 3220, 3221, 3222, 3223, 3224, 3225, 3226, 3227, 3228, 3229, 3230, 3231, 3232, 3233, 3234, 3235, 3236, 3237, 3238, 3239, 3240, 3241, 3242, 3243, 3244, 3245, 3246, 3247, 3248, 3249, 3250, 3251, 3252, 3253, 3254, 3255, 3256, 3257, 3258, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3268, 3269, 3270, 3271, 3272, 3273, 3274, 3275, 3276, 3277, 3278, 3279, 3280, 3281, 3282, 3283, 3284, 3285, 3286, 3287, 3288, 3289, 3290, 3291, 3292, 3293, 3294, 3295, 3296, 3297, 3298, 3299, 3300, 3301, 3302, 3303, 3304, 3305, 3306, 3307, 3308, 3309, 3310, 3311, 3312, 3313, 3314, 3315, 3316, 3317, 3318, 3319, 3320, 3321, 3322, 3323, 3324, 3325, 3326, 3327, 3328, 3329, 3330, 3331, 3332, 3333, 3334, 3335, 3336, 3337, 3338, 3339, 3340, 3341, 3342, 3343, 3344, 3345, 3346, 3347, 3348, 3349, 3350, 3351, 3352, 3353, 3354, 3355, 3356, 3357, 3358, 3359, 3360, 3361, 3362, 3363, 3364, 3365, 3366, 3367, 3368, 3369, 3370, 3371, 3372, 3373, 3374, 3375, 3376, 3377, 3378, 3379, 3380, 3381, 3382, 3383, 3384, 3385, 3386, 3387, 3388, 3389, 3390, 3391, 3392, 3393, 3394, 3395, 3396, 3397, 3398, 3399, 3400, 3401, 3402, 3403, 3404, 3405, 3406, 3407, 3408, 3409, 3410, 3411, 3412, 3413, 3414, 3415, 3416, 3417, 3418, 3419, 3420, 3421, 3422, 3423, 3424, 3425, 3426, 3427, 3428, 3429, 3430, 3431, 3432, 3433, 3434, 3435, 3436, 3437, 3438, 3439, 3440, 3441, 3442, 3443, 3444, 3445, 3446, 3447, 3448, 3449, 3450, 3451, 3452, 3453, 3454, 3455, 3456, 3457, 3458, 3459, 3460, 3461, 3462, 3463, 3464, 3465, 3466, 3467, 3468, 3469, 3470, 3471, 3472, 3473, 3474, 3475, 3476, 3477, 3478, 3479, 3480, 3481, 3482, 3483, 3484, 3485, 3486, 3487, 3488, 3489, 3490, 3491, 3492, 3493, 3494, 3495, 3496, 3497, 3498, 3499, 3500, 3501, 3502, 3503, 3504, 3505, 3506, 3507, 3508, 3509, 3510, 3511, 3512, 3513, 3514, 3515, 3516, 3517, 3518, 3519, 3520, 3521, 3522, 3523, 3524, 3525, 3526, 3527, 3528, 3529, 3530, 3531, 3532, 3533, 3534, 3535, 3536, 3537, 3538, 3539, 3540, 3541, 3542, 3543, 3544, 3545, 3546, 3547, 3548, 3549, 3550, 3551, 3552, 3553, 3554, 3555, 3556, 3557, 3558, 3559, 3560, 3561, 3562, 3563, 3564, 3565, 3566, 3567, 3568, 3569, 3570, 3571, 3572, 3573, 3574, 3575, 3576, 3577, 3578, 3579, 3580, 3581, 3582, 3583, 3584, 3585, 3586, 3587, 3588, 3589, 3590, 3591, 3592, 3593, 3594, 3595, 3596, 3597, 3598, 3599, 3600, 3601, 3602, 3603, 3604, 3605, 3606, 3607, 3608, 3609, 3610, 3611, 3612, 3613, 3614, 3615, 3616, 3617, 3618, 3619, 3620, 3621, 3622, 3623, 3624, 3625, 3626, 3627, 3628, 3629, 3630, 3631, 3632, 3633, 3634, 3635, 3636, 3637, 3638, 3639, 3640, 3641, 3642, 3643, 3644, 3645, 3646, 3647, 3648, 3649, 3650, 3651, 3652, 3653, 3654, 3655, 3656, 3657, 3658, 3659, 3660, 3661, 3662, 3663, 3664, 3665, 3666, 3667, 3668, 3669, 3670, 3671, 3672, 3673, 3674, 3675, 3676, 3677, 3678, 3679, 3680, 3681, 3682, 3683, 3684, 3685, 3686, 3687, 3688, 3689, 3690, 3691, 3692, 3693, 3694, 3695, 3696, 3697, 3698, 3699, 3700, 3701, 3702, 3703, 3704, 3705, 3706, 3707, 3708, 3709, 3710, 3711, 3712, 3713, 3714, 3715, 3716, 3717, 3718, 3719, 3720, 3721, 3722, 3723, 3724, 3725, 3726, 3727, 3728, 3729, 3730, 3731, 3732, 3733, 3734, 3735, 3736, 3737, 3738, 3739, 3740, 3741, 3742, 3743, 3744, 3745, 3746, 3747, 3748, 3749, 3750, 3751, 3752, 3753, 3754, 3755, 3756, 3757, 3758, 3759, 3760, 3761, 3762, 3763, 3764, 3765, 3766, 3767, 3768, 3769, 3770, 3771, 3772, 3773, 3774, 3775, 3776, 3777, 3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800, 3801, 3802, 3803, 3804, 3805, 3806, 3807, 3808, 3809, 3810, 3811, 3812, 3813, 3814, 3815, 3816, 3817, 3818, 3819, 3820, 3821, 3822, 3823, 3824, 3825, 3826, 3827, 3828, 3829, 3830, 3831, 3832, 3833, 3834, 3835, 3836, 3837, 3838, 3839, 3840, 3841, 3842, 3843, 3844, 3845, 3846, 3847, 3848, 3849, 3850, 3851, 3852, 3853, 3854, 3855, 3856, 3857, 3858, 3859, 3860, 3861, 3862, 3863, 3864, 3865, 3866, 3867, 3868, 3869, 3870, 3871, 3872, 3873, 3874, 3875, 3876, 3877, 3878, 3879, 3880, 3881, 3882, 3883, 3884, 3885, 3886, 3887, 3888, 3889, 3890, 3891, 3892, 3893, 3894, 3895, 3896, 3897, 3898, 3899, 3900, 3901, 3902, 3903, 3904, 3905, 3906, 3





|                                  |
|----------------------------------|
| PROPOSED AIR SAMPLE LOCATION MAP |
| WALGREENS                        |
| 78 CROTON AVENUE                 |
| OSSENG, NEW YORK                 |
| WACE ENVIRONMENTAL, INC.         |
| DATE: JAN 6 2014                 |
| BY: D. PELLETER                  |

## **APPENDIX B**

### **NYSDEC APPROVAL LETTER**

# New York State Department of Environmental Conservation

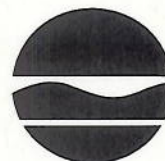
## Division of Environmental Remediation

Remedial Bureau C, 11th Floor

625 Broadway, Albany, New York 12233-7014

Phone: (518) 402-9662 • Fax: (518) 402-9679

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



Joe Martens  
Commissioner

July 19, 2013

Ossining R.X Development, LLC.  
Attn: Sally Krauss  
580 White Plains Road  
Tarrytown, NY 10591

**Re: Periodic Review Report  
Clinton Terrace Shopping Center Site (C360110)  
Ossining, Westchester County**

Dear Ms. Krauss,

The New York State Department of Environmental Conservation (Department) and New York State Department of Health (NYSDOH) have reviewed the Periodic Review Report (PRR) for the above site. Upon review, it has been determined that corrective measures are needed. Therefore, the Department disapproves the document. The following modifications are requested:

### Corrective Measures

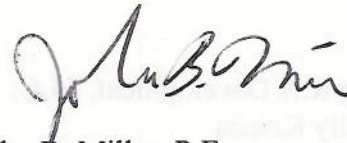
Section 2.3 – The sub-slab depressurization system (SSDS) has not been tested since its installation. Thus, follow up work is needed to ensure it is operating effectively. Therefore, please submit a brief work plan that summarizes procedures to complete pressure differential testing in the on-site building. Also, a manometer should be installed for the SSDS to document vacuum conditions beneath the building.

### General PRR Comments

1. The cover page of the PRR should be updated to include the entire site number (C360110).
2. Section 1.1.2 – The statement “all soil contamination had been removed” is inaccurate as tetrachloroethene was detected above 1.3 ppm in one of the excavation end point samples. The statement should be removed or revised.
3. In box 2 of the PRR questionnaire, question 6 is marked no. Please confirm whether or not this is correct.
4. Section 3, Conclusions/Recommendations, should be updated following the implementation of the Corrective Measures for the SSDS.

I may be contacted by email at [jymiller@gw.dec.state.ny.us](mailto:jymiller@gw.dec.state.ny.us) or 518-402-9564 with any questions or comments.

Sincerely,



John B. Miller, P.E.  
Project Manager

cc: Mr. David Pelletier, P.E.  
President  
Jade Environmental, Inc.  
59 Circle Drive  
Hopewell Junction, NY 12533  
[dpelletierpe@jadeenv.com](mailto:dpelletierpe@jadeenv.com)

cc: J. Candiloro (DER)  
N. Walz (DOH)

# New York State Department of Environmental Conservation

## Division of Environmental Remediation, 11th Floor

625 Broadway, Albany, New York 12233

**Phone:** (518) 402-9553 **Fax:** (518) 402-9577

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



Joe Martens  
Commissioner

2/18/2014

Sally Krauss  
Ossining Development RX, LLC  
580 White Plains Road  
Tarrytown, NY 10591

### **Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal**

**Site Name:** Clinton Terrace Shopping Center

**Site No.:** C360110

**Site Address:** 74-82 Croton Avenue  
Ossining, NY 10562

Dear Sally Krauss:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at <http://www.dec.ny.gov/regulations/67386.html>) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **April 29, 2014**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Qualified Environmental Professional (QEP). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:  
<http://www.dec.ny.gov/regulations/2586.html>

The signed certification forms should be sent to John Miller, Project Manager, at the following address:

New York State Department of Environmental Conservation  
Division of Environmental Remediation, BURC  
625 Broadway  
Albany, NY 12233-7014

Phone number: 518-402-9589. E-mail: [jymiller@gw.dec.state.ny.us](mailto:jymiller@gw.dec.state.ny.us)

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance  
Certification Form Instructions  
Certification Forms

cc: w/ enclosures

Robert W. Mehlich  
Anne C.S. Mehlich  
Cheryl Schmitz

ec: w/ enclosures

John Miller, Project Manager  
James Candiloro, Section Chief  
Edward Moore, Hazardous Waste Remediation Engineer, Region 3  
David Pelletier, Jade Environmental

## Enclosure 1

### Certification Instructions

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

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

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

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

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

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

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

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

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

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





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



|  |                |                     |  |
|--|----------------|---------------------|--|
| <b>Site No.</b>  | <b>C360110</b> | <b>Site Details</b> | <b>Box 1</b>   |
| <b>Site Name Clinton Terrace Shopping Center</b>   |                |                     |  |
| Site Address: 74-82 Croton Avenue      Zip Code: 10562   |                |                     |  |
| City/Town: Ossining  |                |                     |  |
| County: Westchester  |                |                     |  |
| Site Acreage: 0.9  |                |                     |  |
| Reporting Period: December 22, 2011 to March 30, 2014  |                |                     |  |
|  |                |                     | YES      NO  |
| 1. Is the information above correct?   |                |                     | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| If NO, include handwritten above or on a separate sheet.   |                |                     |  |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?                              |                |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?   |                |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?                      |                |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| <b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b> |                |                     |  |
| 5. Is the site currently undergoing development?   |                |                     | <input type="checkbox"/> <input checked="" type="checkbox"/> |

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

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

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

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

\_\_\_\_\_  
Date

**Box 2A**

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

☐☒

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  
(The Qualitative Exposure Assessment must be certified every five years)

☒☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

**SITE NO. C360110****Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control**89.16-7-1**

Ossining RX Development, LLC

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

## Environmental Easement

- Groundwater Use Restrictions
- Land Use Restriction (commercial)

## Institutional Controls

- Compliance with Easement
- ECs maintained in accordance with SMP
- Groundwater Monitoring in accordance with SMP
- Periodic Reporting in accordance with SMP

**Box 4****Description of Engineering Controls**ParcelEngineering Control**89.16-7-1**

Vapor Mitigation ✓  
Cover System ✓

## Engineering Controls

- Soil Cover
- Vapor Barrier
- Sub-Slab Depressurization System

### Periodic Review Report (PRR) Certification Statements

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

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES / NO  
☒ ☐

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

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES / NO  
☒ ☐

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

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

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

\_\_\_\_\_  
Date



IC CERTIFICATIONS  
SITE NO. C360110

Box 6

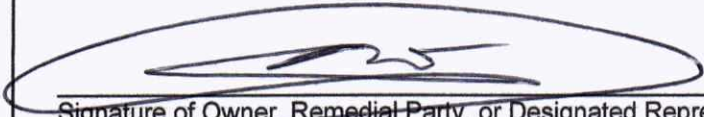
**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

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

I DAVE PELLETER, P.E. at 59 Circle Dr., Wingdale, NY 12533  
print name print business address

am certifying as REMEDIATION ENGINEER (Owner or Remedial Party)

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

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

6/20/14  
Date

IC/EC CERTIFICATIONS

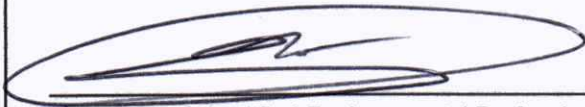
Box 7

Qualified Environmental Professional Signature

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

I DAVE PELLETIER PE at 59 Circle Dr. Wingdale, NY 12532  
print name print business address

am certifying as a Qualified Environmental Professional for the Remedial Engineer  
(Owner or Remedial Party)



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



9/20/14  
Date

**Enclosure 3**  
**Periodic Review Report (PRR) General Guidance**

- I. Executive Summary: (1/2-page or less)
  - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
  - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
    1. progress made during the reporting period toward meeting the remedial objectives for the site
    2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
  - C. Compliance
    1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
    2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
  - D. Recommendations
    1. recommend whether any changes to the SMP are needed
    2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
    3. recommend whether the requirements for discontinuing site management have been met.
- II. Site Overview (one page or less)
  - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
  - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.
- IV. IC/EC Plan Compliance Report (if applicable)
  - A. IC/EC Requirements and Compliance
    1. Describe each control, its objective, and how performance of the control is evaluated.
    2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
    3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
    4. Conclusions and recommendations for changes.
  - B. IC/EC Certification
    1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
- V. Monitoring Plan Compliance Report (if applicable)
  - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
  - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
  - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
  - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
  - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
  - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
  - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
  - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

- D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
- E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

#### VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
  - 1. whether all requirements of each plan were met during the reporting period
  - 2. any requirements not met
  - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
  - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
  - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

#### VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

December 9, 2013  
(rev January 7, 2014)

John Miller, Project Supervisor  
NYSDEC  
Division of Environmental Remediation  
625 Broadway, Albany, NY 12233-7014

--Transmitted Electronically--

**Re: Final Proposed Soil Gas and Indoor Air Testing Plan  
Walgreens Brownfield Project C360110  
Clinton & Croton Avenues, Ossining, New York**

Dear Inspector Miller:

Jade Environmental, Inc. is pleased to submit the following Final Proposed Work Plan to conduct indoor air and soil gas testing as requested by the New York state Department of Environmental Conservation and the New York State Department of Health as a result of the on-going monitoring at the above referenced property. This plan includes revisions based on NYSDOH input. Importantly, the active Sub-slab Depressurization System will be shut down a minimum 30 days before any testing proposed herein is commenced. Jade will notify both the NYSDEC and NYSDOH of the sampling plan at least 10 days prior to implementation.

**Proposed Indoor Air Sampling**

Specifically, Jade proposes conducting two indoor air sampling using standard 6 liter summa canisters set with 8 hour regulators to mimic daily property use. Prior to sampling a chemical inventory will be conducted documenting chemicals stored and their condition. One canister will be set in the basement and the second in the back room or office of the building. Every effort to keep exterior building openings sealed will be made for the week prior and during the sampling. During the testing, access to the area of the canisters will be cordoned off to eliminate potential contact with building tenants.

**Proposed Deep Soil Gas Sampling (Basement Simulation)**

In addition, Jade proposes installing one deep 1" PVC well point to a depth of 10' adjacent the northeast side of the building to access soil gas (just above groundwater at 12') from soil in proximity to the basement floor slab. The borehole will be advanced utilizing direct push technology via Geoprobe® Macrocore® Sampler. Once the boring is complete, a new 10' length of 20 slot PVC screen with a 1" inside diameter will be installed inside the open boring. The annular space between the screen and the boring wall will be filled with new #2 silica well gravel to within 2' of grade. The gravel pack will covered a minimum 1.5' of bentonite chips hydrated in-place with approximately ½ gallon of tap water. The remaining 6" of annulus will be filled with blacktop to match surrounding surface. The well pipe will be capped with a flush cap.

The well point will be allowed to stabilize for a minimum 1 week before the sampling event begins. Upon return to each well point to start the sampling, each cap will be removed and each well point evacuated using a standard vacuum pump via new dedicated silicone or polyethylene tubing of multiple well volumes at a rate not to exceed 0.2 l/min. After the evacuation, a soil gas implant will be lowered into the well point attached to the dedicated tubing to a point approximately 6" from the bottom of the point. The tubing will be connected to the summa canister at grade and all appropriate data logged accordingly. The annulus between the tubing and the well screen will be plugged with a plug of non-shrinking / non-VOC containing putty to keep out above grade air. Sample tubing will traverse a rubber plug set into the putty. The summa canister will be secured from vandalism and the test initiated. Just prior to the 8 hour open time, the canister valve will be closed, the well point sealed closed and the canister couriered to a state licensed laboratory for sample analysis via TO-15 under proper chain of custody and the final Category B report validated by the labs consultant.



**Proposed Shallow Soil Gas Sampling (Retail Floor Simulation)**

A second shallow well point to 3' below grade will be placed on the south side of the building (between building and Clinton Avenue) to simulate soil gas conditions beneath the on-grade floor slab of the retail space, and the closest location of the original solvent release. **Sampling will be initiated with and in the exact same manner as described for the deeper well point above.**

**Conclusions**

Jade will present the results to both the NYSDEC and NYSDOH in a detailed letter report within 2 weeks of obtaining sample results from the lab.

Jade will consult with both departments as to the appropriate next steps to address results exceeding applicable CSGs, if that is the case.

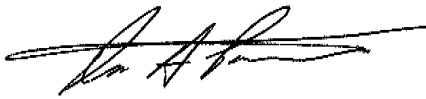
As a result of the very expensive and critically installed liner beneath the building, Jade concludes it is unlikely any exceedences will be identified inside the building. If this is the case, Jade will propose in our report the termination of the active system and replacement of same with a passive system which will include replacing the in-line fan with a rain hood.

Jade remains uncertain as to any activity if any will be initiated as a result of soil gas levels exceeding SCGs outside the building (as is expected) other than continuing with the on-going enhanced natural attenuation process currently underway.

As always, we look forward to your input. If you any questions at any time, please do not hesitate to call.

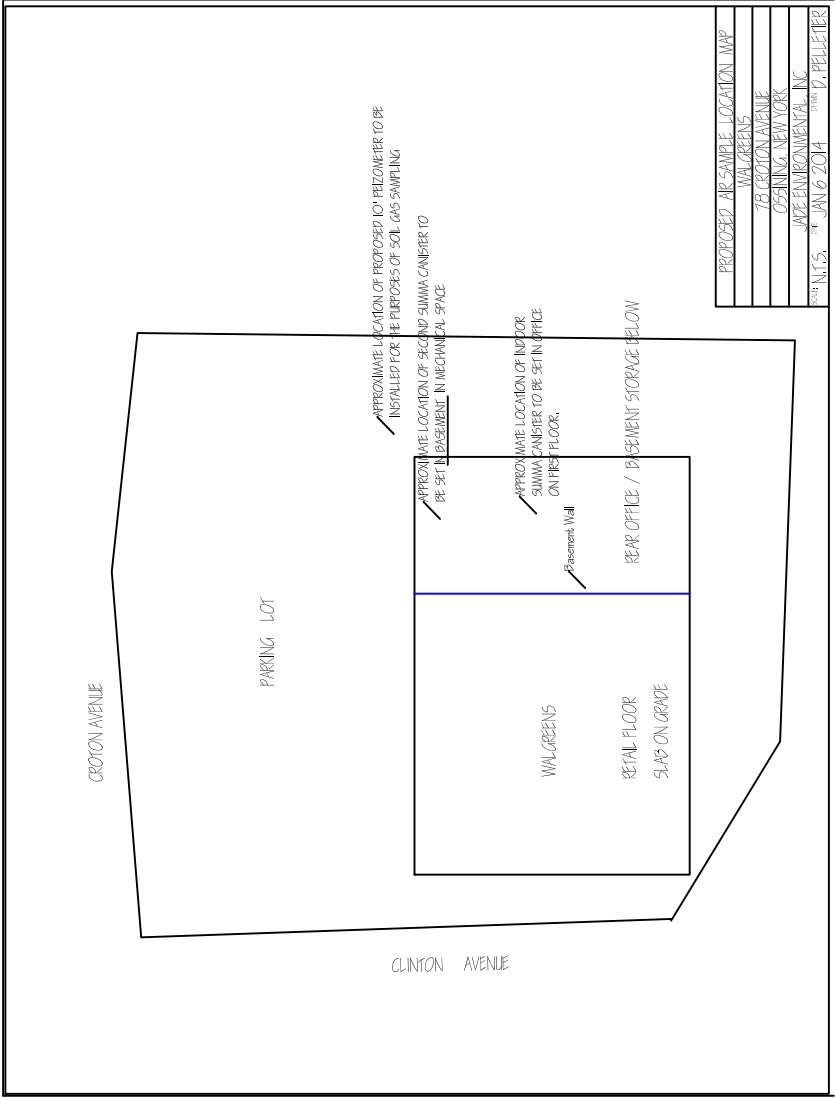
Sincerely,

Jade Environmental, Inc.



Dave Pelletier, P. E.  
Project Engineer

Site map attached



|                                  |
|----------------------------------|
| PROPOSED AIR SAMPLE LOCATION MAP |
| WALGREENS                        |
| 78 CROTON AVENUE                 |
| OSSENG, NEW YORK                 |
| WACE ENVIRONMENTAL, INC.         |
| DATE: JAN 6 2014                 |
| BY: D. PELLETIER                 |

## **APPENDIX C**

### **ORIGINAL SITE MANAGEMENT PLAN**

# **Clinton Terrace Shopping Center**

## **WESTCHETER COUNTY, NEW YORK**

---

# **Site Management Plan**

**NYSDEC Site Number: C360110**

**Prepared for:**  
Ossining Rx Development, LLC  
Tarrytown, NY

**Prepared by:**  
Jade Environmental, Inc.  
Hopewell Junction, NY  
845-897-2188 Desk  
845-897-2189 Fax  
dpelletierpe@jadeenv.com

### **Revisions to Final Approval:**

| Revision #  | Submitted Date | Summary of Revision              | DEC Approval Date |
|-------------|----------------|----------------------------------|-------------------|
| 4-10-12-001 | April 10, 2012 | Groundwater discharge monitoring | 4-23-2012         |
|             |                |                                  |                   |
|             |                |                                  |                   |
|             |                |                                  |                   |

---

**NOVEMBER, 2011**

# TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>TABLE OF CONTENTS .....</b>                              | <b>2</b>  |
| <b>LIST OF TABLES .....</b>                                 | <b>5</b>  |
| <b>LIST OF FIGURES .....</b>                                | <b>5</b>  |
| <b>LIST OF APPENDICES .....</b>                             | <b>6</b>  |
| <b>SITE MANAGEMENT PLAN .....</b>                           | <b>7</b>  |
| <b>1.0 INTRO / DESCRIPTION OF REMEDIAL PROGRAM.....</b>     | <b>7</b>  |
| <b>1.1 INTRODUCTION.....</b>                                | <b>7</b>  |
| 1.1.1 General .....   | 7         |
| 1.1.2 Purpose .....   | 9         |
| 1.1.3 Revisions .....                                       | 10        |
| <b>1.2 SITE BACKGROUND.....</b>                             | <b>10</b> |
| 1.2.1 Site Location and Description .....                   | 10        |
| 1.2.2 Site History .....                                    | 10        |
| 1.2.3 Geologic Conditions.....                              | 11        |
| <b>1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS .....</b> | <b>12</b> |
| <b>1.4 SUMMARY OF REMEDIAL ACTIONS .....</b>                | <b>13</b> |
| 1.4.1 Removal of Contaminated Media from the Site.....      | 14        |
| 1.4.2 Site-Related Treatment Systems .....                  | 15        |
| 1.4.3 Remaining Contamination.....                          | 15        |

|  |           |
|--|-----------|
| <b>2.0 ENGINEERING / INSTITUTIONAL CONTROL PLAN .....</b>                          | <b>17</b> |
| <b>2.1 INTRODUCTION.....</b>   | <b>17</b> |
| 2.1.1 General .....  | 17        |
| 2.1.2 Purpose .....  | 17        |
| <b>2.2 ENGINEERING CONTROLS .....</b>  | <b>18</b> |
| 2.2.1 Engineering Control Systems .....  | 18        |
| 2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems ..... | 19        |
| <b>2.3 INSTITUTIONAL CONTROLS .....</b>  | <b>19</b> |
| 2.3.1 Excavation Work Plan.....  | 21        |
| 2.3.2 Soil Vapor Intrusion Evaluation.....   | 22        |
| <b>2.4 INSPECTIONS AND NOTIFICATIONS .....</b>                                     | <b>23</b> |
| 2.4.1 Inspections.....   | 23        |
| 2.4.2 Notifications .....  | 23        |
| <b>2.5 CONTINGENCY PLAN .....</b>  | <b>24</b> |
| 2.5.1 Emergency Telephone Numbers .....  | 24        |
| 2.5.2 Map and Directions to Nearest Health Facility .....                          | 25        |
| 2.5.3 Response Procedures.....   | 26        |
| <b>3.0 SITE MONITORING PLAN.....</b>   | <b>27</b> |
| <b>3.1 INTRODUCTION.....</b>   | <b>27</b> |
| 3.1.1 General .....  | 27        |
| 3.1.2 Purpose and Schedule.....  | 27        |
| <b>3.2 SOIL COVER SYSTEM MONITORING.....</b>                                       | <b>28</b> |
| <b>3.3 MEDIA MONITORING PROGRAM .....</b>  | <b>28</b> |
| 3.3.1 Groundwater Monitoring.....  | 28        |
| 3.3.2 Groundwater Discharge Monitoring .....                                       | 28        |
| 3.3.2.1 Sampling Protocol.....   | 29        |
| 3.3.2.2 Monitoring Well Repairs, Replacement And Decommissioning.....              | 30        |

|   |           |
|---|-----------|
| <b>3.4 SITE-WIDE INSPECTION .....</b>                                 | <b>30</b> |
| <b>3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL.....</b>          | <b>31</b> |
| <b>3.6 MONITORING REPORTING REQUIREMENTS.....</b>                     | <b>32</b> |
| <b>4.0 OPERATION AND MAINTENANCE PLAN .....</b>                       | <b>33</b> |
| <b>4.1 INTRODUCTION.....</b>  | <b>33</b> |
| <b>5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS.....</b>             | <b>34</b> |
| <b>5.1 SITE INSPECTIONS .....</b>                                     | <b>34</b> |
| 5.1.1 Inspection Frequency .....                                      | 34        |
| 5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports .....  | 34        |
| 5.1.3 Evaluation of Records and Reporting .....                       | 34        |
| <b>5.2 CERTIFICATION OF ENGINEERING / INSTITUTIONAL CONTROLS.....</b> | <b>35</b> |
| <b>5.3 PERIODIC REVIEW REPORT .....</b>                               | <b>37</b> |
| <b>5.4 CORRECTIVE MEASURES PLAN .....</b>                             | <b>38</b> |

## **LIST OF TABLES**

Remedial Investigation Soil Contamination Summary

Remedial Investigation Groundwater Contamination Summary

Summary of Remaining Soil Contamination above Unrestricted Levels

Monitoring/Inspection Schedule

Schedule of Monitoring/Inspection Reports

Emergency Contact Numbers

Other Contact Numbers

## **LIST OF FIGURES**

Figure of Site and Site Boundaries

Geologic Cross Section(s)

Groundwater Flow Figure

Remedial Investigation Soil Contamination Summary

Remedial Investigation Groundwater Contamination Summary

Remedial Investigation Soil Vapor Data

Extent of Remedial Excavation Performed

Location of Cover System Types

Groundwater Monitoring Well Network

Baseline Post-Remediation Groundwater Quality

Map of Route from Site to Hospital



## **LIST OF APPENDICES**

- A - Environmental Easement / Metes and Bounds
- B – Site Maps
- C – Health and Safety Plan
- D - Monitoring Well Boring and Construction Logs
- E -Groundwater Monitoring Well Sampling Log Form
- F - Quality Assurance Project Plan
- G - Site-wide Inspection Form
- H - EC As-Built Drawings

## **SITE MANAGEMENT PLAN**

### **1.0 INTRO / DESCRIPTION OF REMEDIAL PROGRAM**

#### **1.1 INTRODUCTION**

This document is required as an element of the remedial program at the former Clinton Terrace Shopping Center (hereinafter referred to as the “Site”) under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index# C360110 which was executed on October 18, 2009.

##### **1.1.1 General**

Ossining Rx Development, LLC and Mehlich Associates (hereinafter referred to as the “Remedial Party”) entered into a BCA with the NYSDEC to remediate a one acre parcel of commercial property located in Village of Ossining, Westchester County, New York. This BCA required the Remedial Party investigate and remediate contaminated media at the site. A figure showing the site location and boundaries of this 1-acre site is provided in Figure 1 below. The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement attached as appendix A.

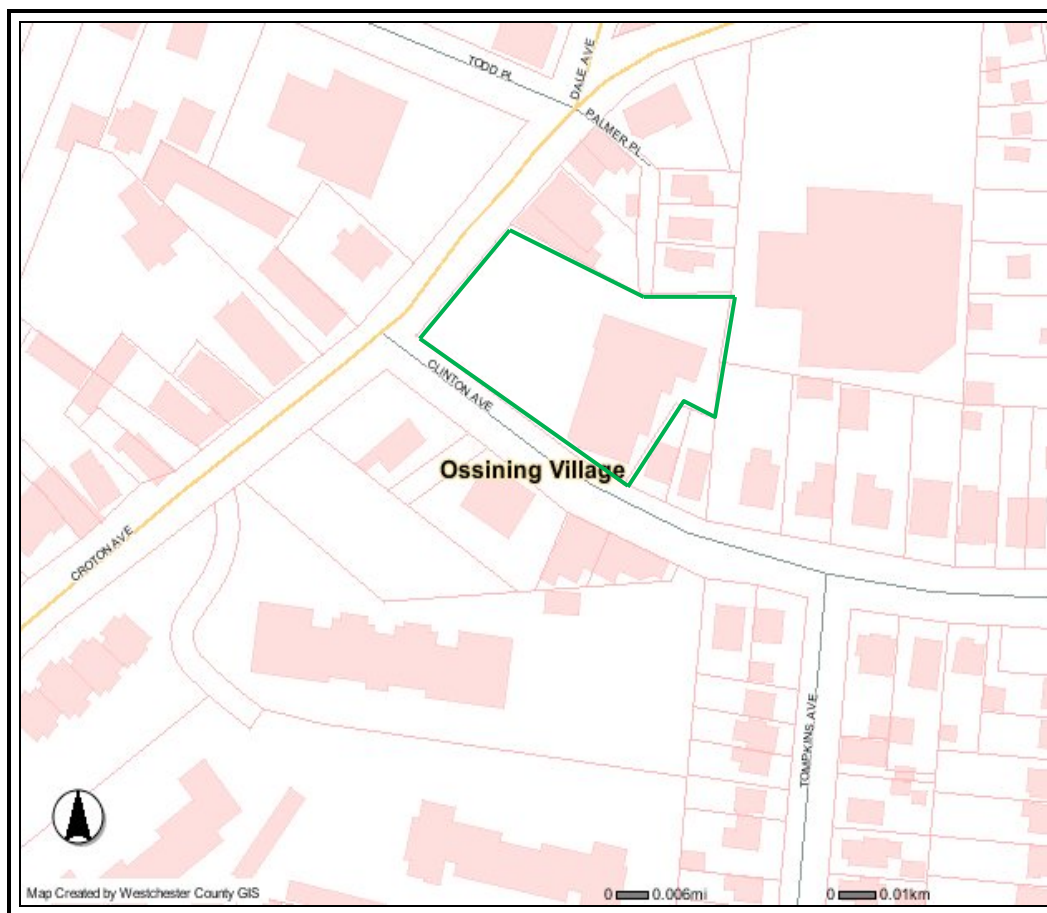


Figure 1 – Site Location Map

After completion of the remedial work described in the Remedial Action Work Plan, some contamination was left in groundwater at this site at concentrations exceeding state regulatory limits, which is hereafter referred to as ‘remaining contamination.’ This Site Management Plan (SMP) was prepared to manage remaining contamination at the site until the Environmental Easement is removed in accordance with ECL Article 71, Title 36. All reports associated with the site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Jade Environmental, Inc., on behalf of Ossining Rx Development, LLC, the end user, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010 and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the site.

### 1.1.2 Purpose

The site contains residual contamination left behind after completion of the remedial action. Engineering Controls have been incorporated into the site remedy to control exposure to residual contamination during site use and ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Westchester County Clerk, will require compliance with this SMP and all ECs and ICs placed on the site. The ICs place restrictions on site use, and mandate operation, maintenance, monitoring and reporting for all ECs and ICs.

This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage residual contamination at the site after completion of the Remedial Action, including:

- (1) implementation and management of all Engineering and Institutional Controls;
- (2) media monitoring;
- (3) O&M of all treatment, collection, containment, or recovery systems;
- (4) Periodic inspections, certifications, and Periodic Review Reports; and
- (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes three plans:

- (1) an Engineering and Institutional Control Plan;
- (2) a Monitoring Plan; and
- (3) an Operation and Maintenance Plan.

This SMP also includes a description of Periodic Review Reports detailing the periodic filing of inspection results, recommendations, and certifications required by the NYSDEC.

**It is important to note that:**

- **This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement**

**the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC); and**

- **Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA Site # C360110 for the site, and thereby subject to applicable penalties.**

### **1.1.3 Revisions**

Revisions to this plan must be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the approved SMP.

## **1.2 SITE BACKGROUND**

### **1.2.1 Site Location and Description**

The Site is located in the Village Of Ossining, County of Westchester County, New York and is identified as Section 89.16 Block 7 and Lot 1 by the Village of Ossining Tax Assessor. The Site is approximately 1-acre and bounded by Croton Avenue to the west, Clinton Avenue to the south, mixed commercial and residential development to the north and single family dwellings to the east (see Figure 1). The boundaries of the site are more fully described in Appendix A – Metes and Bounds.

### **1.2.2 Site History**

Historical data indicates the site was developed with two (2) two-story single family dwellings fronting Clinton and Croton Avenues built in the 1800s. Historical data indicates both dwellings may have also been used for light commercial purposes including a bakery and a fishing reel retailer. The two dwellings were purchased, the lots combined and the dwellings razed in about 1954. By 1956 a single story block commercial structure occupied by a grocery store "Gristedes" was constructed in the northeast corner of the property, which comprised the two (2) northern most units of the former shopping center (razed March 2011). The remainder of the property was asphalt paved and used for patron parking.

In 1961 an addition was appended to the southern side of the building, more than doubling the size of the building to a total of approximately 10,000 SF. The building and property as a whole had not changed since the addition in 1961 (50 years).

The southernmost unit of the addition was tenanted by a laundry mat which included a Westinghouse Coin-Operating Dry Cleaning facility containing 10 solvent washers in the northwest corner of the tenant space. Records indicate the laundry mat opened their doors in January 1961 and continued in operation until approximately 1975. Specific data was unavailable to confirm or deny whether dry cleaning was conducted during the entire existence of the laundry mat. In 1975, the laundry facility was converted into a pharmacy and a cheese shop. The pharmacy later expanded into the cheese shop space and was in operation during the initial investigations of the Site which began in 2008. As part of this Brownfield project the commercial building was razed in March 2011.

### **1.2.3 Geologic Conditions**

Based on inspection, surficial deposits across the Site consist of glacial till, and fill material which appears to have originated as glacial till, likely from a nearby - possibly on-site - source. Typical till consists of varying components of clay, silt and sand with gravel. Based on soil inspection, it appears that some of the Site has been filled with up to as much as 14 feet of soil.

At boring WP-2, a suspected remnant wetland formation was identified at 14 feet below surface grade (bsg), in the form of a meadow mat. Beneath the meadow mat is typical decomposing organic materials above an aquitard of dense gray mottled silt and clay.

State geology maps provided by the New York State Department of Education indicates that Ossining is located at the northern end of a bedrock formation referred to as the Manhattan Prong and comprised primarily of highly glaciated schist, gneiss and marble. At the southeast corner of the site, bedrock is at grade and rises to almost roof grade behind the south exterior wall near the sidewalk along Clinton Avenue. Borings in the alley behind the southeast corner of the building identified bedrock approximately 3 feet below grade. Borings SB-21 and SB-22, located approximately 15' north of the south exterior wall inside the building, encountered rock at 4-6' bsg. Borings SB-4, 5 and 6 located approximately 20' north of the south exterior wall in the parking lot in front of the pharmacy, encountered bedrock between 7-12' bsg. At WP-11, centrally located between the north and south property lines, the boring was terminated at over 30' bsg, indicating that the bedrock dips significantly to the north, possibly vertically in areas.

Groundwater is 10' below surface grade ("bsg") at the up gradient southeast corner of the property and dips approximately 13' bsg near the down gradient northwest corner of the Site. Please refer to the Groundwater Contour Map provided as Appendix B for a

depiction of the potentiometric surface of the upper aquifer. As can be seen on the map, groundwater beneath the site generally flows in a northwesterly direction.

### **1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS**

A Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The results of the RI are described in detail in the Remedial Investigation / Feasibility Study (RI/FS) dated approved on October 25, 2010.

Generally, the RI/FS determined that a source of Tetrachloroethene ("TCE"). TCE was present in soil beneath the former coin operated machines in the northwest corner of the southern most retail unit. Historical records indicated that the dry cleaner had an underground spill overflow tank that would collect any inadvertently spilled TCE from the business's day to day operations. This information was confirmed during the site's investigation activities. Soil samples collected from the vicinity of the overflow tank indicate that discharges occurred from its plumbing, possibly a loose elbow. Over the dry cleaner's years of operations, a "source" of TCE resulted in the shallow soil beneath the former dry cleaning equipment as a result of these discharges.

#### Site-Related Groundwater

Because the release was beneath the building floor slab and protected from the effects of stormwater percolation, the investigation did confirm gravity accelerated dispersion resulted in TCE reaching the saturated zone 10' below grade. The groundwater carried the dissolved TCE along its natural flow pattern in a northwesterly direction beneath the front of the former shopping center building and then beneath the parking lot. Testing revealed little if any TCE had been carried off-site with groundwater.

#### Site-Related Soil Vapor Intrusion

TCEAs required by DER-10, Jade gained access into the north adjacent residence and collected two soil gas samples as well as a basement indoor air sample. The purpose of the sampling was to ascertain whether soil vapor intrusion was impacting or had the potential to impact the off-site property. The results of the soil gas/indoor air quality survey were inconclusive. The Department plans to complete additional soil vapor intrusion sampling in the future. The RI/FS and maps and survey's therewith provide in-depth detail into the nature and extent of the TCE contamination in both soil and groundwater beneath the Site. The investigation also confirms no other regulated contaminants exist in site soil/groundwater except a small area of SVOCs in soil beneath the parking lot attributed to ash observed in the subsurface during sampling in this area. The presence of the low levels of SVOCs was attributed to the site's historical fill and it

was determined that a site cover system would address this concern. Other than some limited delineation efforts, no additional contaminant investigation was conducted.

## **1.4 SUMMARY OF REMEDIAL ACTIONS**

The site was remediated in accordance with the NYSDEC-approved February 2011 Decision Document.

The following is a summary of the Remedial Actions performed at the site:

1. Excavation and removal of the storage tank and plumbing system and proper disposal of the residual TCE remaining in the storage tank. It was during this removal this system that the loose piping was identified and the heaviest soil contamination identified beneath the loose elbow, the expected discharge point.
2. Installation of a groundwater dewatering / treatment system to drop the water table from 10' below grade to 15' below grade so that excavation could proceed below the static water table.
3. Excavation of soil/fill beneath the discharge point contaminated above unrestricted SCOs listed in 6 Part 375 -6.8(b) Table 11.1 (protection of groundwater), to a depth of 13+ feet below the first floor elevation of the former retail building.
4. Backfilling of the saturated zone and lower vadose zone with highly permeable crushed stone to promote aeration and effectuated rapid distribution of Hydrogen reducing compound throughout the excavation.
5. Application of hydrogen releasing compound (HRC) in order to encourage indigenous anaerobic bacteria growth and the subsequent dechlorination of residual contaminants during the natural metabolism of the bacteria.
6. Installation of a permeable vapor barrier to minimize communication between potentially contaminated below grade and above grade atmospheres.
7. Installation of a sub-slab depressurization system to create a negative pressure differential between below grade and above grade atmospheres so should a migration of gases occur that migration would be from interior room space (higher pressure) to the sub



slab (low pressure), further protecting the interior breathing zone from potential harmful sub-slab vapor intrusion;

8. Construction and maintenance of a cover system comprised of concrete and / or a 12” layer of certified clean fill (i.e. top soil) to prevent future human exposure to any residual contaminated soil/fill remaining at the site;

9. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.

10. Development and implementation of this Site Management Plan for long term management of residual contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;

Active remedial work was conducted between May 15 and July 15, 2011. Installation of vapor barrier, sub-slab depressurization and cover control system were completed during the building construction between July 15 and October 15, 2011 .

#### **1.4.1 Removal of Contaminated Media from the Site**

As part of the remedial efforts, after the building was removed, a total of 1150 tons of non-hazardous TCE contaminated soil and 112 tons of contaminated soil that characterized as hazardous due to contaminant concentration/leachability was excavated from beneath the discharge point and appropriately disposed off-site. The contaminated soil was excavated to a minimum depth of 12 feet below grade. The PCE source area was predominantly removed and its break down components (e.g. TCE, xDCE and VC) that remain at the site will be significantly reduced as a result of the PCE mitigation efforts.

A list of the soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use for this site is provided in Table 1 below.

Table 1- Applicable SCOs

| Constituent              | Unrestricted Use<br>Soil Clean-up Objective (ppb) |
|--------------------------|---|
| 1,2-Dichloroethane       | 20  |
| cis-1,2-Dichloroethene   | 250   |
| trans-1,2-Dichloroethene | 190   |
| Tetrachloroethene        | 1,300   |
| Trichloroethene          | 470   |
| Vinyl chloride           | 20  |

A figure showing areas where excavation was performed is shown in maps provided in Appendix B.

#### **1.4.2 Site-Related Treatment Systems**

Other than application of HRC and monitoring thereof in addition to on-going monitoring of the residual contaminant plume in groundwater, no long-term treatment systems were installed as part of the site remedy.

#### **1.4.3 Remaining Contamination**

Table 2 summarizes the analytical results from the post excavation soil sampling. After completion of the Remedial Action activities, very limited soil contamination remains at the site that exceeds the Track 1 (unrestricted) SCOs. This contamination was not feasibly removed during excavation.

Table 2- Post Excavation End-point Soil Sample Analysis Results

| End-Point<br>Sample Id | Contaminant SCO<br>ppb) |           |      |         |
|------------------------|-------------------------|-----------|------|---------|
|                        | TCE (1,300)             | TCE (470) | DCE  | VC (20) |
| North Wall             | 5,700 (1,300)           | <5.7      | <5.7 | <5.7    |
| South Wall             | <5.5                    | <5.5      | <5.5 | <5.5    |
| East Wall              | 4,000 (1,800)           | <5.6      | <5.6 | <5.6    |
| West Wall              | 420                     | <150      | <150 | <150    |
| North Bottom           | 9,800 (42)              | <280      | <280 | <280    |
| South Bottom           | 11                      | <5.9      | <5.9 | <5.9    |

Notes:

1. All concentrations reported in parts per billion (ppb )
2. Concentrations in parenthesis include results from resampling after additional excavation/stockpiling was deemed required based on end-point sampling results exceeding applicable SCOs.
3. No third sampling of the east wall was conducted after obtaining the 1800 ppb result as additional excavation extended to the basement wall of the building, so additional sampling was not possible.

## **2.0 ENGINEERING / INSTITUTIONAL CONTROL PLAN**

### **2.1 INTRODUCTION**

#### **2.1.1 General**

Since low levels of TCE as well as its breakdown components remain beneath the site, Engineering and Institutional Controls (EC/ICs) are required to ensure protection of human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all approved EC/ICs at the site. The EC/IC Plan is one component of this SMP. The NYSDEC reserves the right to revise EC/ICs as needed any time during its implementation.

#### **2.1.2 Purpose**

This plan provides:

- A description of all EC/ICs on the site;
- The basic implementation and intended role of each EC/IC;
- A description of the ICs set forth in the Environmental Easement;
- A description of the components required of each periodic inspection and essential components of the periodic inspection reports;
- A description of plans and procedures to be followed in the event a deviation of the EC/ICs was required, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination that may be disturbed during maintenance or redevelopment work on the site that required breach of the cover system and contact with soil potentially contaminated with residual:

## **2.2 ENGINEERING CONTROLS**

### **2.2.1 Engineering Control Systems**

#### 2.2.1.1 Soil Cover

Exposure to soil/fill at the site will be limited by a soil or concrete cover system placed over the site. This cover system is comprised of a minimum of 12 inches of clean soil or 4+ inch thick layer of asphalt pavement or concrete (i.e. sidewalks, building slabs, asphalt parking areas). In the event the cover system is required to be breached, penetrated or temporarily removed, and any underlying soil disturbed, a work plan will have to be first approved by the site engineer and/or the NYSDEC. The site engineer will be required to inspect, maintain and certify competence of the cover system annually as required by this SMP.

#### 2.2.1.2 Vapor Barrier

To minimize the communication of gases between interior and subslab atmospheres, a vapor barrier will be installed comprised of a layer of 6 mil polyethylene sheeting. The sheeting will be oriented in a manner that minimizes the number of pieces of sheeting required to cover the entire footprint of the building. Where two separate pieces are required, the two sheets will overlap by a minimum of 2' and be adhered to each other using two continuous ¼" beads of 100% silicone. At exterior walls/foundations, the sheeting will drop a minimum 6" down the wall of the building and be adhered to the wall again using continuous beads of silicone. The concrete slab will be installed immediately after installation of the vapor barrier to minimize worker contact and ensure its integrity.

#### 2.2.1.3 Sub-slab Depressurization Systems

Procedures for monitoring the sub-slab depressurization system are included in the Monitoring Plan (Section 3 of this SMP). The sub-slab depressurization system will include the installation of a highly permeable sub-slab layer of ¾" crushed stone with a minimum thickness of 6" fitted with perforated PVC pipe fully imbedded in the stone and stubbed out behind the building so that no perforations of the floor slab are required. Once the building is erected, a sub-slab depressurization will be completed by connecting the piping stubs to a radon extraction / in-line fan system, which will be fixed to the rear

wall of the building and vent above the roof line. The crushed stone will be covered with an impermeable membrane sealed at the edges with a double bead of 100 % silicone.

### **2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems**

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial goals identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

#### **2.2.2.1 Composite Cover System**

The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals.

#### **2.2.2.2 Vapor Barrier**

The vapor barrier is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals.

#### **2.2.2.3 Sub-slab Depressurization System (SSDS)**

The active SSD system will not be discontinued unless prior written approval is granted by the NYSDEC. In the event that monitoring data indicates that the SSD system is no longer required, a proposal to discontinue the SSD system will be submitted by the property owner to the NYSDEC and NYSDOH.

#### **2.2.2.4 Groundwater Monitoring**

Groundwater monitoring activities to assess natural attenuation will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be below NYSDEC standards. Monitoring will continue until permission to discontinue is granted in writing by the NYSDEC.

## **2.3 INSTITUTIONAL CONTROLS**

A series of Institutional Controls is required by the SMP to:

(1) detail the implementation, maintenance and monitoring Engineering Control systems;

(2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface; and,

(3) limit the use and development of the site to non-residential uses only.

Adherence to these Institutional Controls on the site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls require:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls be operated/maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property be inspected at a frequency and in a manner defined in the SMP.
- Groundwater monitoring as defined in this SMP;
- Data and information pertinent to Site Management of the Controlled Property be reported at the frequency and in a manner defined in this SMP;

Institutional Controls identified in the Environmental Easement may not be discontinued without an amendment to or termination of the Environmental Easement.

The Site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for commercial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as restricted residential use without amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining soil must be conducted in accordance with the excavation work plan contained in this;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;

- The potential for vapor intrusion must be evaluated for any future buildings and any potential impacts that are identified must be monitored or mitigated;
- Vegetable gardens and farming on the property are prohibited;
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

### **2.3.1 Excavation Work Plan**

The site has been remediated for restricted use. Any future intrusive work that will penetrate the soil cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system will be performed in compliance with an Excavation Work Plan (EWP) prepared for each such event and approved by the NYSDEC. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the site. A sample HASP is attached as Appendix C to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. Based on future changes to State and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (See Section 5).

The site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of excavation de-water, control of runoff from open excavations into remaining



contamination, and for structures that may be affected by excavations (such as building foundations and bridge footings). The site owner will ensure that site development activities will not interfere with, or otherwise impair or compromise, the engineering controls described in this SMP.

### **2.3.2 Soil Vapor Intrusion Evaluation**

Prior to the construction of any enclosed structures on the site in the future, an SVI evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH “Guidance for Evaluating Vapor Intrusion in the State of New York”. Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure.

Preliminary (unvalidated) SVI sampling data will be forwarded to the NYSDEC and NYSDOH for initial review and interpretation. Upon validation, the final data will be transmitted to the agencies, along with a recommendation for follow-up action, such as mitigation. Validated SVI data will be transmitted to the property owner within 30 days of validation.

SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

## **2.4 INSPECTIONS AND NOTIFICATIONS**

### **2.4.1 Inspections**

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- Sampling and analysis of appropriate media during monitoring events;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system;

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

### **2.4.2 Notifications**

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Brownfield Cleanup Agreement (BCA), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.

- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

Any change in the ownership of the site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the Brownfield Cleanup Agreement (BCA), and all approved work plans and reports, including this SMP
- Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

## **2.5 CONTINGENCY PLAN**

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

### **2.5.1 Emergency Telephone Numbers**

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner or Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to qualified environmental professional. These emergency contact lists must be maintained in an easily accessible location at the site.

**Table 3: Emergency Contact Numbers**

|  |                |
|--|----------------|
| Medical, Fire, and Police:               | 911            |
| One Call Center:                         | (800) 272-4480 |
| Poison Control Center:                   | (800) 222-1222 |
| Pollution Toxic Chemical Oil Spills:     | (800) 424-8802 |
| NYSDEC Spills Hotline                    | (800) 457-7362 |
| Owner - DLC Mgmt Corp                    | 914-631-3131   |
| Site Engineer – Jade Environmental, Inc. | (845) 897-2188 |

\* Note: Contact numbers subject to change and should be updated as necessary

### **2.5.2 Map and Directions to Nearest Health Facility**

Site Location: Ambulance –southwest across Clinton Avenue

Nearest Hospital Name: Phelps Memorial Hospital

Hospital Location: 701 N Broadway (S.R. 9) Sleepy Hollow, New York 10591

Hospital Telephone: (914) 366 -3000 or 911

Directions to the Hospital: South on Croton Avenue 300 yds. to Route 9. Left (south) onto Route 9 – continue 4 miles to hospital on right.

Total Distance: 4.2 miles

Total Estimated Time: 10-11 minutes

### **2.5.3 Response Procedures**

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Plan. The list will also be posted prominently at the site and made readily available to all personnel at all times.

## **3.0 SITE MONITORING PLAN**

### **3.1 INTRODUCTION**

#### **3.1.1 General**

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cover system, and all affected site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

#### **3.1.2 Purpose and Schedule**

This Monitoring Plan describes the methods to be used for:

- Sampling and analysis of appropriate media (e.g., groundwater, air, vapor, soils);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance, particularly ambient groundwater standards and Part 375 SCO's for soil;
- Assessing achievement of the remedial performance criteria.
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Sampling locations, protocol, and frequency;
- Information on all designed monitoring systems (e.g., well logs);
- Analytical sampling program requirements;
- Reporting requirements;
- Quality Assurance/Quality Control (QA/QC) requirements;
- Inspection and maintenance requirements for monitoring wells;
- Monitoring well decommissioning procedures; and
- Annual inspection and periodic certification.

Quarterly monitoring of the performance of the remedy and overall reduction in contamination on-site and will be conducted for the first three years. The frequency thereafter will be determined by NYSDEC. Trends in contaminant levels in air, soil, and/or groundwater in the affected areas, will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. Monitoring programs are summarized in Table 3.1 and outlined in detail in Sections 3.2 and 3.3 below.

**Table 3.1: Monitoring/Inspection Schedule**

| <b>Monitoring Program</b> | <b>Frequency*</b> | <b>Matrix</b> | <b>Analysis</b> |
|---------------------------|-------------------|---------------|-----------------|
| Soil Cover                | Quarterly         | Soil          | Inspection      |
| Vapor Barrier             | Quarterly         | Air / Vapor   | Inspection      |
| Subslab Depressurization  | Quarterly         | Air / vapor   | Inspection      |
| Groundwater               | Quarterly         | Groundwater   | VOCs            |

\* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

### **3.2 SOIL COVER SYSTEM MONITORING**

At predetermined intervals the Site will be inspected for any existing and/or evidence of past disturbances of the soil cover and or concrete surface. Any naturally occurring disturbances that breach the cover will be repaired and certified by the Site Engineer.

### **3.3 MEDIA MONITORING PROGRAM**

#### **3.3.1 Groundwater Monitoring**

Groundwater monitoring will be performed on quarterly basis for a period of three years to assess the performance of the remedy. After that term, the monitoring period may be adjusted as approved by the NYSDEC.

The network of monitoring wells has been installed to monitor both up-gradient and down-gradient groundwater conditions at the site. The network of on-site wells has been designed based on the following criteria:

- Groundwater is between 10-13 feet below grade;
- The plume is between 0.5 and 0.75 acres in size;
- Groundwater flow is in a northwest direction;
- The heart of the plume is somewhat east of center on the Site;
- The wells penetrate the saturated zone adequately to penetrate lens that may contain elevated concentrations of organics;

Deliverables for the groundwater monitoring program are specified below. Additional HRC injections will be considered if future groundwater monitoring activities show that contamination persists above the target cleanup objectives.

### **3.3.2 Groundwater Discharge Monitoring**

Groundwater being pumped from beneath the new structure and discharged to the existing storm water control system have been tested and found to be well below state stormwater effluent limitations of 25 ppb. Sampling to date has not measured discharge concentrations above 1.8 ppb. To insure groundwater discharge does not violate state applicable stormwater effluent limitations, Jade proposes sampling of the primary receiving and secondary stormwater catch basins as part of the groundwater monitoring for this. Jade proposed sampling directly from both the primary and secondary basins via dedicated bailer or approved other and analysis in accordance with proposed sample mgmt plans. Samples will be analyzed for halogenated solvents via EPA analytical method 8010 or approved alternative analysis that meets or exceeds method detection limits required by the NYSDEC.

Should groundwater discharge monitoring indicate exceedences or potential exceedences of the stormwater effluent limitations (e.g >20 ppb PCE). Groundwater treatment will be immediately initiated in the form of air stripping and/or carbon filtration.

#### **3.3.2.1 Sampling Protocol**

All monitoring well sampling activities will be recorded in a field log, provided in the final report. Other observations (e.g., well integrity, etc.) will be noted on the well sampling log. The well sampling log will serve as the inspection form for the groundwater monitoring report and also include:



- Well gauging;
- Well purging;
- Sampling methodology;
- Analytical methodology:
  - Lab certification;
  - Analytical methods;
  - Analytes.

### **3.3.2.2 Monitoring Well Repairs, Replacement and Decommissioning**

If biofouling or silt accumulation occurs in monitoring wells, the wells will be physically agitated/surged and redeveloped. Additionally, monitoring wells will be properly decommissioned and replaced (as per the Monitoring Plan), if an event renders the wells unusable.

Repairs and/or replacement of wells in the monitoring well network will be performed based on assessments of structural integrity and overall performance.

The NYSDEC will be notified prior to any repair or decommissioning of monitoring wells for the purpose of replacement, and the repair or decommissioning and replacement process will be documented in the subsequent periodic report. Well decommissioning without replacement will be done only with the prior approval of NYSDEC. Well abandonment will be performed in accordance with NYSDEC's "Groundwater Monitoring Well Decommissioning Procedures." Monitoring wells that are decommissioned because they have been rendered unusable will be reinstalled in the nearest available location, unless otherwise approved by the NYSDEC.

## **3.4 SITE-WIDE INSPECTION**

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect Engineering Controls. During these inspections, an inspection

form will be completed and filed with the required report. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and
- Confirm that site records are up to date.

### **3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL**

All sampling and analyses will be performed in accordance with the requirements of the Quality Assurance Project Plan (QAPP) prepared for the site. Main Components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
  - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
  - Sample holding times will be in accordance with the NYSDEC ASP requirements.
  - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:

- All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
- The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

### **3.6 MONITORING REPORTING REQUIREMENTS**

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site and/or the Site Engineers office. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A letter report will also be prepared, subsequent to each sampling event. The report will include, at a minimum:

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc.);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;

- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether groundwater conditions have changed since the last reporting event.

Data will be reported in hard copy or digital format as determined by NYSDEC.

## **4.0 OPERATION AND MAINTENANCE PLAN**

### **4.1 INTRODUCTION**

This Operation and Maintenance Plan describes the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the steps necessary to allow individuals unfamiliar with the site to operate and maintain the systems;
- Includes an operation and maintenance contingency plan; and,
- Will be updated periodically to reflect changes in site conditions or the manner in which the systems are operated and maintained.

Information on non-mechanical Engineering Controls (i.e. soil cover system) is provided in Section 3 - Engineering and Institutional Control Plan. A copy of this Operation and Maintenance Plan, along with the complete SMP, will be kept at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of the SMP.

## **5.0 Inspections, reporting and certifications**

### **5.1 SITE INSPECTIONS**

#### **5.1.1 Inspection Frequency**

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

#### **5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports**

All inspections and monitoring events will be recorded on the appropriate forms for their respective system which are contained in the Appendices. Additionally, a general site-wide inspection form will be completed during the site-wide inspection. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

#### **5.1.3 Evaluation of Records and Reporting**

The results of the inspection and site monitoring data will be evaluated as part of the EC/IC certification to confirm that the:

- EC/ICs are in place, are performing properly, and remain effective;
- The Monitoring Plan is being implemented;
- Operation and maintenance activities are being conducted properly; and, based on the above items,
- The site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

## **5.2 CERTIFICATION OF ENGINEERING / INSTITUTIONAL CONTROLS**

After the last inspection of the reporting period, a Professional Engineer licensed to practice in New York State will prepare the following certification:

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program and generally accepted engineering practices; and
- The information presented in this report is accurate and complete.
- 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, [name], of [business address], am certifying as Owner’s Designated Site Representative: I

have been authorized and designated by all site owners to sign this certification for the site.

- The signed certification will be included in the Periodic Review Report described below. For each institutional control identified for the site, I certify that all of the following statements are true:
- The institutional control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental easement.
- The information presented in this report is accurate and complete.
- 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, [name], of [business address], am certifying as Owner’s Designated Site Representative I have been authorized and designated by all site owners to sign this certification.
- No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid; and
- Every five years the following certification will be added:
- The assumptions made in the qualitative exposure assessment remain valid.
- The signed certification will be included in the Periodic Review Report below.

### **5.3 PERIODIC REVIEW REPORT**

A Periodic Review Report will be submitted to the Department every year, beginning eighteen months after the Certificate of Completion is issued. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in Appendix B (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site;
- Results of the required annual site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format;
- A summary of any discharge monitoring data and/or information generated during the reporting period with comments and conclusions;
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific RAWP or Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;



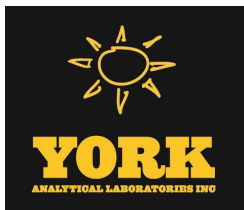
- Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
- Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
- The overall performance and effectiveness of the remedy.

#### **5.4 CORRECTIVE MEASURES PLAN**

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

## **APPENDIX D**

### **GROUNDWATER ANALYSIS REPORT**



# Technical Report

prepared for:

**Jade Environmental, Inc.**  
59 Circle Drive  
Hopewell Junction NY, 12533  
**Attention: Mr. Dave Pelletier**

Report Date: 07/31/2013  
**Client Project ID: Ossining 6/13**  
York Project (SDG) No.: 13G0903

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 07/31/2013  
Client Project ID: Ossining 6/13  
York Project (SDG) No.: 13G0903

**Jade Environmental, Inc.**  
59 Circle Drive  
Hopewell Junction NY, 12533  
Attention: Mr. Dave Pelletier

---

## 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 24, 2013 and listed below. The project was identified as your project: **Ossining 6/13**.

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> |
|-----------------------|-------------------------|---------------|-----------------------|----------------------|
| 13G0903-01            | MW-1                    | Water         | 07/24/2013            | 07/24/2013           |
| 13G0903-02            | MW-2                    | Water         | 07/24/2013            | 07/24/2013           |
| 13G0903-03            | MW-3                    | Water         | 07/24/2013            | 07/24/2013           |
| 13G0903-04            | MW-4                    | Water         | 07/24/2013            | 07/24/2013           |
| 13G0903-05            | MW-5                    | Water         | 07/24/2013            | 07/24/2013           |
| 13G0903-06            | DRAIN                   | Water         | 07/24/2013            | 07/24/2013           |

## **General Notes for York Project (SDG) No.: 13G0903**

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:** 07/31/2013

**YORK**



## Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13G0903-01

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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  | 0.32 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 71-55-6  | 1,1,1-Trichloroethane       | ND     |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 79-34-5  | 1,1,2,2-Tetrachloroethane   | ND     |      | ug/L  | 0.59 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 79-00-5  | 1,1,2-Trichloroethane       | ND     |      | ug/L  | 1.3  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-34-3  | 1,1-Dichloroethane          | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-35-4  | 1,1-Dichloroethylene        | ND     |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 563-58-6 | 1,1-Dichloropropylene       | ND     |      | ug/L  | 0.26 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 87-61-6  | 1,2,3-Trichlorobenzene      | ND     |      | ug/L  | 0.99 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 96-18-4  | 1,2,3-Trichloropropane      | ND     |      | ug/L  | 0.73 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 120-82-1 | 1,2,4-Trichlorobenzene      | ND     |      | ug/L  | 0.91 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 96-12-8  | 1,2-Dibromo-3-chloropropane | ND     |      | ug/L  | 0.98 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 106-93-4 | 1,2-Dibromoethane           | ND     |      | ug/L  | 0.44 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 95-50-1  | 1,2-Dichlorobenzene         | ND     |      | ug/L  | 0.40 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 107-06-2 | 1,2-Dichloroethane          | ND     |      | ug/L  | 0.36 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 78-87-5  | 1,2-Dichloropropane         | ND     |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 541-73-1 | 1,3-Dichlorobenzene         | ND     |      | ug/L  | 0.47 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 142-28-9 | 1,3-Dichloropropane         | ND     |      | ug/L  | 0.55 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 106-46-7 | 1,4-Dichlorobenzene         | ND     |      | ug/L  | 0.62 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 594-20-7 | 2,2-Dichloropropane         | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 95-49-8  | 2-Chlorotoluene             | ND     |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 106-43-4 | 4-Chlorotoluene             | ND     |      | ug/L  | 0.31 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 108-86-1 | Bromobenzene                | ND     |      | ug/L  | 1.0  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 74-97-5  | Bromochloromethane          | ND     |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-27-4  | Bromodichloromethane        | ND     |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-25-2  | Bromoform                   | ND     |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 74-83-9  | Bromomethane                | ND     |      | ug/L  | 2.0  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 56-23-5  | Carbon tetrachloride        | ND     |      | ug/L  | 0.56 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 108-90-7 | Chlorobenzene               | ND     |      | ug/L  | 0.38 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-00-3  | Chloroethane                | ND     |      | ug/L  | 2.8  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 67-66-3  | Chloroform                  | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 74-87-3  | Chloromethane               | ND     |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 156-59-2 | cis-1,2-Dichloroethylene    | ND     |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |



### Sample Information

**Client Sample ID:** MW-1

**York Sample ID:** 13G0903-01

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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 |
|------------|-----------------------------|------------|------|-------|------|-----|----------|------------------|--------------------|--------------------|---------|
| 10061-01-5 | cis-1,3-Dichloropropylene   | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 124-48-1   | Dibromochloromethane        | ND         |      | ug/L  | 0.39 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 74-95-3    | Dibromomethane              | ND         |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-71-8    | Dichlorodifluoromethane     | ND         |      | ug/L  | 0.35 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 87-68-3    | Hexachlorobutadiene         | ND         |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-09-2    | Methylene chloride          | ND         |      | ug/L  | 2.4  | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 91-20-3    | Naphthalene                 | ND         |      | ug/L  | 1.2  | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 103-65-1   | n-Propylbenzene             | ND         |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 100-42-5   | Styrene                     | ND         |      | ug/L  | 0.22 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 127-18-4   | <b>Tetrachloroethylene</b>  | <b>1.5</b> | J    | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 108-88-3   | Toluene                     | ND         |      | ug/L  | 0.17 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 156-60-5   | trans-1,2-Dichloroethylene  | ND         |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND         |      | ug/L  | 0.67 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 79-01-6    | Trichloroethylene           | ND         |      | ug/L  | 0.16 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-69-4    | Trichlorofluoromethane      | ND         |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |
| 75-01-4    | Vinyl Chloride              | ND         |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 03:02   | SS      |

### Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 13G0903-02

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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  | 1.6 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 71-55-6  | 1,1,1-Trichloroethane     | ND     |      | ug/L  | 1.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |      | ug/L  | 2.9 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 79-00-5  | 1,1,2-Trichloroethane     | ND     |      | ug/L  | 6.4 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-34-3  | 1,1-Dichloroethane        | ND     |      | ug/L  | 2.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-35-4  | 1,1-Dichloroethylene      | ND     |      | ug/L  | 2.6 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 563-58-6 | 1,1-Dichloropropylene     | ND     |      | ug/L  | 1.3 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 87-61-6  | 1,2,3-Trichlorobenzene    | ND     |      | ug/L  | 4.9 | 50 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |



## Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 13G0903-02

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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 |
|------------|---------------------------------|------------|------|-------|-----|----|----------|------------------|--------------------|--------------------|---------|
| 96-18-4    | 1,2,3-Trichloropropane          | ND         |      | ug/L  | 3.7 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 120-82-1   | 1,2,4-Trichlorobenzene          | ND         |      | ug/L  | 4.6 | 50 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 96-12-8    | 1,2-Dibromo-3-chloropropane     | ND         |      | ug/L  | 4.9 | 50 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 106-93-4   | 1,2-Dibromoethane               | ND         |      | ug/L  | 2.2 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 95-50-1    | 1,2-Dichlorobenzene             | ND         |      | ug/L  | 2.0 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 107-06-2   | 1,2-Dichloroethane              | ND         |      | ug/L  | 1.8 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 78-87-5    | 1,2-Dichloropropane             | ND         |      | ug/L  | 1.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 541-73-1   | 1,3-Dichlorobenzene             | ND         |      | ug/L  | 2.4 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 142-28-9   | 1,3-Dichloropropane             | ND         |      | ug/L  | 2.8 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 106-46-7   | 1,4-Dichlorobenzene             | ND         |      | ug/L  | 3.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 594-20-7   | 2,2-Dichloropropane             | ND         |      | ug/L  | 2.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 95-49-8    | 2-Chlorotoluene                 | ND         |      | ug/L  | 2.2 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 106-43-4   | 4-Chlorotoluene                 | ND         |      | ug/L  | 1.5 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 108-86-1   | Bromobenzene                    | ND         |      | ug/L  | 5.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 74-97-5    | Bromochloromethane              | ND         |      | ug/L  | 2.7 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-27-4    | Bromodichloromethane            | ND         |      | ug/L  | 2.0 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-25-2    | Bromoform                       | ND         |      | ug/L  | 2.9 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 74-83-9    | Bromomethane                    | ND         |      | ug/L  | 9.8 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 56-23-5    | Carbon tetrachloride            | ND         |      | ug/L  | 2.8 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 108-90-7   | Chlorobenzene                   | ND         |      | ug/L  | 1.9 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-00-3    | Chloroethane                    | ND         |      | ug/L  | 14  | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 67-66-3    | Chloroform                      | ND         |      | ug/L  | 2.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 74-87-3    | Chloromethane                   | ND         |      | ug/L  | 2.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 156-59-2   | <b>cis-1,2-Dichloroethylene</b> | <b>350</b> |      | ug/L  | 2.2 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 10061-01-5 | cis-1,3-Dichloropropylene       | ND         |      | ug/L  | 2.0 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 124-48-1   | Dibromochloromethane            | ND         |      | ug/L  | 2.0 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 74-95-3    | Dibromomethane                  | ND         |      | ug/L  | 2.9 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-71-8    | Dichlorodifluoromethane         | ND         |      | ug/L  | 1.8 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 87-68-3    | Hexachlorobutadiene             | ND         |      | ug/L  | 3.4 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-09-2    | Methylene chloride              | ND         |      | ug/L  | 12  | 50 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 91-20-3    | Naphthalene                     | ND         |      | ug/L  | 6.0 | 50 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 103-65-1   | n-Propylbenzene                 | ND         |      | ug/L  | 2.7 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 100-42-5   | Styrene                         | ND         |      | ug/L  | 1.1 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |





### Sample Information

**Client Sample ID:** MW-2

**York Sample ID:** 13G0903-02

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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 |
|------------|-----------------------------|--------|------|-------|------|----|----------|------------------|--------------------|--------------------|---------|
| 127-18-4   | Tetrachloroethylene         | 11     | J    | ug/L  | 2.0  | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 108-88-3   | Toluene                     | ND     |      | ug/L  | 0.84 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 156-60-5   | trans-1,2-Dichloroethylene  | ND     |      | ug/L  | 2.6  | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND     |      | ug/L  | 3.4  | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 79-01-6    | Trichloroethylene           | ND     |      | ug/L  | 0.82 | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-69-4    | Trichlorofluoromethane      | ND     |      | ug/L  | 2.7  | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |
| 75-01-4    | Vinyl Chloride              | ND     |      | ug/L  | 3.4  | 25 | 5        | EPA SW846-8260B  | 07/30/2013 09:06   | 07/30/2013 11:10   | BK      |

### Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13G0903-03

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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  | 0.32 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 71-55-6  | 1,1,1-Trichloroethane       | ND     |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 79-34-5  | 1,1,2,2-Tetrachloroethane   | ND     |      | ug/L  | 0.59 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 79-00-5  | 1,1,2-Trichloroethane       | ND     |      | ug/L  | 1.3  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-34-3  | 1,1-Dichloroethane          | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-35-4  | 1,1-Dichloroethylene        | ND     |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 563-58-6 | 1,1-Dichloropropylene       | ND     |      | ug/L  | 0.26 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 87-61-6  | 1,2,3-Trichlorobenzene      | ND     |      | ug/L  | 0.99 | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 96-18-4  | 1,2,3-Trichloropropane      | ND     |      | ug/L  | 0.73 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 120-82-1 | 1,2,4-Trichlorobenzene      | ND     |      | ug/L  | 0.91 | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 96-12-8  | 1,2-Dibromo-3-chloropropane | ND     |      | ug/L  | 0.98 | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 106-93-4 | 1,2-Dibromoethane           | ND     |      | ug/L  | 0.44 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 95-50-1  | 1,2-Dichlorobenzene         | ND     |      | ug/L  | 0.40 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 107-06-2 | 1,2-Dichloroethane          | ND     |      | ug/L  | 0.36 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 78-87-5  | 1,2-Dichloropropane         | ND     |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 541-73-1 | 1,3-Dichlorobenzene         | ND     |      | ug/L  | 0.47 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 142-28-9 | 1,3-Dichloropropane         | ND     |      | ug/L  | 0.55 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |



## Sample Information

**Client Sample ID:** MW-3

**York Sample ID:** 13G0903-03

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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 |
|------------|---------------------------------|------------|------|-------|------|-----|----------|------------------|--------------------|--------------------|---------|
| 106-46-7   | 1,4-Dichlorobenzene             | ND         |      | ug/L  | 0.62 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 594-20-7   | 2,2-Dichloropropane             | ND         |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 95-49-8    | 2-Chlorotoluene                 | ND         |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 106-43-4   | 4-Chlorotoluene                 | ND         |      | ug/L  | 0.31 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 108-86-1   | Bromobenzene                    | ND         |      | ug/L  | 1.0  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 74-97-5    | Bromochloromethane              | ND         |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-27-4    | Bromodichloromethane            | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-25-2    | Bromoform                       | ND         |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 74-83-9    | Bromomethane                    | ND         |      | ug/L  | 2.0  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 56-23-5    | Carbon tetrachloride            | ND         |      | ug/L  | 0.56 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 108-90-7   | Chlorobenzene                   | ND         |      | ug/L  | 0.38 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-00-3    | Chloroethane                    | ND         |      | ug/L  | 2.8  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 67-66-3    | Chloroform                      | ND         |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 74-87-3    | Chloromethane                   | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 156-59-2   | <b>cis-1,2-Dichloroethylene</b> | <b>1.9</b> | J    | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 10061-01-5 | cis-1,3-Dichloropropylene       | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 124-48-1   | Dibromochloromethane            | ND         |      | ug/L  | 0.39 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 74-95-3    | Dibromomethane                  | ND         |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-71-8    | Dichlorodifluoromethane         | ND         |      | ug/L  | 0.35 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 87-68-3    | Hexachlorobutadiene             | ND         |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-09-2    | Methylene chloride              | ND         |      | ug/L  | 2.4  | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 91-20-3    | Naphthalene                     | ND         |      | ug/L  | 1.2  | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 103-65-1   | n-Propylbenzene                 | ND         |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 100-42-5   | Styrene                         | ND         |      | ug/L  | 0.22 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 127-18-4   | Tetrachloroethylene             | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 108-88-3   | Toluene                         | ND         |      | ug/L  | 0.17 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 156-60-5   | trans-1,2-Dichloroethylene      | ND         |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 10061-02-6 | trans-1,3-Dichloropropylene     | ND         |      | ug/L  | 0.67 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 79-01-6    | Trichloroethylene               | ND         |      | ug/L  | 0.16 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-69-4    | Trichlorofluoromethane          | ND         |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |
| 75-01-4    | Vinyl Chloride                  | ND         |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 11:50   | BK      |



## Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 13G0903-04

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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  | 0.32 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 71-55-6    | 1,1,1-Trichloroethane           | ND          |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 79-34-5    | 1,1,2,2-Tetrachloroethane       | ND          |      | ug/L  | 0.59 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 79-00-5    | 1,1,2-Trichloroethane           | ND          |      | ug/L  | 1.3  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-34-3    | 1,1-Dichloroethane              | ND          |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-35-4    | 1,1-Dichloroethylene            | ND          |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 563-58-6   | 1,1-Dichloropropylene           | ND          |      | ug/L  | 0.26 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 87-61-6    | 1,2,3-Trichlorobenzene          | ND          |      | ug/L  | 0.99 | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 96-18-4    | 1,2,3-Trichloropropane          | ND          |      | ug/L  | 0.73 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 120-82-1   | 1,2,4-Trichlorobenzene          | ND          |      | ug/L  | 0.91 | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 96-12-8    | 1,2-Dibromo-3-chloropropane     | ND          |      | ug/L  | 0.98 | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 106-93-4   | 1,2-Dibromoethane               | ND          |      | ug/L  | 0.44 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 95-50-1    | 1,2-Dichlorobenzene             | ND          |      | ug/L  | 0.40 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 107-06-2   | 1,2-Dichloroethane              | ND          |      | ug/L  | 0.36 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 78-87-5    | 1,2-Dichloropropane             | ND          |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 541-73-1   | 1,3-Dichlorobenzene             | ND          |      | ug/L  | 0.47 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 142-28-9   | 1,3-Dichloropropane             | ND          |      | ug/L  | 0.55 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 106-46-7   | 1,4-Dichlorobenzene             | ND          |      | ug/L  | 0.62 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 594-20-7   | 2,2-Dichloropropane             | ND          |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 95-49-8    | 2-Chlorotoluene                 | ND          |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 106-43-4   | 4-Chlorotoluene                 | ND          |      | ug/L  | 0.31 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 108-86-1   | Bromobenzene                    | ND          |      | ug/L  | 1.0  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 74-97-5    | Bromochloromethane              | ND          |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-27-4    | Bromodichloromethane            | ND          |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-25-2    | Bromoform                       | ND          |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 74-83-9    | Bromomethane                    | ND          |      | ug/L  | 2.0  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 56-23-5    | Carbon tetrachloride            | ND          |      | ug/L  | 0.56 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 108-90-7   | Chlorobenzene                   | ND          |      | ug/L  | 0.38 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-00-3    | Chloroethane                    | ND          |      | ug/L  | 2.8  | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 67-66-3    | Chloroform                      | ND          |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 74-87-3    | Chloromethane                   | ND          |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 156-59-2   | <b>cis-1,2-Dichloroethylene</b> | <b>0.99</b> | J    | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 10061-01-5 | cis-1,3-Dichloropropylene       | ND          |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |



### Sample Information

**Client Sample ID:** MW-4

**York Sample ID:** 13G0903-04

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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 |
|------------|-----------------------------|--------|------|-------|------|-----|----------|------------------|--------------------|--------------------|---------|
| 124-48-1   | Dibromochloromethane        | ND     |      | ug/L  | 0.39 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 74-95-3    | Dibromomethane              | ND     |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-71-8    | Dichlorodifluoromethane     | ND     |      | ug/L  | 0.35 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 87-68-3    | Hexachlorobutadiene         | ND     |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-09-2    | Methylene chloride          | ND     |      | ug/L  | 2.4  | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 91-20-3    | Naphthalene                 | ND     |      | ug/L  | 1.2  | 10  | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 103-65-1   | n-Propylbenzene             | ND     |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 100-42-5   | Styrene                     | ND     |      | ug/L  | 0.22 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 127-18-4   | Tetrachloroethylene         | ND     |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 108-88-3   | Toluene                     | ND     |      | ug/L  | 0.17 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 156-60-5   | trans-1,2-Dichloroethylene  | ND     |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND     |      | ug/L  | 0.67 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 79-01-6    | Trichloroethylene           | ND     |      | ug/L  | 0.16 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-69-4    | Trichlorofluoromethane      | ND     |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |
| 75-01-4    | Vinyl Chloride              | 3.3    | J    | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/30/2013 09:32   | 07/30/2013 12:30   | BK      |

### Sample Information

**Client Sample ID:** MW-5

**York Sample ID:** 13G0903-05

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated 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  | 0.32 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 71-55-6  | 1,1,1-Trichloroethane     | ND     |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |      | ug/L  | 0.59 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 79-00-5  | 1,1,2-Trichloroethane     | ND     |      | ug/L  | 1.3  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-34-3  | 1,1-Dichloroethane        | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-35-4  | 1,1-Dichloroethylene      | ND     |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 563-58-6 | 1,1-Dichloropropylene     | ND     |      | ug/L  | 0.26 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 87-61-6  | 1,2,3-Trichlorobenzene    | ND     |      | ug/L  | 0.99 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 96-18-4  | 1,2,3-Trichloropropane    | ND     |      | ug/L  | 0.73 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |



## Sample Information

**Client Sample ID:** MW-5

**York Sample ID:** 13G0903-05

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

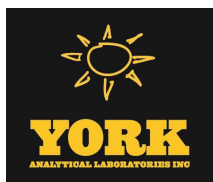
### Volatile Organics, 8021 Halogenated List

### 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 |
|------------|-----------------------------|------------|------|-------|------|-----|----------|------------------|--------------------|--------------------|---------|
| 120-82-1   | 1,2,4-Trichlorobenzene      | ND         |      | ug/L  | 0.91 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 96-12-8    | 1,2-Dibromo-3-chloropropane | ND         |      | ug/L  | 0.98 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 106-93-4   | 1,2-Dibromoethane           | ND         |      | ug/L  | 0.44 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 95-50-1    | 1,2-Dichlorobenzene         | ND         |      | ug/L  | 0.40 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 107-06-2   | 1,2-Dichloroethane          | ND         |      | ug/L  | 0.36 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 78-87-5    | 1,2-Dichloropropane         | ND         |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 541-73-1   | 1,3-Dichlorobenzene         | ND         |      | ug/L  | 0.47 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 142-28-9   | 1,3-Dichloropropane         | ND         |      | ug/L  | 0.55 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 106-46-7   | 1,4-Dichlorobenzene         | ND         |      | ug/L  | 0.62 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 594-20-7   | 2,2-Dichloropropane         | ND         |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 95-49-8    | 2-Chlorotoluene             | ND         |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 106-43-4   | 4-Chlorotoluene             | ND         |      | ug/L  | 0.31 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 108-86-1   | Bromobenzene                | ND         |      | ug/L  | 1.0  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 74-97-5    | Bromochloromethane          | ND         |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-27-4    | Bromodichloromethane        | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-25-2    | Bromoform                   | ND         |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 74-83-9    | Bromomethane                | ND         |      | ug/L  | 2.0  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 56-23-5    | Carbon tetrachloride        | ND         |      | ug/L  | 0.56 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 108-90-7   | Chlorobenzene               | ND         |      | ug/L  | 0.38 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-00-3    | Chloroethane                | ND         |      | ug/L  | 2.8  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 67-66-3    | Chloroform                  | ND         |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 74-87-3    | Chloromethane               | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 156-59-2   | cis-1,2-Dichloroethylene    | ND         |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 10061-01-5 | cis-1,3-Dichloropropylene   | ND         |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 124-48-1   | Dibromochloromethane        | ND         |      | ug/L  | 0.39 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 74-95-3    | Dibromomethane              | ND         |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-71-8    | Dichlorodifluoromethane     | ND         |      | ug/L  | 0.35 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 87-68-3    | Hexachlorobutadiene         | ND         |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-09-2    | Methylene chloride          | ND         |      | ug/L  | 2.4  | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 91-20-3    | Naphthalene                 | ND         |      | ug/L  | 1.2  | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 103-65-1   | n-Propylbenzene             | ND         |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 100-42-5   | Styrene                     | ND         |      | ug/L  | 0.22 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 127-18-4   | <b>Tetrachloroethylene</b>  | <b>1.4</b> | J    | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |



### Sample Information

**Client Sample ID:** MW-5

**York Sample ID:** 13G0903-05

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

#### **Volatile Organics, 8021 Halogenated 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 |
|------------|-----------------------------|--------|------|-------|------|-----|----------|------------------|--------------------|--------------------|---------|
| 108-88-3   | Toluene                     | ND     |      | ug/L  | 0.17 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 156-60-5   | trans-1,2-Dichloroethylene  | ND     |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND     |      | ug/L  | 0.67 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 79-01-6    | Trichloroethylene           | ND     |      | ug/L  | 0.16 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-69-4    | Trichlorofluoromethane      | ND     |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |
| 75-01-4    | Vinyl Chloride              | ND     |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:23   | SS      |

### Sample Information

**Client Sample ID:** DRAIN

**York Sample ID:** 13G0903-06

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

#### **Volatile Organics, 8021 Halogenated 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  | 0.32 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 71-55-6  | 1,1,1-Trichloroethane       | ND     |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 79-34-5  | 1,1,2,2-Tetrachloroethane   | ND     |      | ug/L  | 0.59 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 79-00-5  | 1,1,2-Trichloroethane       | ND     |      | ug/L  | 1.3  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-34-3  | 1,1-Dichloroethane          | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-35-4  | 1,1-Dichloroethylene        | ND     |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 563-58-6 | 1,1-Dichloropropylene       | ND     |      | ug/L  | 0.26 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 87-61-6  | 1,2,3-Trichlorobenzene      | ND     |      | ug/L  | 0.99 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 96-18-4  | 1,2,3-Trichloropropane      | ND     |      | ug/L  | 0.73 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 120-82-1 | 1,2,4-Trichlorobenzene      | ND     |      | ug/L  | 0.91 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 96-12-8  | 1,2-Dibromo-3-chloropropane | ND     |      | ug/L  | 0.98 | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 106-93-4 | 1,2-Dibromoethane           | ND     |      | ug/L  | 0.44 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 95-50-1  | 1,2-Dichlorobenzene         | ND     |      | ug/L  | 0.40 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 107-06-2 | 1,2-Dichloroethane          | ND     |      | ug/L  | 0.36 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 78-87-5  | 1,2-Dichloropropane         | ND     |      | ug/L  | 0.23 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 541-73-1 | 1,3-Dichlorobenzene         | ND     |      | ug/L  | 0.47 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 142-28-9 | 1,3-Dichloropropane         | ND     |      | ug/L  | 0.55 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 106-46-7 | 1,4-Dichlorobenzene         | ND     |      | ug/L  | 0.62 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |



## Sample Information

**Client Sample ID:** DRAIN

**York Sample ID:** 13G0903-06

York Project (SDG) No.

13G0903

Client Project ID

Ossining 6/13

Matrix

Water

Collection Date/Time

July 24, 2013 2:00 pm

Date Received

07/24/2013

### Volatile Organics, 8021 Halogenated List

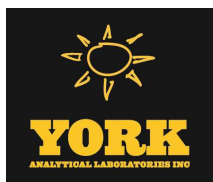
### Log-in Notes:

### 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 |
|------------|-----------------------------|--------|------|-------|------|-----|----------|------------------|--------------------|--------------------|---------|
| 594-20-7   | 2,2-Dichloropropane         | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 95-49-8    | 2-Chlorotoluene             | ND     |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 106-43-4   | 4-Chlorotoluene             | ND     |      | ug/L  | 0.31 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 108-86-1   | Bromobenzene                | ND     |      | ug/L  | 1.0  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 74-97-5    | Bromochloromethane          | ND     |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-27-4    | Bromodichloromethane        | ND     |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-25-2    | Bromoform                   | ND     |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 74-83-9    | Bromomethane                | ND     |      | ug/L  | 2.0  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 56-23-5    | Carbon tetrachloride        | ND     |      | ug/L  | 0.56 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 108-90-7   | Chlorobenzene               | ND     |      | ug/L  | 0.38 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-00-3    | Chloroethane                | ND     |      | ug/L  | 2.8  | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 67-66-3    | Chloroform                  | ND     |      | ug/L  | 0.42 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 74-87-3    | Chloromethane               | ND     |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 156-59-2   | cis-1,2-Dichloroethylene    | ND     |      | ug/L  | 0.43 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 10061-01-5 | cis-1,3-Dichloropropylene   | ND     |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 124-48-1   | Dibromochloromethane        | ND     |      | ug/L  | 0.39 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 74-95-3    | Dibromomethane              | ND     |      | ug/L  | 0.58 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-71-8    | Dichlorodifluoromethane     | ND     |      | ug/L  | 0.35 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 87-68-3    | Hexachlorobutadiene         | ND     |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-09-2    | Methylene chloride          | ND     |      | ug/L  | 2.4  | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 91-20-3    | Naphthalene                 | ND     |      | ug/L  | 1.2  | 10  | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 103-65-1   | n-Propylbenzene             | ND     |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 100-42-5   | Styrene                     | ND     |      | ug/L  | 0.22 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 127-18-4   | Tetrachloroethylene         | ND     |      | ug/L  | 0.41 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 108-88-3   | Toluene                     | ND     |      | ug/L  | 0.17 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 156-60-5   | trans-1,2-Dichloroethylene  | ND     |      | ug/L  | 0.52 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND     |      | ug/L  | 0.67 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 79-01-6    | Trichloroethylene           | ND     |      | ug/L  | 0.16 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-69-4    | Trichlorofluoromethane      | ND     |      | ug/L  | 0.54 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |
| 75-01-4    | Vinyl Chloride              | ND     |      | ug/L  | 0.68 | 5.0 | 1        | EPA SW846-8260B  | 07/29/2013 10:32   | 07/30/2013 05:59   | SS      |





## Volatile Analysis Sample Containers

| Lab ID     | Client Sample ID | Volatile Sample Container                     |
|------------|------------------|---|
| 13G0903-01 | MW-1             | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 13G0903-02 | MW-2             | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 13G0903-03 | MW-3             | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 13G0903-04 | MW-4             | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 13G0903-05 | MW-5             | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 13G0903-06 | DRAIN            | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |

## Notes and Definitions

|           |  |
|-----------|--|
| 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.  |
| 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.





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 1 of 1

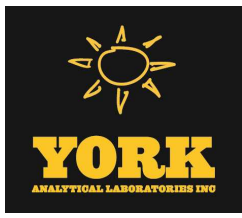
NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 13G0903

| YOUR Information  |                         | Report To:              |                         | Invoice To:             |                         | YOUR Project ID  |                         | Turn-Around Time        |                         | Report Type             |                         |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Company: <u>140E Env.</u>   | Company: <u>SAME</u>    | Company: <u>SAME</u>    | Company: <u>SAME</u>    | Company: <u>SAME</u>    | Company: <u>SAME</u>    | Company: <u>SAME</u>                                       | Company: <u>SAME</u>    | Company: <u>SAME</u>    | Company: <u>SAME</u>    | Company: <u>SAME</u>    | Company: <u>SAME</u>    |
| Address: <u>59 Crock St.</u>  | Address: <u></u>        | Address: <u></u>        | Address: <u></u>        | Address: <u></u>        | Address: <u></u>        | Address: <u></u>   | Address: <u></u>        | Address: <u></u>        | Address: <u></u>        | Address: <u></u>        | Address: <u></u>        |
| Phone No. <u>914 882 6974</u>   | Phone No. <u></u>       | Phone No. <u></u>       | Phone No. <u></u>       | Phone No. <u></u>       | Phone No. <u></u>       | Phone No. <u></u>  | Phone No. <u></u>       | Phone No. <u></u>       | Phone No. <u></u>       | Phone No. <u></u>       | Phone No. <u></u>       |
| Contact Person: <u>DAVE KELLEY</u>  | Contact Person: <u></u> | Contact Person: <u></u> | Contact Person: <u></u> | Contact Person: <u></u> | Contact Person: <u></u> | Contact Person: <u></u>                                    | Contact Person: <u></u> | Contact Person: <u></u> | Contact Person: <u></u> | Contact Person: <u></u> | Contact Person: <u></u> |
| E-Mail Address: <u></u>   | E-Mail Address: <u></u> | E-Mail Address: <u></u> | E-Mail Address: <u></u> | E-Mail Address: <u></u> | E-Mail Address: <u></u> | E-Mail Address: <u></u>                                    | E-Mail Address: <u></u> | E-Mail Address: <u></u> | E-Mail Address: <u></u> | E-Mail Address: <u></u> | E-Mail Address: <u></u> |
| <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> |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| Matrix Codes<br>S - soil<br>Other - specify (oil, etc.)<br>WW - wastewater<br>GW - groundwater<br>DW - drinking water<br>Air-A - ambient air<br>Air-SV - soil vapor                       |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| Samples Collected/Authorized By (Signature)<br><u>DAVE KELLEY</u><br>Name (printed)   |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| Sample Identification   |                         | Date/Time Sampled       |                         | Sample Matrix           |                         | Choose Analyses Needed from the Menu Above and Enter Below |                         |                         |                         |                         |                         |
| <u>MW-1</u>   |                         | <u>7/24/13 2:00 PM</u>  |                         | <u>GW</u>               |                         | <u>CVOC &amp; EPA 8010</u>                                 |                         |                         |                         |                         |                         |
| <u>MW-2</u>   |                         | <u></u>                 |                         | <u></u>                 |                         | <u></u>  |                         |                         |                         |                         |                         |
| <u>MW-3</u>   |                         | <u></u>                 |                         | <u></u>                 |                         | <u></u>  |                         |                         |                         |                         |                         |
| <u>MW-4</u>   |                         | <u></u>                 |                         | <u></u>                 |                         | <u></u>  |                         |                         |                         |                         |                         |
| <u>MW-5</u>   |                         | <u></u>                 |                         | <u></u>                 |                         | <u></u>  |                         |                         |                         |                         |                         |
| <u>MW-6 Drain</u>   |                         | <u></u>                 |                         | <u></u>                 |                         | <u></u>  |                         |                         |                         |                         |                         |
| Comments  |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| Preservation<br>Check those Applicable<br>Special Instructions<br>Field Filtered <input type="checkbox"/><br>Lab to Filter <input type="checkbox"/>                                       |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| 4°C <input checked="" type="checkbox"/> Frozen <input type="checkbox"/> HCl <input type="checkbox"/> MeOH <input type="checkbox"/> Ascorbic Acid <input type="checkbox"/>                 |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> O <sub>2</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> Other <input type="checkbox"/>                             |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| Samples Relinquished By <u>Chieo 7-24-13 9:15</u> Date/Time <u>7/24/13 16:20</u>  |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| Samples Received in LAB by <u>Chieo 7-24-13 9:15</u> Date/Time <u>7/24/13 16:20</u>   |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |
| Temperature on Receipt <u>4.6 °C</u>  |                         |                         |                         |                         |                         |  |                         |                         |                         |                         |                         |

# **APPENDIX E**

## **SOIL GAS AND INDOOR AIR ANALYSIS REPORTS**



# Technical Report

prepared for:

**Jade Environmental, Inc.**  
59 Circle Drive  
Hopewell Junction NY, 12533  
**Attention: Mr. Dave Pelletier**

Report Date: 04/09/2014  
**Client Project ID: OSSINIM**  
York Project (SDG) No.: 14D0207

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 04/09/2014  
Client Project ID: OSSINIM  
York Project (SDG) No.: 14D0207

**Jade Environmental, Inc.**  
59 Circle Drive  
Hopewell Junction NY, 12533  
Attention: Mr. Dave Pelletier

## 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 04, 2014 and listed below. The project was identified as your project: **OSSINIM**.

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> |
|-----------------------|-------------------------------|--------------------|-----------------------|----------------------|
| 14D0207-01            | Cannister ID/451 Storage Room | Indoor Ambient Air | 04/02/2014            | 04/04/2014           |
| 14D0207-02            | Cannister ID/455 Receiving    | Indoor Ambient Air | 04/02/2014            | 04/04/2014           |
| 14D0207-03            | Upper Point A Outside         | Soil Vapor         | 04/02/2014            | 04/04/2014           |

## General Notes for York Project (SDG) No.: 14D0207

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: 04/09/2014





## Sample Information

**Client Sample ID:** Cannister ID/451 Storage Room

**York Sample ID:** 14D0207-01

**York Project (SDG) No.**

14D0207

**Client Project ID**

OSSINIM

**Matrix**

Indoor Ambient Air

**Collection Date/Time**

April 2, 2014 3:00 pm

**Date Received**

04/04/2014

### 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> | 0.31 | 0.31 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 108-05-4    | Vinyl acetate                  | ND          |      | ug/m <sup>3</sup> | 0.43 | 0.43 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 79-01-6     | Trichloroethylene              | ND          |      | ug/m <sup>3</sup> | 0.16 | 0.16 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 10061-02-6  | trans-1,3-Dichloropropylene    | ND          |      | ug/m <sup>3</sup> | 0.55 | 0.55 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 156-60-5    | trans-1,2-Dichloroethylene     | ND          |      | ug/m <sup>3</sup> | 0.48 | 0.48 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 108-88-3    | <b>Toluene</b>                 | <b>16</b>   |      | ug/m <sup>3</sup> | 0.46 | 0.46 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 109-99-9    | <b>* Tetrahydrofuran</b>       | <b>1.2</b>  |      | ug/m <sup>3</sup> | 0.36 | 0.36 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 127-18-4    | <b>Tetrachloroethylene</b>     | <b>3.7</b>  |      | ug/m <sup>3</sup> | 0.83 | 0.83 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 100-42-5    | <b>Styrene</b>                 | <b>1.2</b>  |      | ug/m <sup>3</sup> | 0.52 | 0.52 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 115-07-1    | * Propylene                    | ND          |      | ug/m <sup>3</sup> | 0.21 | 0.21 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 622-96-8    | <b>* p-Ethyltoluene</b>        | <b>1.4</b>  |      | ug/m <sup>3</sup> | 0.60 | 0.60 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 179601-23-1 | <b>p- &amp; m- Xylenes</b>     | <b>4.0</b>  |      | ug/m <sup>3</sup> | 1.1  | 1.1  | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 95-47-6     | <b>o-Xylene</b>                | <b>2.0</b>  |      | ug/m <sup>3</sup> | 0.53 | 0.53 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 110-54-3    | <b>n-Hexane</b>                | <b>2.0</b>  |      | ug/m <sup>3</sup> | 0.43 | 0.43 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 142-82-5    | <b>n-Heptane</b>               | <b>1.1</b>  |      | ug/m <sup>3</sup> | 0.50 | 0.50 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-09-2     | <b>Methylene chloride</b>      | <b>5.8</b>  |      | ug/m <sup>3</sup> | 0.85 | 0.85 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 1634-04-4   | Methyl tert-butyl ether (MTBE) | ND          |      | ug/m <sup>3</sup> | 0.44 | 0.44 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 108-10-1    | <b>4-Methyl-2-pentanone</b>    | <b>0.70</b> |      | ug/m <sup>3</sup> | 0.50 | 0.50 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 67-63-0     | <b>Isopropanol</b>             | <b>25</b>   |      | ug/m <sup>3</sup> | 0.60 | 0.60 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 87-68-3     | Hexachlorobutadiene            | ND          |      | ug/m <sup>3</sup> | 1.3  | 1.3  | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 100-41-4    | <b>Ethyl Benzene</b>           | <b>1.4</b>  |      | ug/m <sup>3</sup> | 0.53 | 0.53 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 141-78-6    | <b>* Ethyl acetate</b>         | <b>9.0</b>  |      | ug/m <sup>3</sup> | 0.88 | 0.88 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 110-82-7    | <b>Cyclohexane</b>             | <b>1.4</b>  |      | ug/m <sup>3</sup> | 0.42 | 0.42 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 10061-01-5  | cis-1,3-Dichloropropylene      | ND          |      | ug/m <sup>3</sup> | 0.55 | 0.55 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 156-59-2    | cis-1,2-Dichloroethylene       | ND          |      | ug/m <sup>3</sup> | 0.48 | 0.48 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 74-87-3     | <b>Chloromethane</b>           | <b>2.1</b>  |      | ug/m <sup>3</sup> | 0.25 | 0.25 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 67-66-3     | Chloroform                     | ND          |      | ug/m <sup>3</sup> | 0.60 | 0.60 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-00-3     | Chloroethane                   | ND          |      | ug/m <sup>3</sup> | 0.32 | 0.32 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 56-23-5     | <b>Carbon tetrachloride</b>    | <b>1.3</b>  |      | ug/m <sup>3</sup> | 0.19 | 0.19 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-15-0     | Carbon disulfide               | ND          |      | ug/m <sup>3</sup> | 0.38 | 0.38 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 74-83-9     | Bromomethane                   | ND          |      | ug/m <sup>3</sup> | 0.47 | 0.47 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-25-2     | Bromoform                      | ND          |      | ug/m <sup>3</sup> | 1.3  | 1.3  | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-27-4     | Bromodichloromethane           | ND          |      | ug/m <sup>3</sup> | 0.76 | 0.76 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 100-44-7    | Benzyl chloride                | ND          |      | ug/m <sup>3</sup> | 0.63 | 0.63 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 71-43-2     | <b>Benzene</b>                 | <b>1.7</b>  |      | ug/m <sup>3</sup> | 0.39 | 0.39 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 67-64-1     | <b>Acetone</b>                 | <b>50</b>   | B    | ug/m <sup>3</sup> | 0.29 | 0.29 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 591-78-6    | <b>* 2-Hexanone</b>            | ND          |      | ug/m <sup>3</sup> | 1.0  | 1.0  | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |





## Sample Information

**Client Sample ID:** Cannister ID/451 Storage Room

**York Sample ID:** 14D0207-01

York Project (SDG) No.  
14D0207

Client Project ID  
OSSINIM

Matrix  
Indoor Ambient Air

Collection Date/Time  
April 2, 2014 3:00 pm

Date Received  
04/04/2014

### 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 |
|-----------------------------|--|---------------|-------------------------|-------------------|------|------|----------|------------------|--------------------|--------------------|---------|
| 78-93-3                     | <b>2-Butanone</b>  | <b>6.3</b>    |                         | ug/m <sup>3</sup> | 0.36 | 0.36 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 123-91-1                    | 1,4-Dioxane  | ND            |                         | ug/m <sup>3</sup> | 0.44 | 0.44 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 106-46-7                    | 1,4-Dichlorobenzene                                      | ND            |                         | ug/m <sup>3</sup> | 0.73 | 0.73 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 541-73-1                    | 1,3-Dichlorobenzene                                      | ND            |                         | ug/m <sup>3</sup> | 0.73 | 0.73 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 106-99-0                    | <b>1,3-Butadiene</b>                                     | <b>1.6</b>    |                         | ug/m <sup>3</sup> | 0.53 | 0.53 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 108-67-8                    | 1,3,5-Trimethylbenzene                                   | ND            |                         | ug/m <sup>3</sup> | 0.60 | 0.60 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 76-14-2                     | 1,2-Dichlorotetrafluoroethane                            | ND            |                         | ug/m <sup>3</sup> | 0.85 | 0.85 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 78-87-5                     | 1,2-Dichloropropane                                      | ND            |                         | ug/m <sup>3</sup> | 0.56 | 0.56 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 107-06-2                    | <b>1,2-Dichloroethane</b>                                | <b>1.9</b>    |                         | ug/m <sup>3</sup> | 0.49 | 0.49 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 95-50-1                     | 1,2-Dichlorobenzene                                      | ND            |                         | ug/m <sup>3</sup> | 0.73 | 0.73 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 95-63-6                     | <b>1,2,4-Trimethylbenzene</b>                            | <b>1.7</b>    |                         | ug/m <sup>3</sup> | 0.60 | 0.60 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 120-82-1                    | 1,2,4-Trichlorobenzene                                   | ND            |                         | ug/m <sup>3</sup> | 0.91 | 0.91 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-35-4                     | 1,1-Dichloroethylene                                     | ND            |                         | ug/m <sup>3</sup> | 0.48 | 0.48 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-34-3                     | 1,1-Dichloroethane                                       | ND            |                         | ug/m <sup>3</sup> | 0.49 | 0.49 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-69-4                     | <b>Trichlorofluoromethane (Freon 11)</b>                 | <b>2.2</b>    |                         | ug/m <sup>3</sup> | 0.69 | 0.69 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 79-00-5                     | 1,1,2-Trichloroethane                                    | ND            |                         | ug/m <sup>3</sup> | 0.67 | 0.67 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 76-13-1                     | <b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b> | <b>0.94</b>   |                         | ug/m <sup>3</sup> | 0.94 | 0.94 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 79-34-5                     | 1,1,2,2-Tetrachloroethane                                | ND            |                         | ug/m <sup>3</sup> | 0.84 | 0.84 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 71-55-6                     | 1,1,1-Trichloroethane                                    | ND            |                         | ug/m <sup>3</sup> | 0.67 | 0.67 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 75-71-8                     | <b>Dichlorodifluoromethane</b>                           | <b>2.0</b>    |                         | ug/m <sup>3</sup> | 0.60 | 0.60 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 106-93-4                    | 1,2-Dibromoethane  | ND            |                         | ug/m <sup>3</sup> | 0.94 | 0.94 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 124-48-1                    | Dibromochloromethane                                     | ND            |                         | ug/m <sup>3</sup> | 0.98 | 0.98 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 80-62-6                     | Methyl Methacrylate                                      | ND            |                         | ug/m <sup>3</sup> | 0.50 | 0.50 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| 108-90-7                    | Chlorobenzene  | ND            |                         | ug/m <sup>3</sup> | 0.56 | 0.56 | 1.2      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 19:04   | RQB     |
| <b>Surrogate Recoveries</b> |  | <b>Result</b> | <b>Acceptance Range</b> |                   |      |      |          |                  |                    |                    |         |
| 460-00-4                    | Surrogate: <i>p</i> -Bromofluorobenzene                  | 89.0 %        | 72-118                  |                   |      |      |          |                  |                    |                    |         |

## Sample Information

**Client Sample ID:** Cannister ID/455 Receiving

**York Sample ID:** 14D0207-02

York Project (SDG) No.  
14D0207

Client Project ID  
OSSINIM

Matrix  
Indoor Ambient Air

Collection Date/Time  
April 2, 2014 3:00 pm

Date Received  
04/04/2014

### 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 |
|---------|-----------|--------|------|-------|-----|----|----------|------------------|--------------------|--------------------|---------|
|---------|-----------|--------|------|-------|-----|----|----------|------------------|--------------------|--------------------|---------|



## Sample Information

**Client Sample ID:** Cannister ID/455 Receiving

**York Sample ID:** 14D0207-02

York Project (SDG) No.  
14D0207

Client Project ID  
OSSINIM

Matrix  
Indoor Ambient Air

Collection Date/Time  
April 2, 2014 3:00 pm

Date Received  
04/04/2014

### 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> | 0.36 | 0.36 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 108-05-4    | Vinyl acetate                  | ND          |      | ug/m <sup>3</sup> | 0.50 | 0.50 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 79-01-6     | <b>Trichloroethylene</b>       | <b>1.1</b>  |      | ug/m <sup>3</sup> | 0.19 | 0.19 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 10061-02-6  | trans-1,3-Dichloropropylene    | ND          |      | ug/m <sup>3</sup> | 0.65 | 0.65 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 156-60-5    | trans-1,2-Dichloroethylene     | ND          |      | ug/m <sup>3</sup> | 0.56 | 0.56 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 108-88-3    | <b>Toluene</b>                 | <b>11</b>   |      | ug/m <sup>3</sup> | 0.54 | 0.54 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 109-99-9    | * Tetrahydrofuran              | ND          |      | ug/m <sup>3</sup> | 0.42 | 0.42 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 127-18-4    | <b>Tetrachloroethylene</b>     | <b>2.1</b>  |      | ug/m <sup>3</sup> | 0.97 | 0.97 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 100-42-5    | <b>Styrene</b>                 | <b>0.73</b> |      | ug/m <sup>3</sup> | 0.61 | 0.61 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 115-07-1    | * Propylene                    | ND          |      | ug/m <sup>3</sup> | 0.25 | 0.25 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 622-96-8    | * <b>p-Ethyltoluene</b>        | <b>0.77</b> |      | ug/m <sup>3</sup> | 0.70 | 0.70 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 179601-23-1 | <b>p- &amp; m- Xylenes</b>     | <b>2.0</b>  |      | ug/m <sup>3</sup> | 1.2  | 1.2  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 95-47-6     | <b>o-Xylene</b>                | <b>0.99</b> |      | ug/m <sup>3</sup> | 0.62 | 0.62 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 110-54-3    | <b>n-Hexane</b>                | <b>1.2</b>  |      | ug/m <sup>3</sup> | 0.50 | 0.50 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 142-82-5    | <b>n-Heptane</b>               | <b>0.99</b> |      | ug/m <sup>3</sup> | 0.58 | 0.58 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-09-2     | <b>Methylene chloride</b>      | <b>3.0</b>  |      | ug/m <sup>3</sup> | 0.99 | 0.99 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 1634-04-4   | Methyl tert-butyl ether (MTBE) | ND          |      | ug/m <sup>3</sup> | 0.51 | 0.51 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 108-10-1    | <b>4-Methyl-2-pentanone</b>    | <b>0.58</b> |      | ug/m <sup>3</sup> | 0.58 | 0.58 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 67-63-0     | <b>Isopropanol</b>             | <b>57</b>   |      | ug/m <sup>3</sup> | 0.70 | 0.70 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 87-68-3     | Hexachlorobutadiene            | ND          |      | ug/m <sup>3</sup> | 1.5  | 1.5  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 100-41-4    | <b>Ethyl Benzene</b>           | <b>1.1</b>  |      | ug/m <sup>3</sup> | 0.62 | 0.62 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 141-78-6    | * <b>Ethyl acetate</b>         | <b>27</b>   |      | ug/m <sup>3</sup> | 1.0  | 1.0  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 110-82-7    | <b>Cyclohexane</b>             | <b>0.69</b> |      | ug/m <sup>3</sup> | 0.49 | 0.49 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 10061-01-5  | cis-1,3-Dichloropropylene      | ND          |      | ug/m <sup>3</sup> | 0.65 | 0.65 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 156-59-2    | cis-1,2-Dichloroethylene       | ND          |      | ug/m <sup>3</sup> | 0.56 | 0.56 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 74-87-3     | <b>Chloromethane</b>           | <b>1.4</b>  |      | ug/m <sup>3</sup> | 0.29 | 0.29 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 67-66-3     | Chloroform                     | ND          |      | ug/m <sup>3</sup> | 0.70 | 0.70 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-00-3     | Chloroethane                   | ND          |      | ug/m <sup>3</sup> | 0.38 | 0.38 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 56-23-5     | <b>Carbon tetrachloride</b>    | <b>0.90</b> |      | ug/m <sup>3</sup> | 0.22 | 0.22 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-15-0     | Carbon disulfide               | ND          |      | ug/m <sup>3</sup> | 0.44 | 0.44 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 74-83-9     | Bromomethane                   | ND          |      | ug/m <sup>3</sup> | 0.55 | 0.55 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-25-2     | Bromoform                      | ND          |      | ug/m <sup>3</sup> | 1.5  | 1.5  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-27-4     | Bromodichloromethane           | ND          |      | ug/m <sup>3</sup> | 0.88 | 0.88 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 100-44-7    | Benzyl chloride                | ND          |      | ug/m <sup>3</sup> | 0.74 | 0.74 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 71-43-2     | <b>Benzene</b>                 | <b>1.0</b>  |      | ug/m <sup>3</sup> | 0.45 | 0.45 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 67-64-1     | <b>Acetone</b>                 | <b>43</b>   | B    | ug/m <sup>3</sup> | 0.34 | 0.34 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 591-78-6    | * 2-Hexanone                   | ND          |      | ug/m <sup>3</sup> | 1.2  | 1.2  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 78-93-3     | <b>2-Butanone</b>              | <b>3.7</b>  |      | ug/m <sup>3</sup> | 0.42 | 0.42 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |



## Sample Information

**Client Sample ID:** Cannister ID/455 Receiving

**York Sample ID:** 14D0207-02

York Project (SDG) No.  
14D0207

Client Project ID  
OSSINIM

Matrix  
Indoor Ambient Air

Collection Date/Time  
April 2, 2014 3:00 pm

Date Received  
04/04/2014

### 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 |
|-----------------------------|---|---------------|-------------------------|-------------------|------|------|----------|------------------|--------------------|--------------------|---------|
| 123-91-1                    | 1,4-Dioxane                                       | ND            |                         | ug/m <sup>3</sup> | 0.51 | 0.51 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 106-46-7                    | 1,4-Dichlorobenzene                               | ND            |                         | ug/m <sup>3</sup> | 0.86 | 0.86 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 541-73-1                    | 1,3-Dichlorobenzene                               | ND            |                         | ug/m <sup>3</sup> | 0.86 | 0.86 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 106-99-0                    | <b>1,3-Butadiene</b>                              | <b>0.86</b>   |                         | ug/m <sup>3</sup> | 0.62 | 0.62 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 108-67-8                    | 1,3,5-Trimethylbenzene                            | ND            |                         | ug/m <sup>3</sup> | 0.70 | 0.70 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 76-14-2                     | 1,2-Dichlorotetrafluoroethane                     | ND            |                         | ug/m <sup>3</sup> | 1.0  | 1.0  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 78-87-5                     | 1,2-Dichloropropane                               | ND            |                         | ug/m <sup>3</sup> | 0.66 | 0.66 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 107-06-2                    | <b>1,2-Dichloroethane</b>                         | <b>1.7</b>    |                         | ug/m <sup>3</sup> | 0.58 | 0.58 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 95-50-1                     | 1,2-Dichlorobenzene                               | ND            |                         | ug/m <sup>3</sup> | 0.86 | 0.86 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 95-63-6                     | <b>1,2,4-Trimethylbenzene</b>                     | <b>0.98</b>   |                         | ug/m <sup>3</sup> | 0.70 | 0.70 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 120-82-1                    | 1,2,4-Trichlorobenzene                            | ND            |                         | ug/m <sup>3</sup> | 1.1  | 1.1  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-35-4                     | 1,1-Dichloroethylene                              | ND            |                         | ug/m <sup>3</sup> | 0.56 | 0.56 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-34-3                     | 1,1-Dichloroethane                                | ND            |                         | ug/m <sup>3</sup> | 0.58 | 0.58 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-69-4                     | <b>Trichlorofluoromethane (Freon 11)</b>          | <b>1.3</b>    |                         | ug/m <sup>3</sup> | 0.80 | 0.80 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 79-00-5                     | 1,1,2-Trichloroethane                             | ND            |                         | ug/m <sup>3</sup> | 0.78 | 0.78 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 76-13-1                     | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND            |                         | ug/m <sup>3</sup> | 1.1  | 1.1  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 79-34-5                     | 1,1,2,2-Tetrachloroethane                         | ND            |                         | ug/m <sup>3</sup> | 0.98 | 0.98 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 71-55-6                     | 1,1,1-Trichloroethane                             | ND            |                         | ug/m <sup>3</sup> | 0.78 | 0.78 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 75-71-8                     | <b>Dichlorodifluoromethane</b>                    | <b>1.4</b>    |                         | ug/m <sup>3</sup> | 0.70 | 0.70 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 106-93-4                    | 1,2-Dibromoethane                                 | ND            |                         | ug/m <sup>3</sup> | 1.1  | 1.1  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 124-48-1                    | Dibromochloromethane                              | ND            |                         | ug/m <sup>3</sup> | 1.1  | 1.1  | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 80-62-6                     | Methyl Methacrylate                               | ND            |                         | ug/m <sup>3</sup> | 0.58 | 0.58 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| 108-90-7                    | Chlorobenzene                                     | ND            |                         | ug/m <sup>3</sup> | 0.66 | 0.66 | 1.4      | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 20:08   | RQB     |
| <b>Surrogate Recoveries</b> |   | <b>Result</b> | <b>Acceptance Range</b> |                   |      |      |          |                  |                    |                    |         |
| 460-00-4                    | Surrogate: <i>p</i> -Bromofluorobenzene           | 89.5 %        | 72-118                  |                   |      |      |          |                  |                    |                    |         |

## Sample Information

**Client Sample ID:** Upper Point A Outside

**York Sample ID:** 14D0207-03

York Project (SDG) No.  
14D0207

Client Project ID  
OSSINIM

Matrix  
Soil Vapor

Collection Date/Time  
April 2, 2014 3:00 pm

Date Received  
04/04/2014

### 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 |
|---------|-----------|--------|------|-------|-----|----|----------|------------------|--------------------|--------------------|---------|
|---------|-----------|--------|------|-------|-----|----|----------|------------------|--------------------|--------------------|---------|





## Sample Information

**Client Sample ID:** Upper Point A Outside

**York Sample ID:** 14D0207-03

York Project (SDG) No.  
14D0207

Client Project ID  
OSSINIM

Matrix  
Soil Vapor

Collection Date/Time  
April 2, 2014 3:00 pm

Date Received  
04/04/2014

### 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> | 7.5 | 7.5 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 108-05-4    | Vinyl acetate                  | ND          |      | ug/m <sup>3</sup> | 10  | 10  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 79-01-6     | Trichloroethylene              | ND          |      | ug/m <sup>3</sup> | 3.9 | 3.9 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 10061-02-6  | trans-1,3-Dichloropropylene    | ND          |      | ug/m <sup>3</sup> | 13  | 13  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 156-60-5    | trans-1,2-Dichloroethylene     | ND          |      | ug/m <sup>3</sup> | 12  | 12  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 108-88-3    | <b>Toluene</b>                 | <b>2300</b> |      | ug/m <sup>3</sup> | 11  | 11  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 109-99-9    | * Tetrahydrofuran              | ND          |      | ug/m <sup>3</sup> | 8.6 | 8.6 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 127-18-4    | <b>Tetrachloroethylene</b>     | <b>93</b>   |      | ug/m <sup>3</sup> | 20  | 20  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 100-42-5    | Styrene                        | ND          |      | ug/m <sup>3</sup> | 12  | 12  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 115-07-1    | * <b>Propylene</b>             | <b>34</b>   |      | ug/m <sup>3</sup> | 5.0 | 5.0 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 622-96-8    | * <b>p-Ethyltoluene</b>        | <b>350</b>  |      | ug/m <sup>3</sup> | 14  | 14  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 179601-23-1 | <b>p- &amp; m- Xylenes</b>     | <b>890</b>  |      | ug/m <sup>3</sup> | 25  | 25  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 95-47-6     | <b>o-Xylene</b>                | <b>260</b>  |      | ug/m <sup>3</sup> | 13  | 13  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 110-54-3    | <b>n-Hexane</b>                | <b>300</b>  |      | ug/m <sup>3</sup> | 10  | 10  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 142-82-5    | <b>n-Heptane</b>               | <b>260</b>  |      | ug/m <sup>3</sup> | 12  | 12  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-09-2     | Methylene chloride             | ND          |      | ug/m <sup>3</sup> | 20  | 20  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 1634-04-4   | Methyl tert-butyl ether (MTBE) | ND          |      | ug/m <sup>3</sup> | 11  | 11  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 108-10-1    | 4-Methyl-2-pentanone           | ND          |      | ug/m <sup>3</sup> | 12  | 12  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 67-63-0     | Isopropanol                    | ND          |      | ug/m <sup>3</sup> | 14  | 14  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 87-68-3     | Hexachlorobutadiene            | ND          |      | ug/m <sup>3</sup> | 31  | 31  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 100-41-4    | <b>Ethyl Benzene</b>           | <b>310</b>  |      | ug/m <sup>3</sup> | 13  | 13  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 141-78-6    | * Ethyl acetate                | ND          |      | ug/m <sup>3</sup> | 21  | 21  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 110-82-7    | <b>Cyclohexane</b>             | <b>59</b>   |      | ug/m <sup>3</sup> | 10  | 10  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 10061-01-5  | cis-1,3-Dichloropropylene      | ND          |      | ug/m <sup>3</sup> | 13  | 13  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 156-59-2    | cis-1,2-Dichloroethylene       | ND          |      | ug/m <sup>3</sup> | 12  | 12  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 74-87-3     | Chloromethane                  | ND          |      | ug/m <sup>3</sup> | 6.0 | 6.0 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 67-66-3     | <b>Chloroform</b>              | <b>17</b>   |      | ug/m <sup>3</sup> | 14  | 14  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-00-3     | Chloroethane                   | ND          |      | ug/m <sup>3</sup> | 7.7 | 7.7 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 56-23-5     | Carbon tetrachloride           | ND          |      | ug/m <sup>3</sup> | 4.6 | 4.6 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-15-0     | <b>Carbon disulfide</b>        | <b>10</b>   |      | ug/m <sup>3</sup> | 9.1 | 9.1 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 74-83-9     | Bromomethane                   | ND          |      | ug/m <sup>3</sup> | 11  | 11  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-25-2     | Bromoform                      | ND          |      | ug/m <sup>3</sup> | 30  | 30  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-27-4     | Bromodichloromethane           | ND          |      | ug/m <sup>3</sup> | 18  | 18  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 100-44-7    | Benzyl chloride                | ND          |      | ug/m <sup>3</sup> | 15  | 15  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 71-43-2     | <b>Benzene</b>                 | <b>130</b>  |      | ug/m <sup>3</sup> | 9.4 | 9.4 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 67-64-1     | <b>Acetone</b>                 | <b>1200</b> | B    | ug/m <sup>3</sup> | 7.0 | 7.0 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 591-78-6    | * 2-Hexanone                   | ND          |      | ug/m <sup>3</sup> | 24  | 24  | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 78-93-3     | <b>2-Butanone</b>              | <b>32</b>   |      | ug/m <sup>3</sup> | 8.6 | 8.6 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |



## Sample Information

**Client Sample ID:** Upper Point A Outside

**York Sample ID:** 14D0207-03

York Project (SDG) No.  
14D0207

Client Project ID  
OSSINIM

Matrix  
Soil Vapor

Collection Date/Time  
April 2, 2014 3:00 pm

Date Received  
04/04/2014

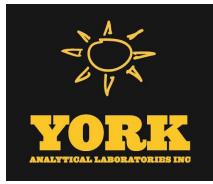
### Volatile Organics, EPA TO15 Full List

### 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 |
|-----------------------------|---|---------------|-------------------------|-------------------|-----|----|----------|------------------|--------------------|--------------------|---------|
| 123-91-1                    | 1,4-Dioxane                                       | ND            |                         | ug/m <sup>3</sup> | 11  | 11 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 106-46-7                    | 1,4-Dichlorobenzene                               | ND            |                         | ug/m <sup>3</sup> | 18  | 18 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 541-73-1                    | 1,3-Dichlorobenzene                               | ND            |                         | ug/m <sup>3</sup> | 18  | 18 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 106-99-0                    | 1,3-Butadiene                                     | ND            |                         | ug/m <sup>3</sup> | 13  | 13 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 108-67-8                    | <b>1,3,5-Trimethylbenzene</b>                     | <b>76</b>     |                         | ug/m <sup>3</sup> | 14  | 14 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 76-14-2                     | 1,2-Dichlorotetrafluoroethane                     | ND            |                         | ug/m <sup>3</sup> | 20  | 20 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 78-87-5                     | 1,2-Dichloropropane                               | ND            |                         | ug/m <sup>3</sup> | 14  | 14 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 107-06-2                    | 1,2-Dichloroethane                                | ND            |                         | ug/m <sup>3</sup> | 12  | 12 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 95-50-1                     | 1,2-Dichlorobenzene                               | ND            |                         | ug/m <sup>3</sup> | 18  | 18 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 95-63-6                     | <b>1,2,4-Trimethylbenzene</b>                     | <b>360</b>    |                         | ug/m <sup>3</sup> | 14  | 14 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 120-82-1                    | 1,2,4-Trichlorobenzene                            | ND            |                         | ug/m <sup>3</sup> | 22  | 22 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-35-4                     | 1,1-Dichloroethylene                              | ND            |                         | ug/m <sup>3</sup> | 12  | 12 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-34-3                     | 1,1-Dichloroethane                                | ND            |                         | ug/m <sup>3</sup> | 12  | 12 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-69-4                     | Trichlorofluoromethane (Freon 11)                 | ND            |                         | ug/m <sup>3</sup> | 16  | 16 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 79-00-5                     | 1,1,2-Trichloroethane                             | ND            |                         | ug/m <sup>3</sup> | 16  | 16 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 76-13-1                     | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND            |                         | ug/m <sup>3</sup> | 22  | 22 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 79-34-5                     | 1,1,2,2-Tetrachloroethane                         | ND            |                         | ug/m <sup>3</sup> | 20  | 20 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 71-55-6                     | 1,1,1-Trichloroethane                             | ND            |                         | ug/m <sup>3</sup> | 16  | 16 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 75-71-8                     | Dichlorodifluoromethane                           | ND            |                         | ug/m <sup>3</sup> | 14  | 14 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 106-93-4                    | 1,2-Dibromoethane                                 | ND            |                         | ug/m <sup>3</sup> | 23  | 23 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 124-48-1                    | Dibromochloromethane                              | ND            |                         | ug/m <sup>3</sup> | 24  | 24 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 80-62-6                     | Methyl Methacrylate                               | ND            |                         | ug/m <sup>3</sup> | 12  | 12 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| 108-90-7                    | Chlorobenzene                                     | ND            |                         | ug/m <sup>3</sup> | 13  | 13 | 28.8     | EPA TO-15        | 04/07/2014 16:08   | 04/07/2014 22:36   | RQB     |
| <b>Surrogate Recoveries</b> |   | <b>Result</b> | <b>Acceptance Range</b> |                   |     |    |          |                  |                    |                    |         |
| 460-00-4                    | Surrogate: <i>p</i> -Bromofluorobenzene           | 88.9 %        | 72-118                  |                   |     |    |          |                  |                    |                    |         |



## Analytical Batch Summary

**Batch ID:** BD40340

**Preparation Method:** EPA TO15 PREP

**Prepared By:** RQB

| YORK Sample ID | Client Sample ID              | Preparation Date |
|----------------|-------------------------------|------------------|
| 14D0207-01     | Cannister ID/451 Storage Room | 04/07/14         |
| 14D0207-02     | Cannister ID/455 Receiving    | 04/07/14         |
| 14D0207-03     | Upper Point A Outside         | 04/07/14         |
| BD40340-BLK1   | Blank                         | 04/07/14         |
| BD40340-BS1    | LCS                           | 04/07/14         |



## Volatile Organic Compounds in Air by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

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

#### Batch BD40340 - EPA TO15 PREP

#### Blank (BD40340-BLK1)

Prepared & Analyzed: 04/07/2014

|                                |      |      |                   |
|--------------------------------|------|------|-------------------|
| Vinyl Chloride                 | ND   | 0.26 | ug/m <sup>3</sup> |
| Vinyl acetate                  | ND   | 0.36 | "                 |
| Trichloroethylene              | ND   | 0.14 | "                 |
| trans-1,3-Dichloropropylene    | ND   | 0.46 | "                 |
| trans-1,2-Dichloroethylene     | ND   | 0.40 | "                 |
| Toluene                        | ND   | 0.38 | "                 |
| Tetrahydrofuran                | ND   | 0.30 | "                 |
| Tetrachloroethylene            | ND   | 0.69 | "                 |
| Styrene                        | ND   | 0.43 | "                 |
| Propylene                      | ND   | 0.18 | "                 |
| p-Ethyltoluene                 | ND   | 0.50 | "                 |
| p- & m- Xylenes                | ND   | 0.88 | "                 |
| o-Xylene                       | ND   | 0.44 | "                 |
| n-Hexane                       | ND   | 0.36 | "                 |
| n-Heptane                      | ND   | 0.42 | "                 |
| Methylene chloride             | ND   | 0.71 | "                 |
| Methyl tert-butyl ether (MTBE) | ND   | 0.37 | "                 |
| 4-Methyl-2-pentanone           | ND   | 0.42 | "                 |
| Isopropanol                    | ND   | 0.50 | "                 |
| Hexachlorobutadiene            | ND   | 1.1  | "                 |
| Ethyl Benzene                  | ND   | 0.44 | "                 |
| Ethyl acetate                  | ND   | 0.73 | "                 |
| Cyclohexane                    | ND   | 0.35 | "                 |
| cis-1,3-Dichloropropylene      | ND   | 0.46 | "                 |
| cis-1,2-Dichloroethylene       | ND   | 0.40 | "                 |
| Chloromethane                  | ND   | 0.21 | "                 |
| Chloroform                     | ND   | 0.50 | "                 |
| Chloroethane                   | ND   | 0.27 | "                 |
| Carbon tetrachloride           | ND   | 0.16 | "                 |
| Carbon disulfide               | ND   | 0.32 | "                 |
| Bromomethane                   | ND   | 0.39 | "                 |
| Bromoform                      | ND   | 1.1  | "                 |
| Bromodichloromethane           | ND   | 0.63 | "                 |
| Benzyl chloride                | ND   | 0.53 | "                 |
| Benzene                        | ND   | 0.32 | "                 |
| Acetone                        | 0.39 | 0.24 | "                 |
| 2-Hexanone                     | ND   | 0.83 | "                 |
| 2-Butanone                     | ND   | 0.30 | "                 |
| 1,4-Dioxane                    | ND   | 0.37 | "                 |
| 1,4-Dichlorobenzene            | ND   | 0.61 | "                 |
| 1,3-Dichlorobenzene            | ND   | 0.61 | "                 |
| 1,3-Butadiene                  | ND   | 0.44 | "                 |
| 1,3,5-Trimethylbenzene         | ND   | 0.50 | "                 |
| 1,2-Dichlorotetrafluoroethane  | ND   | 0.71 | "                 |
| 1,2-Dichloropropane            | ND   | 0.47 | "                 |
| 1,2-Dichloroethane             | ND   | 0.41 | "                 |
| 1,2-Dichlorobenzene            | ND   | 0.61 | "                 |
| 1,2,4-Trimethylbenzene         | ND   | 0.50 | "                 |
| 1,2,4-Trichlorobenzene         | ND   | 0.75 | "                 |
| 1,1-Dichloroethylene           | ND   | 0.40 | "                 |
| 1,1-Dichloroethane             | ND   | 0.41 | "                 |



## Volatile Organic Compounds in Air 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 BD40340 - EPA TO15 PREP

##### Blank (BD40340-BLK1)

Prepared & Analyzed: 04/07/2014

|   |    |      |                   |  |  |  |  |  |  |  |  |
|---|----|------|-------------------|--|--|--|--|--|--|--|--|
| Trichlorofluoromethane (Freon 11)                 | ND | 0.57 | ug/m <sup>3</sup> |  |  |  |  |  |  |  |  |
| 1,1,2-Trichloroethane                             | ND | 0.55 | "                 |  |  |  |  |  |  |  |  |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.78 | "                 |  |  |  |  |  |  |  |  |
| 1,1,2,2-Tetrachloroethane                         | ND | 0.70 | "                 |  |  |  |  |  |  |  |  |
| 1,1,1-Trichloroethane                             | ND | 0.55 | "                 |  |  |  |  |  |  |  |  |
| Dichlorodifluoromethane                           | ND | 0.50 | "                 |  |  |  |  |  |  |  |  |
| 1,2-Dibromoethane                                 | ND | 0.78 | "                 |  |  |  |  |  |  |  |  |
| Dibromochloromethane                              | ND | 0.82 | "                 |  |  |  |  |  |  |  |  |
| Methyl Methacrylate                               | ND | 0.42 | "                 |  |  |  |  |  |  |  |  |
| Chlorobenzene                                     | ND | 0.47 | "                 |  |  |  |  |  |  |  |  |

|   |      |  |      |      |  |      |        |  |  |  |  |
|---|------|--|------|------|--|------|--------|--|--|--|--|
| Surrogate: <i>p</i> -Bromofluorobenzene | 9.07 |  | ppbv | 10.6 |  | 85.6 | 72-118 |  |  |  |  |
|---|------|--|------|------|--|------|--------|--|--|--|--|

##### LCS (BD40340-BS1)

Prepared & Analyzed: 04/07/2014

|                                |      |  |      |      |  |      |        |  |  |  |  |
|--------------------------------|------|--|------|------|--|------|--------|--|--|--|--|
| Vinyl Chloride                 | 8.67 |  | ppbv | 10.2 |  | 85.0 | 61-115 |  |  |  |  |
| Vinyl acetate                  | 8.96 |  | "    | 10.8 |  | 83.0 | 61-141 |  |  |  |  |
| Trichloroethylene              | 8.76 |  | "    | 9.90 |  | 88.5 | 72-125 |  |  |  |  |
| trans-1,3-Dichloropropylene    | 10.6 |  | "    | 10.9 |  | 97.3 | 78-134 |  |  |  |  |
| trans-1,2-Dichloroethylene     | 8.52 |  | "    | 9.70 |  | 87.8 | 69-116 |  |  |  |  |
| Toluene                        | 9.15 |  | "    | 10.4 |  | 88.0 | 71-128 |  |  |  |  |
| Tetrahydrofuran                | 8.31 |  | "    | 9.20 |  | 90.3 | 79-132 |  |  |  |  |
| Tetrachloroethylene            | 9.18 |  | "    | 10.0 |  | 91.8 | 72-124 |  |  |  |  |
| Styrene                        | 9.97 |  | "    | 10.3 |  | 96.8 | 80-137 |  |  |  |  |
| Propylene                      | 8.92 |  | "    | 10.4 |  | 85.8 | 67-106 |  |  |  |  |
| p-Ethyltoluene                 | 9.50 |  | "    | 10.1 |  | 94.1 | 73-143 |  |  |  |  |
| p- & m- Xylenes                | 17.6 |  | "    | 20.2 |  | 87.3 | 68-129 |  |  |  |  |
| o-Xylene                       | 9.65 |  | "    | 10.5 |  | 91.9 | 69-124 |  |  |  |  |
| n-Hexane                       | 9.03 |  | "    | 10.0 |  | 90.3 | 69-119 |  |  |  |  |
| n-Heptane                      | 9.09 |  | "    | 10.3 |  | 88.3 | 69-115 |  |  |  |  |
| Methylene chloride             | 7.83 |  | "    | 9.90 |  | 79.1 | 66-95  |  |  |  |  |
| Methyl tert-butyl ether (MTBE) | 8.59 |  | "    | 9.80 |  | 87.7 | 72-140 |  |  |  |  |
| 4-Methyl-2-pentanone           | 7.73 |  | "    | 9.20 |  | 84.0 | 49-174 |  |  |  |  |
| Isopropanol                    | 9.16 |  | "    | 12.0 |  | 76.3 | 48-166 |  |  |  |  |
| Hexachlorobutadiene            | 8.71 |  | "    | 9.90 |  | 88.0 | 69-152 |  |  |  |  |
| Ethyl Benzene                  | 9.43 |  | "    | 10.3 |  | 91.6 | 68-129 |  |  |  |  |
| Ethyl acetate                  | 7.15 |  | "    | 8.50 |  | 84.1 | 71-135 |  |  |  |  |
| Cyclohexane                    | 9.06 |  | "    | 10.1 |  | 89.7 | 70-118 |  |  |  |  |
| cis-1,3-Dichloropropylene      | 9.78 |  | "    | 10.5 |  | 93.1 | 74-132 |  |  |  |  |
| cis-1,2-Dichloroethylene       | 8.66 |  | "    | 10.3 |  | 84.1 | 67-121 |  |  |  |  |
| Chloromethane                  | 8.56 |  | "    | 10.1 |  | 84.8 | 60-105 |  |  |  |  |
| Chloroform                     | 8.94 |  | "    | 10.1 |  | 88.5 | 71-118 |  |  |  |  |
| Chloroethane                   | 8.66 |  | "    | 9.90 |  | 87.5 | 63-108 |  |  |  |  |
| Carbon tetrachloride           | 9.37 |  | "    | 10.2 |  | 91.9 | 67-119 |  |  |  |  |
| Carbon disulfide               | 8.99 |  | "    | 10.5 |  | 85.6 | 59-119 |  |  |  |  |
| Bromomethane                   | 8.65 |  | "    | 9.90 |  | 87.4 | 60-108 |  |  |  |  |
| Bromoform                      | 10.3 |  | "    | 10.1 |  | 102  | 77-127 |  |  |  |  |
| Bromodichloromethane           | 9.83 |  | "    | 9.90 |  | 99.3 | 68-128 |  |  |  |  |
| Benzyl chloride                | 9.98 |  | "    | 10.2 |  | 97.8 | 57-170 |  |  |  |  |
| Benzene                        | 8.72 |  | "    | 10.2 |  | 85.5 | 64-121 |  |  |  |  |
| Acetone                        | 7.64 |  | "    | 9.80 |  | 78.0 | 71-117 |  |  |  |  |
| 2-Hexanone                     | 7.88 |  | "    | 9.30 |  | 84.7 | 10-242 |  |  |  |  |
| 2-Butanone                     | 8.45 |  | "    | 9.40 |  | 89.9 | 82-143 |  |  |  |  |
| 1,4-Dioxane                    | 8.37 |  | "    | 9.90 |  | 84.5 | 55-198 |  |  |  |  |



## Volatile Organic Compounds in Air by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

| Analyte   | Result      | Reporting<br>Limit | Units    | Spike<br>Level | Source*<br>Result | %REC                            | %REC<br>Limits | Flag | RPD | RPD<br>Limit | Flag |
|---|-------------|--------------------|----------|----------------|-------------------|---------------------------------|----------------|------|-----|--------------|------|
| <b>Batch BD40340 - EPA TO15 PREP</b>              |             |                    |          |                |                   |                                 |                |      |     |              |      |
| <b>LCS (BD40340-BS1)</b>                          |             |                    |          |                |                   | Prepared & Analyzed: 04/07/2014 |                |      |     |              |      |
| 1,4-Dichlorobenzene                               | 9.18        |                    | ppbv     | 10.2           |                   | 90.0                            | 73-128         |      |     |              |      |
| 1,3-Dichlorobenzene                               | 9.21        |                    | "        | 10.2           |                   | 90.3                            | 73-130         |      |     |              |      |
| 1,3-Butadiene                                     | 8.79        |                    | "        | 10.1           |                   | 87.0                            | 65-112         |      |     |              |      |
| 1,3,5-Trimethylbenzene                            | 9.19        |                    | "        | 10.2           |                   | 90.1                            | 65-139         |      |     |              |      |
| 1,2-Dichlorotetrafluoroethane                     | 8.51        |                    | "        | 10.2           |                   | 83.4                            | 52-117         |      |     |              |      |
| 1,2-Dichloropropane                               | 9.17        |                    | "        | 10.3           |                   | 89.0                            | 66-122         |      |     |              |      |
| 1,2-Dichloroethane                                | 9.01        |                    | "        | 10.1           |                   | 89.2                            | 72-113         |      |     |              |      |
| 1,2-Dichlorobenzene                               | 9.15        |                    | "        | 10.1           |                   | 90.6                            | 69-130         |      |     |              |      |
| 1,2,4-Trimethylbenzene                            | 9.35        |                    | "        | 10.2           |                   | 91.7                            | 67-144         |      |     |              |      |
| 1,2,4-Trichlorobenzene                            | 7.70        |                    | "        | 9.60           |                   | 80.2                            | 67-168         |      |     |              |      |
| 1,1-Dichloroethylene                              | 8.68        |                    | "        | 10.0           |                   | 86.8                            | 72-110         |      |     |              |      |
| 1,1-Dichloroethane                                | 8.90        |                    | "        | 10.0           |                   | 89.0                            | 70-114         |      |     |              |      |
| Trichlorofluoromethane (Freon 11)                 | 9.35        |                    | "        | 10.5           |                   | 89.0                            | 67-105         |      |     |              |      |
| 1,1,2-Trichloroethane                             | 9.33        |                    | "        | 10.3           |                   | 90.6                            | 73-124         |      |     |              |      |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 8.51        |                    | "        | 9.70           |                   | 87.7                            | 68-118         |      |     |              |      |
| 1,1,2,2-Tetrachloroethane                         | 9.20        |                    | "        | 10.5           |                   | 87.6                            | 68-126         |      |     |              |      |
| 1,1,1-Trichloroethane                             | 8.96        |                    | "        | 9.90           |                   | 90.5                            | 71-119         |      |     |              |      |
| Dichlorodifluoromethane                           | 7.23        |                    | "        | 10.0           |                   | 72.3                            | 70-130         |      |     |              |      |
| 1,2-Dibromoethane                                 | 9.66        |                    | "        | 10.3           |                   | 93.8                            | 79-129         |      |     |              |      |
| Dibromochloromethane                              | 10.9        |                    | "        | 10.3           |                   | 106                             | 78-123         |      |     |              |      |
| Methyl Methacrylate                               | 8.52        |                    | "        | 9.50           |                   | 89.7                            | 51-138         |      |     |              |      |
| Chlorobenzene                                     | 9.31        |                    | "        | 10.4           |                   | 89.5                            | 71-117         |      |     |              |      |
| <i>Surrogate: p-Bromofluorobenzene</i>            | <i>9.70</i> |                    | <i>"</i> | <i>10.6</i>    |                   | <i>91.5</i>                     | <i>72-118</i>  |      |     |              |      |



## Notes and Definitions

|           |  |
|-----------|--|
| 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.  |
| <hr/>     |  |
| *         | Analyte is not certified or the state (NY) does not offer certification for the Analyte.   |
| 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. 4D0207

| YOUR Information   |                       | Report To:                                      |  | Invoice To:                           |  | YOUR Project ID        |  | Turn-Around Time                                       |  | Report Type/Deliverables       |  |
|--|-----------------------|---|--|---------------------------------------|--|------------------------|--|--|--|--------------------------------|--|
| Company: <u>SAPE ENV</u>   | Company: <u>SAPE</u>  | Company: <u>SAPE</u>                            |  | Company: <u>SAPE</u>                  |  | YOUR Project ID        |  | RUSH - Same Day <input type="checkbox"/>               |  | Summary Report                 |  |
| Address: _____   | Address: _____        | Address: _____                                  |  | Address: _____                        |  | YOUR Project ID        |  | RUSH - Next Day <input type="checkbox"/>               |  | Summary w/ QA Summary <u>α</u> |  |
| Phone No. _____  | Phone No. _____       | Phone No. _____                                 |  | Phone No. _____                       |  | YOUR Project ID        |  | RUSH - Two Day <input type="checkbox"/>                |  | CT RCP Package                 |  |
| Attention: _____   | Attention: _____      | Attention: _____                                |  | Attention: _____                      |  | YOUR Project ID        |  | RUSH - Three Day <input type="checkbox"/>              |  | NY ASP A Package               |  |
| E-Mail Address: _____  | E-Mail Address: _____ | E-Mail Address: _____                           |  | E-Mail Address: _____                 |  | YOUR Project ID        |  | RUSH - Four Day <input type="checkbox"/>               |  | NY ASP B/CLP Pkg               |  |
| 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. |                       | Air Matrix Codes                                |  | TO15 Volatiles and Other Gas Analyses |  | Purchase Order No.     |  | Standard(5-7 Days) <input checked="" type="checkbox"/> |  | Electronic Deliverables:       |  |
| Samples Collected/Authorized By (Signature)<br><u>DAVE KELLER</u>  |                       | AL - INDOOR Ambient Air                         |  | EPA TO-15 List                        |  | Samples from: CT NY NJ |  | Detection Limits Required                              |  | EDD (Specify Type)             |  |
| Name (printed)<br>_____  |                       | AO - OUTDOOR Amb. Air                           |  | NYSDEC VI list                        |  | _____                  |  | ≤ 1 ug/m <sup>3</sup>                                  |  | Standard Excel                 |  |
| _____  |                       | AE - Vapor Extraction Well/Process Gas/Effluent |  | NYSDEC STARS List                     |  | _____                  |  | NYSDEC VI Limits                                       |  | Regulatory Comparison Excel    |  |
| _____  |                       | AS - SOIL Vapor/Sub-Slab                        |  | Project Specific List by TO-15        |  | _____                  |  | NUDEP low level  |  | Special Instructions           |  |
| _____  |                       | _____   |  | NUDEP Target List                     |  | _____                  |  | Routine Survey   |  |                                |  |
| _____  |                       | _____   |  | CTDEP RCP Target List                 |  | _____                  |  | Other  |  |                                |  |

| Sample Identification | Date Sampled | AIR Matrix | Canister Vacuum Before Sampling (in. Hg) | Canister Vacuum After Sampling (in. Hg) | Choose Analytes Needed from the Menu Above and Enter Below | Sampling Media         |
|-----------------------|--------------|------------|--|---|--|------------------------|
| Canister Id 451       | 4/2          | INSIDE     | -30                                      | -10                                     | TO15   | 6 Liter Summa canister |
| Can Id 455            |              |            | -25                                      | -10                                     |  | Tedlar Bag             |
| Vapor Pump A          |              |            | -30                                      | -10                                     |  | 6 Liter Summa canister |
| Outsion               |              |            |  |   |  | Tedlar Bag             |
|                       |              |            |  |   |  | 6 Liter Summa canister |
|                       |              |            |  |   |  | Tedlar Bag             |
|                       |              |            |  |   |  | 6 Liter Summa canister |
|                       |              |            |  |   |  | Tedlar Bag             |
|                       |              |            |  |   |  | 6 Liter Summa canister |
|                       |              |            |  |   |  | Tedlar Bag             |
|                       |              |            |  |   |  | 6 Liter Summa canister |
|                       |              |            |  |   |  | Tedlar Bag             |
|                       |              |            |  |   |  | 6 Liter Summa canister |
|                       |              |            |  |   |  | Tedlar Bag             |
|                       |              |            |  |   |  | 6 Liter Summa canister |
|                       |              |            |  |   |  | Tedlar Bag             |
|                       |              |            |  |   |  | 6 Liter Summa canister |
|                       |              |            |  |   |  | Tedlar Bag             |

Comments

Car B Delivered



Samples Relinquished By \_\_\_\_\_ Date/Time \_\_\_\_\_

Samples Relinquished By \_\_\_\_\_ Date/Time \_\_\_\_\_

Samples Received By \_\_\_\_\_ Date/Time \_\_\_\_\_

Samples Received in LAB by \_\_\_\_\_ Date/Time \_\_\_\_\_

4-4-14

10:50

4/4/14

Date/Time 1500





Monday, June 09, 2014

Attn: Mr. David Pelletier  
Jade Environmental, Inc.  
46 S Cross Road  
Lagrange, New York 12540

Project ID: 78 CROTON AVE  
Sample ID#s: BG52182

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller  
Laboratory Director

NELAC - #NY11301  
CT Lab Registration #PH-0618  
MA Lab Registration #MA-CT-007  
ME Lab Registration #CT-007  
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003  
NY Lab Registration #11301  
PA Lab Registration #68-03530  
RI Lab Registration #63  
VT Lab Registration #VT11301



Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 09, 2014

FOR: Attn: Mr. David Pelletier  
Jade Environmental, Inc.  
46 S Cross Road  
Lagrange, New York 12540

### Sample Information

Matrix: AIR  
Location Code: JADEENV  
Rush Request: 72 Hour  
P.O.#:

### Custody Information

Collected by:  
Received by: LK  
Analyzed by: see "By" below

### Date

05/30/14 6:45  
06/04/14 16:47

### Time

## Laboratory Data

SDG ID: GBG52182  
Phoenix ID: BG52182

Project ID: 78 CROTON AVE  
Client ID:

| Parameter                      | ppbv<br>Result | ppbv<br>RL | ug/m3<br>Result | ug/m3<br>RL | Date/Time | By  | Reference |
|--------------------------------|----------------|------------|-----------------|-------------|-----------|-----|-----------|
| <b><u>Volatiles (TO15)</u></b> |                |            |                 |             |           |     |           |
| 1,1,1,2-Tetrachloroethane      | ND             | 0.146      | ND              | 1.00        | 06/05/14  | KCA | TO15 1    |
| 1,1,1-Trichloroethane          | ND             | 0.183      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,1,2,2-Tetrachloroethane      | ND             | 0.146      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,1,2-Trichloroethane          | ND             | 0.183      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,1-Dichloroethane             | ND             | 0.247      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,1-Dichloroethene             | ND             | 0.252      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,2,4-Trichlorobenzene         | ND             | 0.135      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,2,4-Trimethylbenzene         | 38.1           | 0.204      | 187             | 1.00        | 06/05/14  | KCA | TO15      |
| 1,2-Dibromoethane(EDB)         | ND             | 0.130      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,2-Dichlorobenzene            | ND             | 0.166      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,2-Dichloroethane             | ND             | 0.247      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,2-dichloropropane            | ND             | 0.216      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,2-Dichlorotetrafluoroethane  | ND             | 0.143      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,3,5-Trimethylbenzene         | 11.7           | 0.204      | 57.5            | 1.00        | 06/05/14  | KCA | TO15      |
| 1,3-Butadiene                  | ND             | 0.452      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,3-Dichlorobenzene            | ND             | 0.166      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,4-Dichlorobenzene            | ND             | 0.166      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 1,4-Dioxane                    | ND             | 0.278      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| 2-Hexanone(MBK)                | ND             | 0.244      | ND              | 1.00        | 06/05/14  | KCA | TO15 1    |
| 4-Ethyltoluene                 | 7.16           | 0.204      | 35.2            | 1.00        | 06/05/14  | KCA | TO15 1    |
| 4-Isopropyltoluene             | 1.73           | 0.182      | 9.49            | 1.00        | 06/05/14  | KCA | TO15 1    |
| 4-Methyl-2-pentanone(MIBK)     | 2.59           | 0.244      | 10.6            | 1.00        | 06/05/14  | KCA | TO15      |
| Acetone                        | 111            | 0.421      | 264             | 1.00        | 06/05/14  | KCA | TO15      |
| Acrylonitrile                  | ND             | 0.461      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Benzene                        | 14.1           | 0.313      | 45.0            | 1.00        | 06/05/14  | KCA | TO15      |
| Benzyl chloride                | ND             | 0.193      | ND              | 1.00        | 06/05/14  | KCA | TO15      |

Client ID:

| Parameter                      | ppbv<br>Result | ppbv<br>RL | ug/m3<br>Result | ug/m3<br>RL | Date/Time | By  | Reference |
|--------------------------------|----------------|------------|-----------------|-------------|-----------|-----|-----------|
| Bromodichloromethane           | ND             | 0.149      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Bromoform                      | ND             | 0.097      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Bromomethane                   | ND             | 0.258      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Carbon Disulfide               | 1.10           | 0.321      | 3.42            | 1.00        | 06/05/14  | KCA | TO15      |
| Carbon Tetrachloride           | 0.080          | 0.040      | 0.503           | 0.25        | 06/05/14  | KCA | TO15      |
| Chlorobenzene                  | ND             | 0.217      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Chloroethane                   | ND             | 0.379      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Chloroform                     | 3.50           | 0.205      | 17.1            | 1.00        | 06/05/14  | KCA | TO15      |
| Chloromethane                  | ND             | 0.484      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Cis-1,2-Dichloroethene         | ND             | 0.252      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| cis-1,3-Dichloropropene        | ND             | 0.220      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Cyclohexane                    | 11.7           | 0.291      | 40.2            | 1.00        | 06/05/14  | KCA | TO15      |
| Dibromochloromethane           | ND             | 0.117      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Dichlorodifluoromethane        | 0.480          | 0.202      | 2.37            | 1.00        | 06/05/14  | KCA | TO15      |
| Ethanol                        | 11300          | E 0.531    | 21300           | 1.00        | 06/05/14  | KCA | TO15 1    |
| Ethyl acetate                  | 13.5           | 0.278      | 48.6            | 1.00        | 06/05/14  | KCA | TO15 1    |
| Ethylbenzene                   | 41.4           | 0.230      | 180             | 1.00        | 06/05/14  | KCA | TO15      |
| Heptane                        | 24.3           | 0.244      | 99.5            | 1.00        | 06/05/14  | KCA | TO15      |
| Hexachlorobutadiene            | ND             | 0.094      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Hexane                         | 19.6           | 0.284      | 69.0            | 1.00        | 06/05/14  | KCA | TO15      |
| Isopropylalcohol               | ND             | 0.407      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Isopropylbenzene               | 3.29           | 0.204      | 16.2            | 1.00        | 06/05/14  | KCA | TO15      |
| m,p-Xylene                     | 146            | 0.230      | 634             | 1.00        | 06/05/14  | KCA | TO15      |
| Methyl Ethyl Ketone            | 5.62           | 0.339      | 16.6            | 1.00        | 06/05/14  | KCA | TO15      |
| Methyl tert-butyl ether(MTBE)  | ND             | 0.278      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Methylene Chloride             | 0.370          | 0.288      | 1.28            | 1.00        | 06/05/14  | KCA | TO15      |
| n-Butylbenzene                 | 3.41           | 0.182      | 18.7            | 1.00        | 06/05/14  | KCA | TO15 1    |
| o-Xylene                       | 51.1           | 0.230      | 222             | 1.00        | 06/05/14  | KCA | TO15      |
| Propylene                      | 27.2           | 0.581      | 46.8            | 1.00        | 06/05/14  | KCA | TO15 1    |
| sec-Butylbenzene               | 1.48           | 0.182      | 8.12            | 1.00        | 06/05/14  | KCA | TO15 1    |
| Styrene                        | 0.730          | 0.235      | 3.11            | 1.00        | 06/05/14  | KCA | TO15      |
| Tetrachloroethene              | 6.74           | 0.037      | 45.7            | 0.25        | 06/05/14  | KCA | TO15      |
| Tetrahydrofuran                | ND             | 0.339      | ND              | 1.00        | 06/05/14  | KCA | TO15 1    |
| Toluene                        | 428            | 0.266      | 1610            | 1.00        | 06/05/14  | KCA | TO15      |
| Trans-1,2-Dichloroethene       | ND             | 0.252      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| trans-1,3-Dichloropropene      | ND             | 0.220      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Trichloroethene                | 0.110          | 0.047      | 0.591           | 0.25        | 06/05/14  | KCA | TO15      |
| Trichlorofluoromethane         | 0.600          | 0.178      | 3.37            | 1.00        | 06/05/14  | KCA | TO15      |
| Trichlorotrifluoroethane       | ND             | 0.130      | ND              | 1.00        | 06/05/14  | KCA | TO15      |
| Vinyl Chloride                 | ND             | 0.098      | ND              | 0.25        | 06/05/14  | KCA | TO15      |
| <b><u>QA/QC Surrogates</u></b> |                |            |                 |             |           |     |           |
| % Bromofluorobenzene           | 107            | %          | 107             | %           | 06/05/14  | KCA | TO15      |

Client ID:

| Parameter | ppbv<br>Result | ppbv<br>RL | ug/m3<br>Result | ug/m3<br>RL | Date/Time | By | Reference |
|-----------|----------------|------------|-----------------|-------------|-----------|----|-----------|
|-----------|----------------|------------|-----------------|-------------|-----------|----|-----------|

1 = This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters at this time.

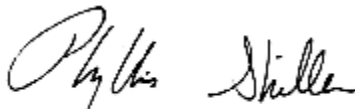
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected

BRL=Below Reporting Level

**Comments:**

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

This report must not be reproduced except in full as defined by the attached chain of custody.



**Phyllis Shiller, Laboratory Director**

**June 09, 2014**

**Reviewed and Released by: Greg Lawrence, Assistant Lab Director**



Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## QA/QC Report

June 09, 2014

### QA/QC Data

SDG I.D.: GBG52182

| Parameter   | Blank<br>ppbv | Blank<br>ug/m3 | LCS<br>% | Sample<br>Result<br>ug/m3 | Sample<br>Dup<br>ug/m3 | Sample<br>Result<br>ppbv | Sample<br>Dup<br>ppbv | DUP<br>RPD | %<br>Rec<br>Limits | %<br>RPD<br>Limits |
|---|---------------|----------------|----------|---------------------------|------------------------|--------------------------|-----------------------|------------|--------------------|--------------------|
| QA/QC Batch 276339, QC Sample No: BG52665 (BG52182) |               |                |          |                           |                        |                          |                       |            |                    |                    |
| <b>Volatiles</b>                                    |               |                |          |                           |                        |                          |                       |            |                    |                    |
| 1,1,1,2-Tetrachloroethane                           | ND            | ND             | 116      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,1,1-Trichloroethane                               | ND            | ND             | 109      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,1,2,2-Tetrachloroethane                           | ND            | ND             | 96       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,1,2-Trichloroethane                               | ND            | ND             | 106      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,1-Dichloroethane                                  | ND            | ND             | 98       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,1-Dichloroethene                                  | ND            | ND             | 93       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,2,4-Trichlorobenzene                              | ND            | ND             | 122      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,2,4-Trimethylbenzene                              | ND            | ND             | 101      | 28.4                      | 29.3                   | 5.79                     | 5.97                  | 3.1        | 70 - 130           | 20                 |
| 1,2-Dibromoethane(EDB)                              | ND            | ND             | 109      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,2-Dichlorobenzene                                 | ND            | ND             | 107      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,2-Dichloroethane                                  | ND            | ND             | 99       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,2-dichloropropane                                 | ND            | ND             | 101      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,2-Dichlorotetrafluoroethane                       | ND            | ND             | 106      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,3,5-Trimethylbenzene                              | ND            | ND             | 97       | 11.0                      | 11.1                   | 2.24                     | 2.26                  | 0.9        | 70 - 130           | 20                 |
| 1,3-Butadiene                                       | ND            | ND             | 94       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,3-Dichlorobenzene                                 | ND            | ND             | 104      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,4-Dichlorobenzene                                 | ND            | ND             | 109      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 1,4-Dioxane   | ND            | ND             | 106      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 2-Hexanone(MBK)                                     | ND            | ND             | 108      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| 4-Ethyltoluene                                      | ND            | ND             | 101      | 7.42                      | 8.20                   | 1.51                     | 1.67                  | 10.1       | 70 - 130           | 20                 |
| 4-Isopropyltoluene                                  | ND            | ND             | 100      | 1.48                      | 1.48                   | 0.270                    | 0.270                 | 0.0        | 70 - 130           | 20                 |
| 4-Methyl-2-pentanone(MIBK)                          | ND            | ND             | 103      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Acetone   | ND            | ND             | 94       | 92.8                      | 94.2                   | 39.1                     | 39.7                  | 1.5        | 70 - 130           | 20                 |
| Acrylonitrile                                       | ND            | ND             | 102      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Benzene   | ND            | ND             | 99       | 1.21                      | 1.24                   | 0.380                    | 0.390                 | 2.6        | 70 - 130           | 20                 |
| Benzyl chloride                                     | ND            | ND             | >140     | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Bromodichloromethane                                | ND            | ND             | 112      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Bromoform   | ND            | ND             | 120      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Bromomethane  | ND            | ND             | 95       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Carbon Disulfide                                    | ND            | ND             | 101      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Carbon Tetrachloride                                | ND            | ND             | 115      | 0.503                     | 0.566                  | 0.080                    | 0.090                 | 11.8       | 70 - 130           | 20                 |
| Chlorobenzene                                       | ND            | ND             | 94       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Chloroethane  | ND            | ND             | 95       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Chloroform  | ND            | ND             | 95       | 2.15                      | 2.15                   | 0.440                    | 0.440                 | 0.0        | 70 - 130           | 20                 |
| Chloromethane                                       | ND            | ND             | 90       | 1.18                      | 1.32                   | 0.570                    | 0.640                 | 11.6       | 70 - 130           | 20                 |
| Cis-1,2-Dichloroethene                              | ND            | ND             | 107      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| cis-1,3-Dichloropropene                             | ND            | ND             | 115      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Cyclohexane   | ND            | ND             | 96       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Dibromochloromethane                                | ND            | ND             | 120      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Dichlorodifluoromethane                             | ND            | ND             | 99       | 2.57                      | 2.57                   | 0.520                    | 0.520                 | 0.0        | 70 - 130           | 20                 |
| Ethanol   | ND            | ND             | 91       | 57.6                      | 61.4                   | 30.6                     | 32.6                  | 6.3        | 70 - 130           | 20                 |

## QA/QC Data

SDG I.D.: GBG52182

| Parameter                     | Blank<br>ppbv | Blank<br>ug/m3 | LCS<br>% | Sample<br>Result<br>ug/m3 | Sample<br>Dup<br>ug/m3 | Sample<br>Result<br>ppbv | Sample<br>Dup<br>ppbv | DUP<br>RPD | %<br>Rec<br>Limits | %<br>RPD<br>Limits |
|-------------------------------|---------------|----------------|----------|---------------------------|------------------------|--------------------------|-----------------------|------------|--------------------|--------------------|
| Ethyl acetate                 | ND            | ND             | 118      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Ethylbenzene                  | ND            | ND             | 101      | 2.08                      | 2.08                   | 0.480                    | 0.480                 | 0.0        | 70 - 130           | 20                 |
| Heptane                       | ND            | ND             | 93       | 1.72                      | 1.68                   | 0.420                    | 0.410                 | 2.4        | 70 - 130           | 20                 |
| Hexachlorobutadiene           | ND            | ND             | 85       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Hexane                        | ND            | ND             | 97       | 2.89                      | 3.10                   | 0.820                    | 0.880                 | 7.1        | 70 - 130           | 20                 |
| Isopropylalcohol              | ND            | ND             | 98       | 7.59                      | 7.76                   | 3.09                     | 3.16                  | 2.2        | 70 - 130           | 20                 |
| Isopropylbenzene              | ND            | ND             | 101      | 1.72                      | 1.77                   | 0.350                    | 0.360                 | 2.8        | 70 - 130           | 20                 |
| m,p-Xylene                    | ND            | ND             | 101      | 12.8                      | 13.0                   | 2.96                     | 3.00                  | 1.3        | 70 - 130           | 20                 |
| Methyl Ethyl Ketone           | ND            | ND             | 104      | 2.56                      | 2.53                   | 0.870                    | 0.860                 | 1.2        | 70 - 130           | 20                 |
| Methyl tert-butyl ether(MTBE) | ND            | ND             | 107      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Methylene Chloride            | ND            | ND             | 83       | 514                       | 535                    | 148                      | 154                   | 4.0        | 70 - 130           | 20                 |
| n-Butylbenzene                | ND            | ND             | 104      | 1.37                      | 1.37                   | 0.250                    | 0.250                 | 0.0        | 70 - 130           | 20                 |
| o-Xylene                      | ND            | ND             | 99       | 6.81                      | 6.86                   | 1.57                     | 1.58                  | 0.6        | 70 - 130           | 20                 |
| Propylene                     | ND            | ND             | 102      | 2.75                      | 4.11                   | 1.60                     | 2.39                  | 39.6       | 70 - 130           | 20                 |
| sec-Butylbenzene              | ND            | ND             | 97       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Styrene                       | ND            | ND             | 109      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Tetrachloroethene             | ND            | ND             | 107      | 3.46                      | 3.52                   | 0.510                    | 0.520                 | 1.9        | 70 - 130           | 20                 |
| Tetrahydrofuran               | ND            | ND             | 110      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Toluene                       | ND            | ND             | 104      | 407                       | 414                    | 108                      | 110                   | 1.8        | 70 - 130           | 20                 |
| Trans-1,2-Dichloroethene      | ND            | ND             | 98       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| trans-1,3-Dichloropropene     | ND            | ND             | 123      | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Trichloroethene               | ND            | ND             | 101      | 0.644                     | 0.644                  | 0.120                    | 0.120                 | 0.0        | 70 - 130           | 20                 |
| Trichlorofluoromethane        | ND            | ND             | 98       | 1.35                      | 1.40                   | 0.240                    | 0.250                 | 4.1        | 70 - 130           | 20                 |
| Trichlorotrifluoroethane      | ND            | ND             | 91       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| Vinyl Chloride                | ND            | ND             | 90       | ND                        | ND                     | ND                       | ND                    | NC         | 70 - 130           | 20                 |
| % Bromofluorobenzene          | 102           | 102            | 95       | 103                       | 103                    | 103                      | 103                   | 0.0        | 70 - 130           | 20                 |

I = This parameter is outside laboratory lcs/lcsd specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

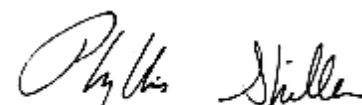
LCSd - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference



Phyllis Shiller, Laboratory Director  
June 09, 2014

Monday, June 09, 2014

Criteria: None

State: NY

## Sample Criteria Exceedences Report

### GBG52182 - JADEENV

Page 1 of 1

| SampNo | Acode | Phoenix Analyte | Criteria | Result | RL | Criteria | RL<br>Criteria | Analysis<br>Units |
|--------|-------|-----------------|----------|--------|----|----------|----------------|-------------------|
|--------|-------|-----------------|----------|--------|----|----------|----------------|-------------------|

\*\*\* No Data to Display \*\*\*

Phoenix Laboratories does not assume responsibility for the data contained in this report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

52182

JADE ENV.

5/30/14 78 Crofton Ave

START 11:00 AM +30<sup>IN</sup>

Stop 6:40 PM 6<sup>IN</sup>

G



