# SUPPLEMENTAL CHARACTERIZATION AND GROUNDWATER REMEDIATION STUDY

## FORMER DRUM STORAGE AREA
## ROWE INDUSTRIES SITE
## SAG HARBOR, NEW YORK

KRAFT HEINZ FOODS COMPANY, INC.

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# SIGNATURES

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# 1 INTRODUCTION

On behalf of Kraft Heinz Foods Company (Kraft), WSP USA (WSP) is providing the results of supplemental characterization work conducted in June 2018 and a feasibility study (FS) for treating the residual contaminants of concern (COCs) (primarily tetrachloroethylene) in the groundwater beneath the former drum storage area (FDSA) on the Rowe Industries Superfund Site (Site).

Further characterization efforts were conducted in the FDSA to delineate and quantify the residual contamination in December 2015 and June 2018 (Figure 1) and subsequently update/refine the extent of the residual COCs and clay lenses. The December 2015 characterization work determined that all saturated soil and most groundwater quality data were below Applicable or Relevant and Appropriate Requirements ARARs in the 12 borings (SB1 to SB12) that were drilled. The December 2015 characterization work did not identify hot spots of residual COCs on which to focus future remedial efforts beyond what was initially known. The summary of the December 2015 characterization effort was provided in the September 2017 report titled "Characterization of the Saturated Zone in the Former Drum Storage Area". The June 2018 characterization work was completed to locate hot spots of residual COCs within the FDSA to determine appropriate locations to focus future remedial efforts. The June 2018 characterization work is summarized in Section 2.3.

The purpose of this report is the following:

- To summarize the results of the June 2018 characterization work and update the conceptual site model;
- To evaluate potential remedial alternatives for treating the residual COCs in the FDSA; and
- To recommend a preferred remedial alternative for treating the residual COCs in the FDSA.

# 2 BACKGROUND

## 2.1 PREVIOUS UNSATURATED ZONE TREATMENT IN THE FDSA

Excavation of contaminated soil from the surface to four feet below grade was successfully completed in the FDSA in 1998. To treat the remaining contamination in the unsaturated zone, a soil-vapor extraction (SVE) system operated from 1998 to 2003. The combination of these two remedial efforts successfully treated the unsaturated zone of the FDSA.

In January 2005, LBG Hydrogeologic and Engineering Services, P.C. (LBGHES) submitted to the EPA a report titled "Addendum to Soil Remedial Action Report, Closure Request for Source Soils in the Former Drum Storage Area". This report described the activities and results that demonstrated soil quality in the unsaturated zone of the FDSA had achieved ARARs. The EPA approved this report as written. Therefore, the remaining cleanup efforts in the FDSA focus on treating COCs in the saturated zone.

As part of the information presented in the January 2005 report, exceedances of the ARAR for PCE in soil were identified from soil samples collected at borings C3-2 and C3-4 in January 2003. The residual PCE in these borings was located in the vadose zone (at depths below the annual high-water level such that they are in the saturated soil part of the year and are not considered part of the unsaturated soil). Therefore, that report concluded the residual contamination detected in the soil vadose zone would be better treated by the groundwater remedy. With that in mind, the location and information from these borings were evaluated as part of this FS and are included in the soil quality table (for saturated soil) and figures in this FS. The soil quality in the remaining borings that were advanced in January 2003 did not have concentrations of PCE in the soil above the ARAR.

## 2.2 PREVIOUS AND EXISTING SATURATED ZONE TREATMENT IN AND DOWNGRADIENT OF THE FDSA

In November 2000, the FP&T remediation system began operating with four focused recovery wells (FRW-1, 2, 3 and 4) in the FDSA. The primary objective of groundwater extraction from the FRW is to prevent COCs from migrating beyond the FDSA. In 2008, the FRW were rerouted so that extracted groundwater would be treated in the FSP&T system. Since 2000, on-going groundwater monitoring indicates that COCs have not migrated beyond the FDSA.

In December 2002, the FSP&T system consisting of nine recovery wells (RW-1 through RW-9), an equalization tank, bag filters, a tower air stripper and transfer tank were installed and began operation for the purpose of recovering dissolved-phase COCs in the groundwater plume downgradient from the FDSA. Initial FSP&T system influent PCE concentrations were 110 ug/L. By January 2011, all of the recovery wells (RW) on and downgradient of the Site had attained contaminant concentrations below ARARs. In accordance with the Site's consent decree, eight of the recovery wells located downgradient of the FDSA have been turned off with EPA approval between July 2005 and January 2014 once the water quality in the RWs had achieved ARARs for at least three consecutive years. Currently, FRW-1 thru 4, and RW-2 remain in operation.

In November 2004, approximately 10,800 lbs. of EHC® product, which contained a micro-scale zero-valent iron (ZVI) and a carbon nutrient source, was injected into the saturated zone of the FDSA to attempt to accelerate abiotic and anaerobic natural attenuation processes. The EHC injections facilitated limited degradation of PCE to cis-DCE and VC, however the injections did not lead to significant long-term reductions in COC concentrations. It

is believed that the viscosity of the EHC® product hindered subsurface distribution and prevented complete treatment of residual COCs beneath the FDSA.

COC concentrations in groundwater from the FDSA have decreased significantly as a result of past and current remedial efforts in the saturated zone beneath the FDSA. However, COC concentrations in groundwater persist at concentrations above ARARs. The remediation alternatives discussed in this report are intended to enhance remedial efforts to address groundwater quality in the FDSA.

## 2.3 JUNE 2018 CHARACTERIZATION WORK

In June 2018, WSP conducted work in the FDSA to improve the characterization of the lithology and identify the location and magnitude (i.e. concentration and areal extent) of residual COCs to facilitate an informed decision for future remediation efforts in the saturated zone of the FDSA. Section 2.3.1 describes the preparation activities completed prior to field work, and Section 2.3.2 describes the work conducted and methodology. Section 2.3.3 describes the results. Section 2.3.4 discusses the results and the updated conceptual site model. In addition to the June 2018 characterization work, results of groundwater samples collected in July, August and September as part of the monthly remedial system monitoring and annual groundwater monitoring are included in the discussion of the updated conceptual site model. The results are incorporated into tables and figures; the analytical reports were provided separately as part of the regular monthly and semi-annual reports.

### *2.3.1 PREPARATION FOR FIELD WORK*

Prior to drilling activities, Mrs. Christie Hagerman, who is one of the owners of 107 Laurel Lane (i.e. location of the FDSA), was notified in writing in a letter dated June 1, 2018, of WSP's intent to conduct subsurface investigation activities on her property. The written request was followed by a telephone call on June 12, 2018 to discuss the intended work and to insure the owner was comfortable with the work that was proposed on her property. The site-specific health and safety plan (HASP) was reviewed and updated for the drilling and sampling activities being conducted. The WSP Sr. Hydrogeologist reviewed the relevant task-specific safety procedures with WSP field staff (drill rig safety, appropriate personal protective equipment (PPE), etc.). New York One-Call was contacted to obtain utility clearance for the drilling work and the FP&T system was turned off prior to beginning the work.

### *2.3.2 WORK CONDUCTED AND METHODOLOGY*

On June 18, 2018, WSP advanced seven soil borings (SB13 to SB19) using direct push (Geoprobe®) drilling techniques to an explored depth ranging from 28 to 33 feet below grade (ft bg) (Figure 1). To minimize disturbance of the work area, plywood was placed in the path of the Geoprobe® rig to minimize lawn damage. Prior to using the drill rig at SB18 and SB19, a combination of hand-digging and a high-vacuum extraction truck were used to remove soil to a depth of 4 ft bg to facilitate clearance for drilling in these two locations to avoid drilling through the below-grade lateral pipes associated with the FP&T system. Boring logs are provided in Appendix I

In the remaining five boring locations, a 3.25-inch diameter probe rod (riser) was advanced to approximately 4 ft bg. A four-foot long sample sheath containing the plastic liner with integrated core catcher was advanced through the cutting shoe beyond the probe rod to collect soil samples. The plastic liner was subsequently

retracted through the probe rod, which remained in place. Once the soil sample was collected, the riser was then advanced another four feet and the process repeated.

Soil samples were collected continuously from approximately 4 ft bg up to 33 ft bg. At each boring a hydrogeologist visually inspected the soil cores, logged the soil lithology and screened the soil for VOCs with a calibrated photoionization detector (PID) equipped with a 10.6 electron volt (eV) bulb. The soil type, color, field estimate of moisture content, field instrumentation readings, evidence of soil contamination (staining, odors, etc.) and sampling interval were recorded on soil boring logs; copies of which are attached in Appendix I.

Sixteen soil samples from the saturated zone were collected from seven borings at depths ranging from 22 to 33 ft bg. At least one soil sample with low permeability and one sample with high permeability was collected at each boring. Samples were stored on ice, preserved as needed and transported to a certified laboratory under standard chain-of-custody procedures. Sixteen soil samples were analyzed for VOCs via EPA Method 8260, seven soil samples (one from each boring) were analyzed for total organic carbon (TOC) via Method SW9060 and ten soil samples were analyzed for soil oxidant demand via ASTM Method D7262-07.

On June 19, 2018, groundwater sampling was conducted at monitor wells MW-98-01A, MW-98-04 and MW-98-05BR to assess the groundwater quality in these wells located within or immediately downgradient of the FDSA. The original intent was to collect a groundwater sample at MW-98-05AR (not MW-98-05BR); however, the sampler mistakenly collected samples from MW98-05BR. Historic results for MW98-05AR and results from MW98-01 were used to evaluate groundwater quality in the FDSA. Dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, temperature, turbidity and conductivity were evaluated and documented in the field using a calibrated Horiba flow-through cell. Ferrous iron concentrations were evaluated with a field kit at monitor wells MW-98-01A and MW-98-04 on June 20, 2018. Groundwater samples were collected at FRW-1, 2 and 3 for nitrate and nitrite on July 2, 2018.

The groundwater samples were stored on ice, preserved as needed and transported to a certified laboratory under standard chain-of-custody procedures. The groundwater samples were analyzed at the laboratory for VOCs via EPA Method 8260, TOC via SM5310B (00, 11), total and dissolved iron via SW846 6010C, sulfate, nitrate and nitrite via EPA Method 300.0, sulfide via SM4500S-D-11, dissolved methane, dissolved ethene and dissolved ethane via Method RSK-175. An equipment blank and trip blank were collected and analyzed for VOCs for quality assurance/quality control purposes.

All site activities were documented in field notes, geologic logs, low-flow logs and/or photographs. All instrumentation used for the measurement of field parameters (i.e. PID and Horiba) were calibrated daily prior to use and cleaned/decontaminated at the end of each work day, as necessary.

Drilling and/or sampling equipment was decontaminated between each boring and/or sampling location and all purge water was discharged to the on-site treatment system. Used PPE and plastic liners were placed in labelled drums that will be temporarily stored on site and disposed of off-site pursuant to applicable state and federal regulations. Drilling activities that damaged the lawn was re-graded/repaired and re-seeded, as needed.

### *2.3.3 RESULTS*

Geology and Hydrogeology

Soil samples logged in the FDSA were identified mostly as fine to coarse sand with smaller amounts of silt and clay. Boring logs are provided in Appendix I. One fairly continuous clay and silt lens, which is considered the primary lens in the FDSA, exists in the saturated zone at an elevation ranging from approximately -3 ft to 2 ft above mean sea level (amsl). The thickness of the primary lens ranges from approximately 0.3 to 2.8 ft. Several smaller, discontinuous clay and silt lenses exist above the primary lens; most of these smaller clay and silt lenses are located at or below the groundwater table (Figures 2 and 3). The locations of the cross sections shown in Figures 2 and 3

are shown on Figure 1. The thickness of these smaller lenses ranges from approximately 0.3 to 2.0 ft. Figures 2 and 3 depict a low and high groundwater table for water levels collected from 2003 to 2018 at monitor wells MW-98-01A, MW-98-04/04B, MW-98-05A/AR, MW-98-05B/BR, MW-45A and MW-45B located in or immediately adjacent to the FDSA. The groundwater elevations are presented in tabular form in Table 1. The groundwater elevations from 2003 to 2018 range from approximately 6.1 ft amsl to 13.6 ft amsl. Additional discussion for groundwater elevations as it relates to residual PCE contamination is provided in Section 2.3.4. From previous semi-annual and annual reports, the general direction of groundwater flow in the FDSA is to the northwest.

Soil Quality

The results of the soil sampling from 2018 are presented in Table 2 along with samples collected in 2015 for reference. A total of 16 samples were collected from 7 borings during the June 2018 investigation. PCE was detected in 5 of 16 samples and the detected concentration exceeded the ARAR (1.5 mg/kg) in 1 sample (630 mg/kg) taken at a depth of 23-24 ft bgs (9-10 ft amsl) at location SB-13. The soil quality results for VOCs in the remaining samples collected on December 2015 and June 2018 (56 samples from 19 borings) were below ARARs and, in many cases, were below the laboratory reporting limits.

The TOC in the soil samples collected on December 2015 and June 2018 ranged from 1,000 mg/kg to 36,000 mg/kg (Table 2). Permanganate soil oxidant demand (SOD), which was evaluated for 10 samples collected during the June 2018 characterization event, ranged from 99 mg/kg to 14,333 mg/kg and 116 to 17,199 mg/kg on a wet and dry weight basis, respectively. The laboratory report for soil samples collected in June 2018 are provided in Appendix II.

Groundwater Quality

The results of groundwater samples collected in June 2018 are summarized in Table 3 (geochemistry results) and Tables 4 and 5 (VOC results) along with historic results from the sampled wells. The results for total and dissolved iron in the groundwater from 2004 to 2018 at monitoring wells MW98-01A, MW98-04, MW98-05A and MW98-05BR, and FRW-1, 2, 3 and 4 ranged from less than 10 ug/L to 150,000 ug/L. Ferrous iron ranged from less than 25 ug/L to 12,800 ug/L. Sulfate and sulfide concentrations in the groundwater ranged from less than 1 ug/L to 69,300 ug/L. Nitrate and nitrite concentrations in the groundwater ranged from 82 ug/L to 1,020 ug/L. TOC concentrations in the groundwater ranged from 942 ug/L to 307,000 ug/L. Methane, ethane and ethene concentrations in the groundwater ranged from less than 3 ug/L to 7.1 ug/L.

The results for COCs (PCE, TCE, 1-2-DCE, TCA) from the groundwater sampling conducted at monitor wells MW-98-01, MW-98-04 and MW-98-05BR on June 19, 2018 were below their respective ARAR. These results are in line with historic results which have ranged between non-detect and 2,400 ug/L since monitoring began in 1998.

Laboratory reports for June and July 2018 groundwater quality are included in Appendix II. The data from the September 2018 semi-annual monitoring event will be provided in the Semi-annual monitoring report.

Quality Assurance Quality Control (QA/QC)

Soil and groundwater samples were collected and submitted with the preservative needed and within the hold time limit under standard chain-of-custody procedures; with any noted exceptions provided in the comments for a specific laboratory report provided below. A summary of quality assurance/quality control (QA/QC) for the laboratory reports is provided below.

Laboratory Report 18F0837 (York - Soil Samples – Report No. 18F0837)

Surrogate recovery for toluene was outside of the established control limits for soil samples SB13 (23-24), SB17 (26-27) and SB19 (27-29) because of a sample matrix interference effect. The samples were re-extracted and re-analyzed to confirm this effect. The matrix interference effects can reduce the reliability of the data, however, because of the magnitude of the detected concentrations for toluene, the results are considered to be usable for feasibility study purposes. For soil sample SB14 (26-28), the sample was diluted because of the presence of high concentrations of non-target analytes resulting in elevated reporting limits above the ARARs. This information was factored into the evaluation for this FS by including boring SB14 within the boundary of where the PCE concentration exceeded the ARAR; as shown on Figure 1.

The relatively low concentrations of acetone and methylene chloride were estimated values because of their behavior during initial calibration. Acetone is commonly used for cleaning purposes in laboratory equipment and is considered a laboratory artifact at the noted estimated concentration range. The remaining QA/QC for this laboratory report did not reveal any other issues.

Laboratory Report (Terra Systems SOD Soil Samples – a report number is not provided on the documentation)

The SOD data were evaluated without any QA/QC issues being identified relative to ASTM Standard D7262.

Laboratory Report (Eurofins Groundwater Samples – Report No. SC47887)

For Quality Assurance/Quality Control (QA/QC) purposes, one trip blank (TB) and one equipment blank (EB) were analyzed. TBs are preserved vials prepared by the laboratory with DI water and shipped with the sample vials. The TB was carried by the sampling hydrogeologist with her vials, and then returned to the laboratory for analysis in order to rule out inadvertent exposure of the vials or samples to VOCs. The results of the TB indicated all VOCs were below laboratory reporting limits.

The sampling hydrogeologist collected an EB by running DI water through tubing and equipment in the field following the same procedures as the collection of groundwater samples with clean, single-use tubing. The EB was then submitted to the laboratory for analysis in order to rule out any contamination from the tubing or equipment. The results of analysis of the EB show that low, estimated concentrations of acetone, chloromethane and methylene chloride were detected. The presence of acetone may be the result of a laboratory artifact. Regardless, the presence of these compounds at the low concentrations reported is not expected to be an issue for the purposes of this FS. The remaining QA/QC for this laboratory report did not reveal any other issues.

### *2.3.4 DISCUSSION AND CONCEPTUAL SITE MODEL*

Groundwater concentrations continue to persist at concentrations above ARARs for PCE and to a lesser extent its breakdown products. PCE concentrations range from non-detected to 1,100 ug/L in the FDSA since January 2013. FRW-1 has the highest average and range of concentrations over the past 5 years, followed by FRW-3, FRW-2 and FRW-4. Concentrations have shown a regular annual fluctuation with higher concentrations in winter/spring and lower concentrations in summer/fall (Graphs 1-4). This is true even when the system is not operating for an extended period of time. In 2012/2013, the FRWs were off-line from September 2012 to June 2013 and during that period concentrations increased through the fall, peaked in March and began decreasing until the FRW were reactivated in June. The FRWs were off-line from July 2 through September 21, 2018 and during this period PCE concentrations range from ND to 49 ug/L in samples collected from the FRW and ranged from 2.6 to 20 ug/L in samples collected from the FRW and FDSA wells during the September 2018 Semi-Annual monitoring event.

Pre-FP&T system startup groundwater elevations ranged from 10 ft amsl to 6.5 ft amsl (Graph 5). Similarly, over the period from September 2013 to September 2018, water levels have fluctuated between a range of 10 ft amsl to 6.5 ft amsl in the monitoring wells around the FDSA with higher water levels in the winter/spring and lower levels in the summer/fall. This agrees with the water level pattern and range identified by water level measurements collected in 1999 before the operation of the FRWs. Water levels measured at the FRWs and MW-98-05AR within the FDSA range between 0 and 9.5 ft amsl while the FRW pumps are in operation. The combination of the natural, seasonal fluctuation of the groundwater and operation of the FRWs leads to the development of a partially saturated zone located around the FRW within the FDSA. This zone is approximately the horizontal extent of the capture zone around the FRWs and vertically between 4 and 10 ft amsl.

The additional soil investigation in June 2018 was intended to identify potential PCE remaining in the subsurface that is contributing to on-going elevated groundwater concentrations in the FDSA. Previous soil investigations in 2000-2003 concluded that PCE is no longer present in the unsaturated zone above the normal high ground water level (approximately 10 ft amsl). PCE concentrations above ARARs were identified in low permeability soils at depths within the normal range of groundwater fluctuation between 6 and 10 ft amsl at C3-2 (2 to 230 mg/kg) and C3-4 (1.8 mg/kg) in soil samples collected between 2000 and 2003. In 2015, additional soil sampling was conducted within the FDSA around the FRWs at the edges of the FRW capture zone. Twelve soil borings were installed and 40 soil samples were collected and all PCE was below ARARs in all samples. The additional subsurface investigation work conducted in June 2018 targeted soil in the naturally saturated zone below 10 ft amsl and immediately around and between the FRW. One soil sample contained an elevated PCE concentration (630 mg/kg) at boring SB13 at a depth of approximately 23 to 24 ft bg or 8-9 ft amsl (SB13 23-24) in soil from the same small silt and clay lens as C3-2 samples from 2000-2003.

The soil data collected in 2000-2003, 2015, and 2018, the range of groundwater PCE concentrations observed in FRWs, and the results of extended periods of FRW shut-down in 2010, 2013 and 2018 suggest that some amount of PCE remains in a partially saturated subsurface zone around the FRWs. Water in the subsurface comes in contact with these remaining pockets of PCE through natural fluctuations in the groundwater table, artificial fluctuations in the groundwater table due to FRW operation, and infiltration of precipitation. Since concentrations in the FRW wells are typically higher in the winter/spring and lower in the summer/fall, this suggests that the above saturation factors combine to saturate soil zones where PCE remains in the winter/spring and combine to prevent saturation of elevated PCE soil zones in the summer/fall.

Specifically, the data collected to date suggests that elevated PCE in the partially saturated soil between 6 ft amsl and 10 ft amsl around FRW-1 and to a lesser extent FRW-2 and FRW-3 is causing the persistent elevated PCE concentrations in groundwater. PCE may exist in other locations in the regularly saturated zone (below 6 ft amsl), but do not result in elevated PCE in groundwater.

The results of the geochemistry and soil property data collected in 2018 provide information that will aid in evaluating remedial measures to address the identified areas of remaining residual COCs.

- The TOC soil results suggest high organic content at a depth of approximately 23 to 24 ft bg in boring SB13 (36,000 mg/L). The high organic content could be the result of organic-rich soil and/or elevated concentrations of residual COCs. The remaining TOC values were within normal ranges for soil.
- Permanganate SOD soil results provide helpful information to assist in determining doses of chemical oxidant, such as permanganate, to inject into the FDSA. A wide range of SOD values were measured in the FDSA with higher values in the low permeability soils (> 2,000 mg/kg) and lower values (< 2,000) measured in the high permeability soil. Soils with higher SOD will require higher oxidant dosing to overcome the natural oxidant demand from the aquifer. Residual PCE within the partially saturated soil horizon is expected to be in the lower permeability soils based on the CSM. The higher SOD results in low permeability soil indicate a higher dosing or multiple doses of the chemical oxidant would be needed to overcome the natural oxidant demand in the aquifer and effectively address residual PCE.

- Groundwater quality data for geochemical and field screening parameters collected in June 2018 indicate that upgradient and downgradient of the FDSA are generally characterized by low dissolved oxygen and conditions within the FDSA near the FRW are hypoxic (ORP < 200, low DO).

# 3 REMEDIAL ALTERNATIVES

As discussed in Section 2, SVE and excavation have been previously implemented to address the unsaturated soil in the FDSA. Since 2000, groundwater extraction and treatment has been implemented to address saturated soil and groundwater in the FDSA. In 2005, in-situ chemical reduction was implemented to supplement the groundwater extraction and treatment. Based on results from recent monitoring of the FDSA groundwater during dry/low flow conditions in the fall/summer, regularly saturated zones in the subsurface have been remediated such that concentrations are near ARARs without operation of the FRW. Additionally, results from soil sampling near the FRW indicate that remaining elevated concentrations of PCE are located within the soil zone from 6 – 10 ft amsl; this zone is only partially saturated throughout the year depending on FRW efficiency, infiltration and natural water table fluctuations. Typically, the highest water table and infiltration occur in the winter/spring which is when elevated PCE have been observed. To address the remaining PCE in saturated soil in the FDSA, two technologies were evaluated: 1) in-situ chemical oxidation; and 2) in-situ enhance reductive dechlorination.

As noted in the 1992 ROD, groundwater clean-up to MCLs is not always feasible under certain Site conditions. In the case of the Rowe Industries Site, multiple technologies have been successfully implemented over the past 30 years to reduce contaminant mass and meet the groundwater clean-up objectives over more than 99% of the original plume area. During that time, local ordinances and public water supply connections have removed the drinking water exposure pathway and significantly reduced the risks associated with groundwater concentrations above MCLs. With this in mind, the goal of the selected remedial action will be to reduce concentrations of PCE in the saturated zone around the FRWs at the Site. With the overall goal of preventing migration of COCs downgradient of the Rowe Industries Superfund Site at concentrations above ARARs through the source control actions described below followed by long-term monitoring to verify that COCs above MCL are contained to the Site.

The following subsections describe in-situ chemical oxidation (Section 3.1) and in-situ reduction (Section 3.2), selection of the optimal technology based on effectiveness, implementability and cost under site conditions (Section 3.3) and describe the scope for implementation and monitoring of the selected remedial alternative (Section 3.4).

## 3.1 CHEMICAL OXIDATION WITH IN-SITU INJECTION

Remediation of soil impacted with COCs using in situ chemical oxidation (ISCO) involves injecting or mixing oxidants and potentially co-amendments directly into the impacted media. Under proper conditions oxidants yield reactive species that can transform and often mineralize many COCs, including PCE. With chemical oxidation, the substrate loses electrons and is oxidized, while the oxidant gains electrons and is reduced. The oxidant chemicals react with the contaminants present in the soil, producing innocuous substances such as carbon dioxide, water, and in the case of chlorinated compounds, inorganic chloride. Chlorinated solvents (e.g., ethene and ethanes) are amenable to treatment by ISCO.

In addition to reacting with contaminants, ISCO oxidants can also consume natural organic matter in the soil. Soil Oxidant Demand (SOD) testing was conducted during the June 2018 investigation and indicated that natural organic matter in the aquifer imparts low to moderate SOD in the high permeability zones and moderate to high SOD in the low permeability zones. As the natural organic matter is consumed, contaminants sorbed to the natural organic matter will be released. The migration of COC will depend upon the permeability of the soil being treated and the oxidant injected. The less permeable the soil, the lower the chance for migration in groundwater because the oxidant has more time to react with the COCs. SOD will need to be considered when designing the dosing for an ISCO implementation.

Injection of oxidants can also temporarily increase the solubility of certain metals resulting in increased concentrations in the surrounding groundwater. This phenomenon is most significant when the natural aquifer conditions are reducing and typically only lasts until redox conditions return to normal. The groundwater monitoring program can be adjusted to include metals testing if metals migration is a concern.

ISCO has been commonly implemented using the following reagents: permanganate, persulfate, catalyzed hydrogen peroxide (Fenton's Reagent) and Ozone. These reagents have been used to treat chlorinated ethenes at a number of sites and the specific reaction chemistry is readily available in various guidance documents. ISCO is typically used for mass removal/source treatment in the saturated zone and, like other in-situ methods, will meet low RAOs (i.e. MCLs) in conjunction with other remedies like MNA. Proper reagent selection is the key to successful ISCO implementation. The reagent is selected based on the target contaminant(s), reagent properties and site conditions. Ozone and fenton's reagent are extremely reactive and therefore only persist in the environment for minutes to a few hours. Based on the CSM, ozone and fenton's reagent are expected to react before contacting COCs present in low permeability soils. Additionally, gas and heat generation are concerns given the proximity of buildings to the injection site. Persulfate is highly reactive but more persistent than ozone or fenton's reagent and more selective (less impacted by SOD) than permanganate. Similar to fenton's reagent, persulfate requires activation under specific conditions (low pH with ferrous iron or high pH with high temperature) and can cause aquifer clogging due to metals precipitation. Permanganate is the most persistent chemical oxidation product, does not require activation and is effective over a wide range of aquifer conditions. Permanganate is more susceptible to natural organic matter, can cause clogging due to precipitation, but typically only when used to treat NAPL, and can impart a purple color to groundwater until permanganate is exhausted.

Based on the conditions in the FDSA, permanganate is expected to be the most effective reagent. Permanganate can be applied as a liquid via gravity, soil mixing, or pressurized injection. Given the depth to the target treatment zone (20-25 ft bgs) and the site setting, surficial gravity and soil mixing applications are not appropriate. Pressurized injection through direct push well screens or new/existing wells will allow for the best distribution of reagent and can create new preferential pathways to access low permeability zones. Injection through existing wells could include batch injection or recirculation of the reagent using the existing extraction system infrastructure. Solid permanganate can also be injection through hydraulic or pneumatic fracturing techniques but are not expected to be as effective as liquid injection.

## 3.2 ENHANCED REDUCTIVE DECHOLORINATION PROCESS

Enhanced Reductive Dechlorination processes include chemical reduction or microbial reduction. In both cases, chlorinated compounds are degraded to non-toxic daughter products under reducing conditions. With chemical reduction, electrons are transferred from the reductant to the substrate. The substrate gains electrons and is reduced, while the reductant loses electrons and is oxidized. The chemical structure of the chlorinated solvent determines how susceptible it will be to reduction or oxidation. In general, solvents with carbon atoms that are electron rich are more susceptible to oxidation; carbon atoms that are electron deficient are more susceptible to reduction. The more chlorines added to a solvent molecule the more oxidized it is and the more resistant it is to further oxidation but the more susceptible to reduction.

ZVI has been employed successfully in low pH environments as a stand-alone remedy to support abiotic VOC degradation. Chemical reduction of the VOCs can occur on the ZVI particle surface, and hydrogen produced during iron corrosion can serve as an electron donor for biological dechlorination. In addition, hydroxyl ions produced from corrosion of ZVI increase pH within the treatment area to levels favorable for biotic dechlorination. This abiotic process is suited to aquifers that have relatively high accumulation of daughter products. β-*elimination* mechanisms promoted by ZVI would typically not accumulate daughter products, as the degradation pathways bypass the production of cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride.

Chlorinated volatile organic compounds (CVOCs) can also be degraded by anaerobic microbes known as reductive dechlorinators to non-toxic daughter products. Such biodegradation requires reducing conditions to stimulate anaerobic bacteria to dechlorinate the CVOC. The approach is designed to provide a carbon or electron donor source to create reducing conditions necessary to enhance anaerobic biodegradation. Examples of effective electron donors that degrade the chlorinated VOCs when delivered to the subsurface include molasses/water mixture, whey, high fructose corn syrup, or sodium lactate. Such anaerobic bioremediation processes have been successful and well documented at a wide variety of sites, and guidance documents are available that describe the process in detail.

The anaerobic microbes use CVOCs during dehalorespiration via reductive dechlorination. There are a variety of bacteria that dehalorespire only on tetrachloroethene (PCE) or trichloroethene (TCE), producing toxic cis-1,2-dichloroethene (cDCE) in the process. In contrast, the dechlorinating microorganisms Dehalococcoides (Dhc) are the only known microorganisms capable of further dechlorination to non-toxic ethene. Although Dhc microorganisms are widely distributed in the environment, research indicates that they are not ubiquitous. If Dhc is absent from a site, incomplete dechlorination and accumulation of cDCE is anticipated to occur, or extended acclimation periods will be required to allow low concentrations or poorly distributed Dhc populations to achieve functional cell densities. If the results of groundwater monitoring during the course of anaerobic bioremediation indicate insufficient Dhc bacterial populations, then the biostimulation is often combined with bioaugmentation using commercially-available microbes.

Under this remedial approach, the microbes sequentially dechlorinate the CVOCs and gain energy in each step, while utilizing the substrate as a carbon source and the CVOC as an electron acceptor. The adapted microbes respire using the CVOCs in place of other electron acceptors such as oxygen. The areas in which substrate is delivered become anaerobic due to the uptake of available electron acceptors to support respiration of the microbes, which provides the environment required for the bioremediation process to take place. Similar to ISCO, ERD is effective for specific site conditions.

In order to effectively anaerobically bioremediate a particular area, it is critical to:

- Select the optimal chemical additives.
- Properly distribute the chemical and biological additives to stimulate the dechlorination process within the contaminated area.
- Bioaugment (if necessary) the site with dechlorinating microbes.
- Maintain the enhanced subsurface conditions for sufficient time to fully dechlorinate the dissolved and adsorbed CVOCs.

**Injection Approaches**

Batch injections of relatively high strength but sparingly soluble carbon amendments, such as emulsified vegetable oils, can be slowly released and can offer electron donor that can subsequently travel with the groundwater for a limited distance and be distributed downgradient of the injection point. Alternatively, batch injections of relatively low strength but soluble carbon amendments (such as lactates and sugars) can be released more rapidly and transported relatively greater distances downgradient.

Chemical reduction by amendments such as zero valent iron (ZVI) have the advantage of being able to treat high concentrations of CVOCs while producing limited amounts of intermediates, such as vinyl chloride. Biological reduction by amendments such as emulsified vegetable oil (EVO) or lactates have the advantage of being able to treat low concentrations of CVOCs. The state of the soil and groundwater remediation practice is evolving, in recognition that combining chemical and biological reduction can function synergistically by creating a reducing environment that thermodynamically promotes biological reductive dechlorination. This combined approach is

intended to promote rapid abiotic degradation within the zone of influence, and to also enhance long-term biological dechlorination.

Additionally, ERD can be supplemented through the use of activated carbon technologies to capture contaminants and treat them within the activated carbon matrix. The same conditions and amendments noted above would be needed to facilitate ERD with activated carbon. In general, activated carbon has a high surface area per unit volume; therefore, it has the potential for many COC molecules to adhere to its surface. This property (i.e. high surface area) can be beneficial during the degradation step.

One activated carbon product is Plumestop® Liquid Activated CarbonTM manufactured by Regenesis. Plumestop® is composed of very fine particles of activated carbon (1 to 2 µm) suspended in water through the use of unique organic polymer dispersion chemistry. In the subsurface, the material behaves as a colloidal biomatrix binding to the aquifer matrix and removing contaminants from groundwater. Once contaminants are sorbed onto the regenerative matrix, biotic and abiotic degradation processes can degrade the contaminant under proper conditions. Use of activated carbon for in-situ treatment of CVOCs is still a relatively new approach which is typically used to cut-off plumes while other source area treatment is implemented. This technology is designed for inhibiting migration of contaminants in the aqueous phase but treatment is only accomplished if proper reducing conditions can be established and maintained in the locations where contaminants reside in the subsurface. Biofouling can also close off surface activation sites limiting the capture of the injected activated carbon. Given the potential for biofouling, potential side effects from dispersion chemicals and lack of dissolved plume at the Site, addition of activated carbon is not considered necessary for this application.

Delivery methods include batch injection and recirculation injection approaches. Batch injections are typically most effective under conditions where naturally reducing or hypoxic/anoxic conditions are already in place. In the case of the FDSA, natural aquifer conditions around the FDSA are generally aerobic and hypoxic within the FDSA. To off-set the influx of potentially aerobic groundwater from upgradient, additional injection points are needed to ensure anaerobic conditions in the target treatment area. Continuous and recirculation injection methods are more aggressive approaches for distributing carbon amendments and can aid in maintaining proper pH and carbon amendment levels. However, the continuous addition of carbon substrate can lead to biofouling of wells which is already an issue with the FRW in the FDSA. Additionally, recirculation systems have a high capital, operation and maintenance cost which make these systems cost effective only for larger sites.

# 4 RECOMMENDATION

Many CVOCs can be degraded via oxidative and/or reductive processes. Accordingly, various oxidizing and reducing agents have been developed to remediate CVOC-impacted groundwater. These reagents have differing features in terms of safety, ease of use, longevity, dosing requirements, and remedial efficacy. There are also situations when the different technologies can be successfully combined (e.g., applying in-situ chemical oxidation [ISCO] within a source area coupled with an in-situ chemical reduction [ISCR] permeable reactive barrier for plume control).

Important factors to consider when selecting a remedial approach include: the type of application (source removal, plume control or both), possible presence of free product, desired remedial timeframe, longevity of the material in the subsurface/reaction kinetics, and secondary environmental impacts. The contaminant profile also needs to be considered. ISCR is effective in treating a wide range of halogenated compounds, but not very effective for treatment of petroleum-based hydrocarbons. The reactivity of ISCO technologies toward different contaminants are diverse and dependent upon activators and application technique.

In general, if the targeted environment is hypoxic (oxygen limited), it seems intuitive to employ an ISCR strategy. Conversely, an ISCO strategy would likely be more effective in an oxic environment. Chemical oxidants will oxidize natural organics and reduced inorganics, and the ISCO loading requirements will therefore be higher for soils with high organic carbon content. Particularly for soils with relatively low CVOC concentrations, ISCO may become cost prohibitive if the CVOC oxidant demand represents a relatively small fraction of the total oxidant demand of the soil. In contrast, the presence of competing electron acceptors such as oxygen, nitrate, iron(III), manganese and sulfate increase ISCR loading requirements.

Oxidants with relatively slow reaction rates (such as permanganate) theoretically help mitigate back diffusion from low permeability media. However, rate of oxidant diffusion into these low permeability zones is typically extremely slow compared to the rate of reaction and thus the penetration distance is very limited. This would be exacerbated in the FDSA where SOD testing suggests that low permeability soils have high natural oxidant demand. To achieve effective distribution of an oxidant throughout a treatment zone and the essential contact of oxidant with target CVOCs, normally two or more active delivery events are required within the target treatment zone.

In-situ bioremediation (ISB) has promise to treat less accessible regions because some electron donors (emulsified vegetable oil, for example) can persist and diffuse into less permeable materials over time. ISB is a promising approach to manage the slow release of CVOCs from less transmissive regions because of the long-duration effects of ISB treatment. In fact, ISB may be well-suited for treating less permeable regions, given the low influxes of oxygen and other electron acceptors and the potential for electron donors to diffuse into these regions. ISCR is often implemented in combination with ISB. Combinations of zero valent iron (ZVI) with electron donors such as lactate or emulsified vegetable oil are commercially available and offer the potential for rapid chemical degradation of the most accessible contaminants (and other electron acceptors) combined with longer-lasting bioremediation. Addition of ZVI may result in sustained reductions in the oxidation–reduction potential (ORP) that can enhance subsequent anaerobic biodegradation. ISCR is also useful at sites where initial contaminant concentrations are too low to solely support a bioremediation approach (such as is likely the case at the Rowe Industries Superfund Site).

Both ISCR/ISB and ISCO approaches may be effective in remediation of CVOC-impacted groundwater at the Rowe Industries Superfund Site. However, based on the foregoing, the relatively low measured dissolved oxygen (DO) content of groundwater in the FDSA wells (generally less than 2 milligrams per liter [mg/L]) and high natural oxidant demand of the low permeability soils, it can be concluded that ISCO approaches would likely require a greater number of injection events (with greater associated costs) than ISCR/ISB approaches. Therefore, the recommended approach is implementation of ISCR/ISB to treat CVOC-impacted groundwater at the Rowe Industries Superfund Site.

## 4.1 RECOMMENDED REMEDIAL DESIGN

The ISCR/ISB injections will be implemented within the approximate 2,000 square foot area identified on Figure 6. The recommended vertical treatment zone would extend from approximately 16 feet below ground surface (bgs) to the top of the primary clay lens underlying the FDSA.

The recommended ZVI application rate is equivalent to approximately 0.2 weight percent with respect to soil within the treatment zone. Assuming a soil density of 100 pounds per cubic foot, this ZVI application rate equates to a ZVI mass of approximately 5,800 pounds. The accompanying carbon substrate would contain a mixture of glycerol, fatty acids, and a phosphate pH buffer. The carbon substrate would be mixed as a 15-weight percent solution with water to form approximately 5,800 gallons (i.e., 14,500 pounds). This volume is equivalent to approximately 10 percent of the target treatment pore space, assuming an effective aquifer porosity of 25 percent. These numbers may be modified based on further discussion with the remedial contractor and conditions encountered in the field.

The addition of ZVI to the carbon substrate provides a number of advantages for enhanced reductive dechlorination. The ZVI will provide an immediate reduction in oxidation-reduction potential. The carbon substrate will provide short-term and long-term nutrients to support anaerobic bacteria growth, which also assists in creating a reducing environment. In addition, the corrosion of iron metal yields ferrous iron and hydrogen, both of which are possible reducing agents. The hydrogen gas produced is also an excellent energy source for a wide variety of anaerobic bacteria.

The carbon substrate and ZVI would be delivered to the site separately and mixed with potable water and emplaced in the subsurface simultaneously. A small quantity of guar will likely also be supplied, which would assist in keeping the ZVI suspended during the mixing and injection process. The dilution factor (i.e., water content) can be adjusted to achieve optimal dispersion and distribution based on site-specific parameters such as injection point spacing, permeability of the formation, and contaminant concentrations.

A commercially-available enriched dechlorinating culture will be co-injected with these electron donors. The Dehalococcoides (Dhc) microbes present in the culture will facilitate complete dechlorination of PCE to non-toxic ethene. The culture is delivered to the site in sealed stainless-steel cylinders. Each cylinder is equipped with an inlet and outlet port. Nitrogen gas is connected to the inlet port and is used to force the culture solution into the injection line and evacuate the canister. The canister is also equipped with a sight glass that allows the field crew to monitor the amount of culture that has been injected. The culture will be premixed with the carbon substrate solution in holding tanks prior to injection or directly into the injection lines during the injection process. Approximately 5 liters of the Dhc culture will be injected, which should provide a desired bacterial population of 1 x 10^6 cells per liter within the treatment area.

Approximately 20 borings would be advanced on approximate 8-foot centers within the treatment area. Proposed injection locations are shown on Figure 6. The injections would be performed from the bottom of the borehole working upwards in 1 to 2-foot intervals to facilitate adequate vertical distribution of reagent. Each boring will be sealed at the completion of the injections using granular bentonite, and subsequently hydrated. It is estimated that the injections can be completed within a 4 to 5-day timeframe.

## 4.2 RECOMMENDED GROUNDWATER MONITORING PROGRAM

To evaluate the potential effectiveness of the recommended ISCR/ISB remedial actions, baseline and post-injection sampling of wells FRW-1 through FRW-4, MW98-05AR and MW-98-01 will include analysis of the following parameters: VOCs (Method 8260), sulfate (Method 300), ethene/ethane/methane (Method 8015), dissolved iron (Method 6010B/200.7), total organic carbon (TOC) (Method 9060), and nitrate+nitrite (Method

353.2). For data quality purposes, one field duplicate sample will be submitted for laboratory analysis of the parameters identified above. The field parameters DO, pH, ORP and temperature will also be analyzed in the field as part of each sampling event. Additionally, monitoring wells MW98-04 and MW-45A will be monitored for VOCs.

A baseline groundwater monitoring event is recommended to be conducted just prior to the ISCR/ISB injection event, to document ambient groundwater conditions within the groundwater treatment zone. Assuming a late-March, early-April injection schedule, the regular March semi-annual sampling event can serve as the baseline ground water monitoring event.

After completion of the ISCR/ISB injection event, groundwater monitoring described above will be conducted on a quarterly basis for 1 year (four sampling events), followed by 2 years of semi-annual monitoring (four additional sampling events), followed by annual groundwater monitoring thereafter. Wells MW-28A/B, 44A/B/C, 58A/B, 59A/B, 98-04B, 45B and N-32 and 32B will continue to be sampled on their regular annual monitoring schedule. The frequency of groundwater monitoring and scope of laboratory analyses may be modified during the course of the groundwater monitoring program in response to monitoring results and field observations. A report documenting the results of each monitoring event will be submitted to USEPA.

Following the injections, the FRWs will be turned off to prevent disruption of the anaerobic environment. The injections will disturb the current soil structure which may result in a temporary increase in PCE concentration in groundwater following the injections. Therefore, RW-2 will remain on and follow the current monitoring and operation schedule until post-injection monitoring confirms that PCE concentrations have stabilized.

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# TABLES

**TABLE 1**

**GROUNDWATER REMEDIAL ACTION**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**SAG HARBOR, NEW YORK**

**Groundwater Elevation at Select Wells in the FDSA**

| Date | MW98-01A DTW (ft btoc) | MW98-01A GW Elevation (ft amsl) | MW98-04 DTW (ft btoc) | MW98-04 GW Elevation (ft amsl) | MW98-04 PCE Concentration (ug/l) | MW98-04B DTW (ft btoc) | MW98-04B GW Elevation (ft amsl) | MW98-05A DTW (ft btoc) | MW98-05A GW Elevation (ft amsl) | MW98-05AR DTW (ft btoc) | MW98-05AR GW Elevation (ft amsl) | MW98-05B DTW (ft btoc) | MW98-05B GW Elevation (ft amsl) | MW98-05BR DTW (ft btoc) | MW98-05BR GW Elevation (ft amsl) | MW-45A DTW (ft btoc) | MW-45A GW Elevation (ft amsl) | MW-45B DTW (ft btoc) | MW-45B GW Elevation (ft amsl) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TOC Well Elev. (ft amsl)** | | **30.47** | | **28.00** | | | **27.94** | | **29.70** | | **29.26** | | **30.01** | | **29.76** | | **27.44** | | **27.63** |
| 3/1/2003 | | | | | | | | | | | | | | | | 19.41 | 8.03 | | |
| 3/24/2003 | | | | | ND | | | | | | | | | | | | | | |
| 4/15/2003 | | | | | | | | | | | | | | | | 17.96 | 9.48 | | |
| 9/1/2003 | | | | | 23 | | | | | | | | | | | | | | |
| 3/8/2004 | 20.85 | 9.62 | | | | | | 20.15 | 9.55 | | | 20.45 | 9.56 | | | | | | |
| 4/28/2004 | | | 18.74 | 9.26 | -- | | | | | | | | | | | | | | |
| 6/30/2004 | | | 19.88 | 8.12 | -- | | | | | | | | | | | | | | |
| 9/15/2004 | | | | | ND | | | | | | | | | | | | | | |
| 9/20/2004 | 21.58 | 8.89 | 20.52 | 7.48 | -- | | | 21.32 | 8.38 | | | 21.19 | 8.82 | | | 19.10 | 8.34 | | |
| 3/14/2005 | | | 19.13 | 8.87 | 28 | | | | | | | | | | | 17.72 | 9.72 | | |
| 4/7/2005 | | | 18.60 | 9.40 | -- | | | | | | | | | | | 17.02 | 10.42 | | |
| 4/28/2005 | | | 18.74 | 9.26 | -- | | | | | | | | | | | 17.15 | 10.29 | | |
| 5/17/2005 | | | | | 4.9 | | | | | | | | | | | | | | |
| 6/16/2005 | | | | | 1.7 | | | | | | | | | | | | | | |
| 8/17/2005 | | | | | ND | | | | | | | | | | | | | | |
| 9/7/2005 | | | 21.10 | 6.90 | | | | | | | | | | | | 19.50 | 7.94 | | |
| 9/8/2005 | | | 21.14 | 6.86 | ND | | | | | | | | | | | 19.71 | 7.73 | | |
| 12/8/2005 | | | | | 45 | | | | | | | | | | | | | | |
| 3/6/2006 | | | | | 7.0 | | | | | | | | | | | 17.38 | 10.06 | | |
| 3/15/2006 | | | 18.89 | 9.11 | -- | | | | | | | | | | | 17.45 | 9.99 | | |
| 5/30/2006 | | | | | | | | | | | | | | | | | | | |
| 9/16/2006 | | | 18.62 | 9.38 | -- | | | | | | | | | | | 17.09 | 10.35 | | |
| 9/19/2006 | | | 18.45 | 9.55 | ND | | | | | | | | | | | 17.02 | 10.42 | | |
| 3/6/2007 | | | 18.75 | 9.25 | ND | | | | | | | | | | | 17.28 | 10.16 | | |
| 3/12/2007 | 19.82 | 10.65 | 18.75 | 9.25 | -- | | | 16.12 | 13.58 | | | 19.02 | 10.99 | | | 17.33 | 10.11 | | |
| 10/1/2007 | 21.65 | 8.82 | 19.55 | 8.45 | -- | | | dry | | | | 20.87 | 9.14 | | | 19.51 | 7.93 | | |
| 10/3/2007 | | | 20.45 | 7.55 | ND | | | | | | | | | | | 19.26 | 8.18 | | |
| 3/11/2008 | 21.40 | 9.07 | 21.42 | 6.58 | 18 | | | 20.60 | 9.10 | | | 20.33 | 9.68 | | | 18.91 | 8.53 | | |
| 9/15/2008 | | | 21.52 | 6.48 | 20 | | | | | | | | | | | | | | |
| 9/22/2008 | 22.57 | 7.90 | 21.49 | 6.51 | -- | | | 21.78 | 7.92 | | | 22.39 | 7.62 | | | 20.17 | 7.27 | | |
| 2/24/2009 | | | | | | | | | | | | | | | | 17.98 | 9.46 | | |
| 3/18/2009 | 21.16 | 9.31 | 19.88 | 8.12 | ND | | | 20.53 | 9.17 | | | 20.90 | 9.11 | | | 18.47 | 8.97 | | |
| 9/15/2009 | 21.29 | 9.18 | 20.18 | 7.82 | -- | | | 20.52 | 9.18 | | | 21.12 | 8.89 | | | 18.80 | 8.64 | | |
| 9/16/2009 | | | | | | | | | | | | | | | | 18.81 | 8.63 | | |
| 3/9/2010 | 19.65 | 10.82 | 18.63 | 9.37 | -- | | | 19.86 | 9.84 | | | 19.58 | 10.43 | | | 18.81 | 8.63 | | |
| 3/16/2010 | | | | | | | | | | | | | | | | 16.71 | 10.73 | | |
| 3/17/2010 | | | 18.21 | 9.79 | 0.68 | | | | | | | | | | | 16.71 | 10.73 | | |
| 9/16/2010 | | | 20.56 | 7.44 | ND | | | | | | | | | | | 19.13 | 8.31 | | |
| 9/22/2010 | 21.45 | 9.02 | 20.41 | 7.59 | -- | | | 20.72 | 8.98 | | | 20.61 | 9.40 | | | 19.01 | 8.43 | | |
| 3/8/2011 | 21.28 | 9.19 | 20.23 | 7.77 | 0.99 | | | 20.76 | 8.94 | | | 20.51 | 9.50 | | | 18.81 | 8.63 | | |
| 9/11/2011 | | | | | | | | | | | | | | | | 19.80 | 7.64 | | |
| 9/22/2011 | 22.33 | 8.14 | 20.23 | 7.77 | -- | | | 21.75 | 7.95 | | | 21.54 | 8.47 | | | 19.79 | 7.65 | | |
| 3/1/2012 | | | 21.18 | 6.82 | -- | | | | | | | | | | | | | | |
| 3/22/2012 | 22.69 | 7.78 | 20.08 | 7.92 | 0.36 | | | 22.08 | 7.62 | | | 22.38 | 7.63 | | | | | | |
| 9/4/2012 | 23.49 | 6.98 | 21.08 | 6.92 | -- | | | 22.70 | 7.00 | | | 22.90 | 7.11 | | | | | | |

**TABLE 1**

**GROUNDWATER REMEDIAL ACTION**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**SAG HARBOR, NEW YORK**

**Groundwater Elevation at Select Wells in the FDSA**

| Date | MW98-01A DTW (ft btoc) | MW98-01A GW Elevation (ft amsl) | MW98-04 DTW (ft btoc) | MW98-04 GW Elevation (ft amsl) | MW98-04 PCE Concentration (ug/l) | MW98-04B DTW (ft btoc) | MW98-04B GW Elevation (ft amsl) | MW98-05A DTW (ft btoc) | MW98-05A GW Elevation (ft amsl) | MW98-05AR DTW (ft btoc) | MW98-05AR GW Elevation (ft amsl) | MW98-05B DTW (ft btoc) | MW98-05B GW Elevation (ft amsl) | MW98-05BR DTW (ft btoc) | MW98-05BR GW Elevation (ft amsl) | MW-45A DTW (ft btoc) | MW-45A GW Elevation (ft amsl) | MW-45B DTW (ft btoc) | MW-45B GW Elevation (ft amsl) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TOC Well Elev. (ft amsl)** | | **30.47** | | **28.00** | | | **27.94** | | **29.70** | | **29.26** | | **30.01** | | **29.76** | | **27.44** | | **27.63** |
| 9/19/2012 | | | 21.22 | 6.78 | 8.8 | | | | | | | | | | | 21.21 | 6.23 | | |
| 2/20/2013 | | | | | | | | | | | | | | | | | | | |
| 3/19/2013 | | | 19.73 | 8.27 | 220 | | | | | | | | | | | 19.70 | 7.74 | | |
| 3/20/2013 | | | | | | | | | | | | | | | | 19.70 | 7.74 | | |
| 3/28/2013 | 22.24 | 8.23 | 19.84 | 8.16 | -- | | | 21.44 | 8.26 | | | 21.90 | 8.11 | | | 19.83 | 7.61 | | |
| 4/23/2013 | | | 20.14 | 7.86 | 310 | | | | | | | | | | | 20.05 | 7.39 | | |
| 6/17/2013 | | | 19.60 | 8.40 | 36 | | | | | | | | | | | | | | |
| 7/23/2013 | | | 20.22 | 7.78 | 2.7 | | | | | | | | | | | | | | |
| 9/10/2013 | 22.49 | 7.98 | 20.10 | 7.90 | 6.6 | | | 21.90 | 7.80 | | | 21.70 | 8.31 | | | 20.01 | 7.43 | | |
| 9/11/2013 | | | | | | | | | | | | | | | | 19.95 | 7.49 | | |
| 11/26/2013 | | | 21.31 | 6.69 | 1.6 | | | | | | | | | | | | | | |
| 3/17/2014 | 22.40 | 8.07 | 19.99 | 8.01 | 2.1 | | | 21.65 | | | | 21.82 | | | | 19.89 | 7.55 | | |
| 9/9/2014 | | | 21.55 | 6.45 | -- | | | | | | | | | | | | | | |
| 9/15/2014 | | | | | | | | | | | | | | | | | | | |
| 9/16/2014 | 23.33 | 7.14 | 20.40 | 7.60 | 7.1 | | | 22.62 | | | | 22.41 | | | | 20.80 | 6.64 | | |
| 3/26/2015 | 21.00 | 9.47 | 18.65 | 9.35 | 21 | | | 20.46 | | | | 19.22 | | | | | | | |
| 3/27/2015 | | | | | | | | | | | | | | | | | | | |
| 9/8/2015 | 23.65 | 6.82 | 21.26 | 6.74 | 2.3 | | | 23.09 | | | | 22.87 | | | | 21.19 | 6.25 | | |
| 9/11/2015 | | | | | | | | | | | | | | | | | | | |
| 3/1/2016 | | | | | | | | | | | | | | | | | | | |
| 3/21/2016 | 22.08 | 8.39 | 19.71 | 8.29 | -- | 19.64 | 8.30 | | | 21.41 | 7.85 | | | 20.99 | 8.77 | 19.61 | 7.83 | 19.41 | 8.22 |
| 3/22/2016 | | | 19.68 | 8.32 | 1.6 | | | | | | | | | | | 19.58 | 7.86 | 19.47 | 8.16 |
| 4/5/2016 | 22.16 | 8.31 | 19.52 | 8.48 | | 19.50 | 8.44 | | | 21.32 | 7.94 | | | 20.87 | 8.89 | | | | |
| 9/1/2016 | | | | | | | | | | | | | | | | | | | |
| 9/14/2016 | | | 21.42 | 6.58 | 2.4 | | | | | | | | | | | 21.31 | 6.13 | | |
| 9/26/2016 | 23.69 | 6.78 | 21.28 | 6.72 | -- | 21.20 | 6.74 | | | 22.60 | 6.66 | | | 23.02 | 6.74 | 21.14 | 6.30 | 20.97 | 6.66 |
| 3/13/2017 | 23.07 | 7.40 | 20.72 | | | 20.74 | | | | 22.91 | 6.35 | | | 23.15 | 6.61 | | | | |
| 3/27/2017 | 22.45 | 8.02 | 20.10 | 7.90 | 2.7 | 20.00 | 7.94 | | | 21.81 | 7.45 | | | 21.40 | 8.36 | 19.96 | 7.48 | 19.80 | 7.83 |
| 9/18/2017 | 22.98 | 7.49 | 20.50 | 7.50 | -- | 20.51 | 7.43 | | | 22.32 | 6.94 | | | 21.89 | 7.87 | 20.53 | 6.91 | 20.31 | 7.32 |
| 9/19/2017 | | | 20.63 | 7.37 | 0.82 | | | | | | | | | | | | | | |
| 10/4/2017 | | | 20.70 | 7.30 | -- | 20.78 | 7.16 | | | | | | | | | 20.68 | 6.76 | 20.50 | 7.13 |
| 11/1/2017 | 22.81 | 7.66 | 20.44 | 7.56 | -- | 20.44 | 7.50 | | | 22.29 | 6.97 | | | 21.85 | 7.91 | 20.39 | 7.05 | 20.27 | 7.36 |
| 12/18/2017 | | | 19.72 | 8.28 | -- | 19.65 | 8.29 | | | | | | | | | 19.14 | 8.30 | 19.18 | 8.45 |
| 1/17/2018 | | | 19.81 | 8.19 | -- | 19.76 | 8.18 | | | | | | | | | 19.42 | 8.02 | 19.37 | 8.26 |
| 2/9/2018 | | | 18.51 | 9.49 | -- | 18.26 | 9.68 | | | | | | | | | 18.92 | 8.52 | 18.26 | 9.37 |
| 3/1/2018 | | | 18.08 | 9.92 | | 18.05 | 9.89 | | | | | | | | | 18.56 | 8.88 | 18.50 | 9.13 |
| 3/29/2018 | 20.99 | 9.48 | 18.74 | 9.26 | | 18.64 | 9.30 | | | 20.00 | 9.26 | | | 20.75 | 9.01 | 18.57 | 8.87 | 18.41 | 9.22 |
| 4/2/2018 | | | 17.85 | 10.15 | | 17.73 | 10.21 | | | | | | | | | 17.82 | 9.62 | 17.90 | 9.73 |
| 4/12/2018 | 22.19 | 8.28 | 19.63 | 8.37 | | 19.58 | 8.36 | | | 20.62 | 8.64 | | | 19.67 | 10.09 | | | | |
| 4/18/2018 | 21.04 | 9.43 | 18.67 | 9.33 | | 18.60 | 9.34 | | | 20.39 | 8.87 | | | 19.96 | 9.80 | | | | |
| 5/15/2018 | | | 20.25 | 7.75 | | 20.09 | 7.85 | | | | | | | | | 19.72 | 7.72 | 19.76 | 7.87 |
| 6/19/2018 | 21.52 | 8.95 | 19.15 | 8.85 | | 19.12 | 8.82 | | | | | | | 20.43 | 9.33 | 18.73 | 8.71 | 18.74 | 8.89 |
| 8/28/2018 | | | 20.11 | 7.89 | | 20.76 | 7.18 | | | | | | | | | 18.45 | 8.99 | 18.52 | 9.11 |
| 9/17/2018 | 22.92 | 7.55 | 20.53 | 7.47 | | 20.43 | 7.51 | | | 22.27 | 6.99 | | | 21.82 | 7.94 | 20.40 | 7.04 | 20.23 | 7.40 |

Notes:
1. TOC = Top of well casing.
2. ft. amsl = feet above mean sea level

**TABLE 2**

**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**UPDATE OF FDSA CHARACTERIZATION**

**Soil Sample Contaminant Concentrations**

| | | | VOCs (ppm or mg/kg) | | | | | | | | | | | | | TOC (mg/kg) | Soil Oxidant Demand (SOD) [11/] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Name and Collection Depth** | **Date** | **Low K [2/] /High K** | **Tetrachloroethylene** | **Trichloroethylene** | **cis-1,2-Dichloroethylene** | **Methylene chloride** | **Toluene** | **1,2,4 Trimethyl-benzene** | **1,3,5 Trimethyl-benzene** | **isopropyl-benzene** | **n-butyl-benzene** | **n-propyl-benzene** | **p-isopropyl-toluene** | **Methylcycloh exane** | **Acetone** | | **wet weight basis (mg/kg)** | **dry weight basis (mg/kg)** |
| MW-98-04B(24-27) | 12/16/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB1(20-23) | 12/8/2015 | high K | 0.0032 J | ND | ND | 0.0100 B | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2,630 | NA | NA |
| SB1(24-27) | 12/8/2015 | low K | ND | ND | ND | 0.0098 B,J | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,950 | NA | NA |
| SB2(20-23) | 12/7/2015 | high K | ND | ND | ND | 0.0054 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB2(23-24) | 12/7/2015 | low K | ND | ND | ND | 0.0100 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB2(24-27) | 12/7/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB3(20-23) | 12/8/2015 | high K | 0.1500 | 0.0120 | 0.0160 | 0.0057 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB3(24-27) | 12/8/2015 | high K | 0.8300 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB3(30-32) | 12/8/2015 | low K | ND | ND | ND | 0.0091 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB4(20-23) | 12/15/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB4(24-27) | 12/15/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,040 | NA | NA |
| SB4(28-30) | 12/15/2015 | low K | ND | ND | ND | ND | 0.0064 | ND | ND | ND | ND | ND | ND | ND | ND | 1,780 | NA | NA |
| SB5(20-23) | 12/14/2015 | high K | 0.0076 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB5(24-27) | 12/14/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB5(24-27)D | 12/14/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB5(29-30) | 12/14/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB5(32.5-33) | 12/14/2015 | low K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB6(20-23) | 12/9/2015 | high K | ND | ND | ND | 0.0110 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB6(24-27) | 12/9/2015 | high K | ND | ND | ND | 0.0140 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,080 | NA | NA |
| SB6(32-33) | 12/9/2015 | low K | ND | ND | ND | 0.0120 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,000 | NA | NA |
| SB7(20-23) | 12/11/2015 | high K | 0.0910 | ND | ND | 0.0054 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB7(24-25) | 12/11/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB7(27-30) | 12/11/2015 | low K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB8(20-23) | 12/14/2015 | high K | ND | ND | ND | 0.0054 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB8(24-27) | 12/14/2015 | high K | 0.0330 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,000 | NA | NA |
| SB8(27-30) | 12/14/2015 | low K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,950 | NA | NA |
| SB9(20-23) | 12/9/2015 | high K | ND | ND | ND | 0.0079 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB9(24-27) | 12/9/2015 | high K | ND | ND | ND | 0.0130 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB9(24-27)D | 12/9/2015 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB9(27.5-28.5) | 12/9/2015 | low K | ND | ND | ND | 0.0120 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB10(20-23) | 12/10/2015 | high K | ND | ND | ND | 0.0067 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB10(24-27) | 12/10/2015 | high K | 0.0045 J | ND | ND | 0.0052 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1,000 | NA | NA |
| SB10(31.32.5) | 12/10/2015 | low K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2,110 | NA | NA |
| SB11(20-23) | 12/11/2015 | high K | 0.0270 | ND | ND | 0.0045 J | 0.0023 J | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB11(20-23)D | 12/11/2015 | high K | 0.0031 J | ND | ND | 0.0054 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB11(24-27) | 12/11/2015 | high K | ND | ND | ND | 0.0076 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB11(27-29) | 12/11/2015 | low K | ND | ND | ND | 0.0090 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB12(20-23) | 12/10/2015 | high K | ND | ND | ND | 0.0062 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB12(24-27) | 12/10/2015 | high K | ND | ND | ND | 0.0110 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB12(30-31) | 12/10/2015 | low K | ND | ND | ND | 0.0066 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA |
| SB13(22-23) | 6/18/2018 | high K | 0.190 | ND | ND | 0.0057 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.022 SCAL-E | NA | 2,318 | 2,573 |
| SB13(23-24) | 6/18/2018 | low K | **630** | 0.920 | ND | ND | ND | 0.640 | 1.50 | 1.30 | 0.290 | 1.10 | 0.340 | 18 | ND | 36,000 | 2,598 | 3,066 |
| SB14(23-24) | 6/18/2018 | high K | 0.110 | ND | ND | 0.0074 J, SCAL-E | ND | ND | 0.0034 J | 0.0026 J | ND | 0.003 J | ND | ND | 0.012 SCAL-E | NA | NA | NA |
| SB14(26-28) [8/] | 6/18/2018 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 8,400 | 46 | 51 |
| SB14(31-32) | 6/18/2018 | low K | ND | ND | ND | 0.0076 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.019 SCAL-E | NA | 2,427 | 2,981 |
| SB15(26-28) | 6/18/2018 | high K | ND | ND | ND | 0.012 | ND | ND | ND | ND | ND | ND | ND | ND | 0.025 SCAL-E | 6,000 | 0 | 0 |
| SB15(31-32) | 6/18/2018 | low K | ND | ND | ND | 0.0056 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.013 SCAL-E | NA | NA | NA |

**TABLE 2**

**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**UPDATE OF FDSA CHARACTERIZATION**

**Soil Sample Contaminant Concentrations**

| | | | VOCs (ppm or mg/kg) | | | | | | | | | | | | | TOC (mg/kg) | Soil Oxidant Demand (SOD) [11/] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Name and Collection Depth** | **Date** | **Low K [2/] /High K** | **Tetrachloroethylene** | **Trichloroethylene** | **cis-1,2-Dichloroethylene** | **Methylene chloride** | **Toluene** | **1,2,4 Trimethyl-benzene** | **1,3,5 Trimethyl-benzene** | **isopropyl-benzene** | **n-butyl-benzene** | **n-propyl-benzene** | **p-isopropyl-toluene** | **Methylcycloh exane** | **Acetone** | | **wet weight basis (mg/kg)** | **dry weight basis (mg/kg)** |
| SB16(29-30) [9/] | 6/18/2018 | high K | ND | ND | ND | 0.0084 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.020 SCAL-E | 7,900 | NA | NA |
| SB16(30-32) | 6/18/2018 | low K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.017 SCAL-E | NA | NA | NA |
| SB17(26-27) | 6/18/2018 | high K | ND | ND | ND | 0.0066 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.029 SCAL-E | 4,500 | 99 | 116 |
| SB17(29-31) | 6/18/2018 | high K | 0.0041 J | ND | ND | 0.0081 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.029 SCAL-E | NA | NA | NA |
| SB17(31-32) | 6/18/2018 | low K | ND | ND | ND | 0.0077 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.035 SCAL-E | NA | NA | NA |
| SB18(26-28) | 6/18/2018 | high K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.029 SCAL-E | 13,000 | 448 | 538 |
| SB18(29-31) | 6/18/2018 | low K | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.0029 J | 0.029 SCAL-E | NA | 14,333 | 17,199 |
| SB19(27-29) | 6/18/2018 | high K | 0.650 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3.3 | ND | 12,000 | 0 | 0 |
| SB19(31-33) | 6/18/2018 | low K | ND | ND | ND | 0.0065 J, SCAL-E | ND | ND | ND | ND | ND | ND | ND | ND | 0.019 SCAL-E | NA | 1,815 | 2,229 |
| Applicable or Relevant and Appropriate Requirements (ARARs) (ppm or mg/kg) | | | 1.5 | 1.0 | 0.5 | NE | 1.5 | NE | NE | NE | NE | NE | NE | NE | NE | NE | N/A | N/A |
| NYS DEC Unrestricted Use Soil Cleanup Objectives (ppm or mg/kg) | | | 1.3 | 0.47 | 0.25 | 0.05 | 0.7 | 3.6 | 8.4 | NE | 12 | 3.9 | NE | NE | 0.05 | NE | N/A | N/A |
| NYS DEC Restricted Use Soil Cleanup Objectives (ppm or mg/kg) | | | | | | | | | | | | | | | | | | |
| Residential | | | 5.5 | 10 | 59 | 51 | 100 | 47 | 47 | NE | 100 | 100 | NE | NE | NE | NE | N/A | N/A |
| Restricted-Residential | | | 19 | 21 | 100 | 100 | 100 | 52 | 52 | NE | 100 | 100 | NE | NE | NE | NE | N/A | N/A |
| Commercial | | | 150 | 200 | 500 | 500 | 500 | 190 | 190 | NE | 500 | 500 | NE | NE | NE | NE | N/A | N/A |
| Industrial | | | 300 | 400 | 1000 | 1000 | 1000 | 380 | 380 | NE | 1,000 | 1,000 | NE | NE | NE | NE | N/A | N/A |
| Protection of Ecological Resources | | | 2 | 2 | NS | 12 | 36 | Note 10 | Note 10 | NE | Note 10 | Note 10 | NE | NE | NE | NE | N/A | N/A |
| Protection of Groundwater | | | 1.3 | 0.47 | 0.25 | 0.05 | 0.7 | 3.6 | 8.4 | NE | 12 | 3.9 | 10 | NE | NE | NE | N/A | N/A |

Notes:

| | | | |
|---|---|---|---|
| VOCs | Volatile Organic Compounds | D | Duplicate sample |
| K | Hydraulic Conductivity | (20-23) | Represents sampling interval, feet below grade |
| PID | Photoionization Detector | SB | Soil Boring |
| ND | Not Detected | TOC | Total Organic Carbon |
| NA | Not Analyzed | ppmv | Parts per million by volume |
| NE | Not Established | mg/kg | Milligram per kilogram |
| | | ppm | Parts per million |

A bold concentration indicates an exceedance of the ARARs and/or NYSDEC criteria.

* PID readings reported are for samples collected for laboratory analysis; all PID readings are indicated on the geologic logs. All significant measurements are summarized in this table. The indicated duplicate PID readings are from the second boring at that location.

1) Site specific ARARs for soil have also been established for the following compounds: Benzene, Xylenes, Ethylbenzene, Toluene, 1,1-Dichloroethane, TCA, and 1,1-DCE. However none of these compounds were detected in any of the soil samples collected.
2) High and Low K soils as determined by observation.
3) A "J" notation next to a concentration indicates a concentration detected below the reporting limit but greater than or equal to the method detection limit, the result is an estimated concentration.
4) A "CCV-E" notation next to a concentrations indicates that the value reported is estimated due to its behavior during calibration verification.
5) A "B" notation next to a concentration indicates that the analyte was found in the associated analysis batch blank. For VOCs, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as an artifact.
6) A "SCAL-E" notation next to a concentration indicates that the value reported is estimated because of its behavior during initial calibration (average Rf>20%).
7) In December 2015, the PID readings of 1083 ppmv and 822 ppmv were measured at depths of 24 to 25 ft bg and 25 to 29 ft bg, respectively.
8) The sample was diluted because of the presence of high levels of non-target analytes resulting in elevated reporting limits above the ARARs.
9) For this sample, the internal std associated with this target compound did not meet acceptance criteria (area < 50% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix affects.
10) NS indicates not specified. Refer to the NYSDEC Technical Support Document (TSD)
11) The soil oxidant damand testing was completed using the "Permanganate Natural Oxidant Demand of Soil and Aquifer Solids" test method pursuant to ASTM D7262

**TABLE 3**

**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**UPDATED FDSA CHARACTERIZATION**

**Groundwater Geochemical Results - 2003-2018**

| Well ID | Date Sampled | Geochemical parameters [1/] | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Dissolved Oxygen (DO) mg/L | Oxidation Reduction Potential (ORP) (mV) | Total Iron | Dissolved Iron | Ferrous Iron | Sulfate as $SO_4$ | Sulfide | Nitrate as N | Nitrite as N | TOC | Methane | Ethane | Ethene |
| MW98-01A | 9/15/2004 | 5.50 | 267 | 676 | 535 | ND<25 | 10,500 | ND<1 | NA | NA | 1,080 | NA | NA | NA |
| | 1/13/2005 | 0.00 | 149 | 266 | 45.7 | ND<25 | 12,800 | ND<1 | NA | NA | 1,130 | NA | NA | NA |
| | 6/19/2018 | 0.60 | -87 | 2,980 | 3,050 | 1,500 [2/] | 9,150 | 530 | NA | NA | 962 J | ND<2.20 | ND<5.00 | ND<5.00 |
| MW98-04 | 8/17/2005 | 5.85 | 261 | NA | NA | NA | NA | NA | NA | NA | ND<1,000 | NA | NA | NA |
| | 9/8/2005 | 6.88 | 225 | 159 | ND<20 | ND<25 | 14,200 | ND<1,000 | NA | NA | ND<1,000 | NA | ND<3.00 | ND<4.00 |
| | 12/8/2005 | 4.76 | 1 | 5,730 | 1,750 | 1,240 | NA | NA | NA | Geo | 5,700 | ND<1.10 | NA | NA |
| | 6/19/2018 | 1.51 | 77 | 8,700 | 687 | 2,000 [2/] | 12,200 | ND<500 | NA | NA | 942 J | ND<2.20 | ND<5.00 | ND<5.00 |
| MW98-05A | 9/15/2004 | 1.51 | 155 | 404 | 99 | ND<25 | 12,400 | ND<1,000 | NA | NA | 1,660 | 4.9 | ND<3.00 | ND<4.00 |
| | 1/13/2005 | 0.00 | -81 | 28,000 | 26,400 | 12,800 | 6,300 | ND<1,000 | NA | NA | 53,400 | NA | NA | NA |
| MW-98-05BR | 6/19/2018 | 0.87 | 101 | 608 | 120 J | NA | 16,000 | ND<500 | NA | NA | 1,740 | ND<2.20 | ND<5.00 | ND<5.00 |
| FRW-1 | 3/14/2005 | 7.66 | 17 | 8,550 | 6,420 | 2,940 | 9,000 | NA | NA | NA | 11,000 | NA | NA | NA |
| | 5/17/2005 | 3.30 | 143 | 3,480 | 14,410 | 276 | 11,800 | NA | NA | NA | 3,300 | NA | ND<3.00 | ND<4.00 |
| | 6/16/2005 | 3.98 | 31 | 3,850 | 2,020 | ND<25 | 11,600 | NA | NA | NA | 2,100 | NA | ND<3.00 | ND<4.00 |
| | 9/8/2005 | 7.46 | -26 | 8,940 | 6,870 | 934 | 7,800 | NA | NA | NA | 5,380 | NA | ND<3.00 | ND<4.00 |
| | 12/8/2005 | 1.10 | -23 | 28,140 | 157 | 49 | NA | NA | NA | NA | 1,800 | NA | NA | NA |
| | 8/21/2012 | NA | NA | 38,800 | 25 | NA | 69,300 | NA | 206 | NA | 8,940 | NA | NA | NA |
| | 9/4/2012 | NA | NA | 4,200 | ND<10 | NA | 6,400 | NA | 210 | NA | 2,400 | NA | NA | NA |
| | 9/19/2012 | 1.62 | -69 | 11,300 | 6,980 | NA | 6,000 | NA | ND<500 | NA | 3,100 | NA | NA | NA |
| | 7/2/2018 | NA | NA | NA | NA | NA | NA | NA | 870 | ND<500 | NA | NA | NA | NA |
| FRW-2 | 9/15/2004 | 6.35 | -5 | 12,600 | 426 | NA | 5,100 | NA | NA | NA | NA | NA | ND<3.00 | ND<4.00 |
| | 1/13/2005 | 6.65 | 3 | 117,000 | 114,000 | NA | 4,700 | NA | NA | NA | NA | NA | 5.9 | 7.1 |
| | 3/14/2005 | 6.71 | 29 | 150,000 | 127,000 | NA | 3,500 | NA | NA | NA | NA | NA | ND<3.00 | ND<4.00 |
| | 5/17/2005 | 4.10 | 96 | 82,700 | 62,900 | NA | 7,500 | NA | NA | NA | NA | NA | ND<3.00 | ND<4.00 |
| | 6/16/2005 | 3.91 | -72 | 72,900 | 53,700 | NA | 3,600 | NA | NA | NA | NA | NA | ND<3.00 | ND<4.00 |
| | 9/8/2005 | 0.43 | -116 | 77,100 | 25,900 | NA | 4,900 | NA | NA | NA | NA | NA | ND<3.00 | ND<4.00 |
| | 12/8/2005 | 0.73 | -10 | 39,600 | 16,600 | NA | NA | NA | NA | NA | 4,900 | NA | NA | NA |
| | 8/21/2012 | NA | NA | 26,300 | ND<10 | NA | 3,550 | NA | ND<500 | NA | 2,160 | NA | NA | NA |
| | 9/4/2012 | NA | NA | 16,500 | ND<10 | NA | 2,740 | NA | 189 | NA | 1,560 | NA | NA | NA |
| | 9/19/2012 | 0.60 | 64 | 73,900 | 14 | NA | 3,460 | NA | ND<500 | NA | NA | NA | NA | NA |
| | 7/2/2018 | NA | NA | NA | NA | NA | NA | NA | 82 | ND<500 | NA | NA | NA | NA |
| FRW-3 | 9/15/2004 | 6.22 | 20 | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND<3.00 | ND<4.00 |
| | 3/14/2005 | 4.20 | -66 | 149,000 | 74,900 | NA | 6,400 | NA | NA | NA | 307,000 | NA | ND<3.00 | ND<4.00 |
| | 5/17/2005 | 0.30 | 101 | 74,100 | 36,700 | NA | 15,900 | NA | NA | NA | 68,000 | NA | ND<3.00 | ND<4.00 |
| | 6/16/2005 | 2.64 | -84 | 55,900 | 18,300 | NA | 10,900 | NA | NA | NA | 39,000 | NA | ND<3.00 | ND<4.00 |
| | 9/8/2005 | 1.20 | -113 | 128,000 | 11,000 | NA | 2,800 | NA | NA | NA | 144,000 | NA | ND<3.00 | ND<4.00 |
| | 12/8/2005 | 0.37 | -2 | 35,200 | 8,720 | NA | NA | NA | NA | NA | 2,100 | NA | NA | NA |
| | 8/21/2012 | NA | NA | 27,900 | ND<10 | NA | 9,300 | NA | ND<500 | NA | 5,060 | NA | NA | NA |
| | 9/4/2012 | NA | NA | 16,000 | ND<10 | NA | 3,540 | NA | 210 | NA | 1,330 | NA | NA | NA |
| | 9/19/2012 | 0.36 | -59 | 24,100 | ND<10 | NA | 4,150 | NA | ND<500 | NA | 1,480 | NA | NA | NA |
| | 7/2/2018 | NA | NA | NA | NA | NA | NA | NA | 1,020 | ND<500 | NA | NA | NA | NA |
| FRW-4 [3/] | 5/17/2005 | 0.70 | 124 | 20,300 | 5,190 | 1,900 | 11,400 | ND<1,000 | NA | NA | 7,300 | NA | ND<3.00 | ND<4.00 |
| | 6/16/2005 | 2.51 | -34 | 15,500 | 15,900 | 2,010 | 13,200 | ND<1,000 | NA | NA | 9,000 | NA | ND<3.00 | ND<4.00 |
| | 8/17/2005 | 4.51 | -22 | NA | NA | NA | NA | NA | NA | NA | 3,800 | NA | NA | NA |
| | 9/8/2005 | 0.28 | 7 | 15,700 | 7,530 | 884 | 11,200 | ND<1,000 | NA | NA | 6,690 | NA | ND<3.00 | ND<4.00 |
| | 12/8/2005 | 0.39 | 10 | 10,500 | 696 | 629 | NA | NA | NA | NA | 2,100 | NA | NA | NA |

Notes:
NA Not Analyzed
ND Not Detected
J Results are estimated because concentrations were detected above the method detection limit but below the reporting limit.
1 Results are reported in ug/L unless otherwise specified.
2 Ferrous Iron Samples were collected on June 20, 2018.
3 Geochemical parameters were not collected for FRW-4 in 2018.

**TABLE 4**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Select Monitor Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| MW-45A | 3/19/2013 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/23/2013 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2013 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/18/2014 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/16/2014 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/1/2015 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/10/2015 | 0.91 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/22/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/14/2016 | 2.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/27/2017 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/20/2017 | 0.41 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/18/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| MW-45B | 4/23/2013 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2013 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/18/2014 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/16/2014 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2015 | 0.25 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/10/2015 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/22/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/14/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/27/2017 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/20/2017 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/18/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| MW-98-01A | 3/20/2013 | **48** | 0.85 | 0.57 | 2.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/12/2013 | **35** | 0.27 J | 0.79 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/19/2014 | 3.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/15/2014 | 3.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/25/2015 | **24** | ND<0.5 | ND<0.5 | 0.57 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/8/2015 | 4.9 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/23/2016 | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/14/2016 | 0.91 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2017 | **7.3** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/18/2017 | 3.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2018 | **18** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/19/2018 [2/] | 0.77 J | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<2.0 |
| | 9/17/2018 | **6.87** | 0.28 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**TABLE 4**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Select Monitor Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| MW-98-04 | 3/19/2013 | **210** | **31** | **68** | 3.8 | ND<0.5 | 0.64 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/23/2013 | **310** | **8.5** | **7** | 4.2 | ND<0.5 | 0.37 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2013 | **36** | 0.85 | 1.1 | 0.45 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/23/2013 | 2.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/10/2013 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/26/2013 | 1.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/18/2014 | 2.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/16/2014 | **7.1** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/26/2015 | **21** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/8/2015 | 2.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/17/2016 | **8.5** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/22/2016 | 1.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/14/2016 | 2.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/27/2017 | 2.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/19/2017 | 0.82 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2018 | **29** | 0.27 J | ND<0.5 | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/19/2018 [2/] | 2.2 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<2.0 |
| | 9/18/2018 | 2.63 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| MW-98-04B | 2/17/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/22/2016 | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/14/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/27/2017 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/19/2017 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/19/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| MW-98-05A | 2/20/2013 | **35** | **8.5** | **56** | 0.69 | 2.2 | 0.6 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/20/2013 | **17** | 2.0 | **59** | 0.54 | 2.3 | 0.9 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/23/2013 | **8.4** | 3.7 | **160** | 0.67 | ND<0.5 | 1.4 | ND<0.5 | 0.14 J | ND<0.5 |
| | 9/12/2013 | **110** | **23** | **120** | 1.4 | 3.6 | 0.53 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/19/2014 | **25** | 3.9 | **32** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/15/2014 | **22** | 1.9 | 2.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/25/2015 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/8/2015 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| MW-98-05AR | 2/17/2016 | **40** | 0.33 J | ND<0.5 | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/23/2016 | **17** | 0.53 | 0.32 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/14/2016 | **19** | 0.75 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2017 | **34** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/18/2017 | **35** | 0.58 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2018 | **73** | 1.1 | 1.2 | 0.38 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/17/2018 | **18** | 1.03 | **5.09** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**TABLE 4**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Select Monitor Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| MW-98-05B | 2/20/2013 | 0.59 | 0.48 J | 0.42 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/20/2013 | 0.17 J | 0.26 J | 0.59 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/23/2013 | 0.3 J | 0.75 | 0.49 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/12/2013 | ND<0.5 | ND<0.5 | 0.43 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/19/2014 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/15/2014 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/25/2015 | **23** | **6.1** | **28** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/8/2015 | **25** | 2.0 | 1.1 | 0.23 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| MW-98-05BR | 2/17/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/23/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/14/2016 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2017 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/18/2017 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/29/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/19/2018 [2/3/] | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | ND<2.0 |
| | 9/17/2018 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**Notes**

**ARARs** Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site.
**PCE** Tetrachloroethylene
**TCE** Trichoroethylene
**cis-1,2-DCE** cis-1,2-Dichloroethylene
**1,1,1-TCA** 1,1,1-Trichloroethane
**VC** Vinyl Chloride
**1,1-DCA** 1,1-Dichloroethane
**1,2-DCA** 1,2-Dichloroethane
**1,1-DCE** 1,1-Dichloroethylene
**CA** Chloroethane
**NE** Not Established
**ND** Not detected above laboratory reporting limit.
**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.

**Notes:**

[1/] The NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.

[2/] The June 2018 laboratory analyses were completed by Eurofins Spectrum Analytical because they could also complete some of the non-VOC geochemical parameters that our normal laboratory, York Analytical Laboratories, Inc., could not complete.

[3/] During the June 2018 groundwater sampling event, MW98-05BR was mistakenly sampled instead of MW98-05AR.

**TABLE 5**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Focused Recovery Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| FRW-1 | 1/9/2013 | **120** | 1.9 | 1.7 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/20/2013 | **1,100** | **25** | **15** | **17** | 0.48 J | 1.6 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 20-Mar-13 [2/] | **510** | **48** | **110** | **7.1** | 3.0 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/23/2013 | **360** | **42** | **290** | 4.4 | **9.5** | 2.0 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/20/2013 | **210** | **36** | **180** | **6.2** | **20** | 2.4 | ND<0.5 | 0.67 | ND<0.5 |
| | 6/12/2013 | **100** | 3.1 | **6.1** | 1.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2013 | **310** | 4.8 | **8.7** | 3.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/23/2013 | **77** | **6.2** | **27** | 0.52 | ND<0.5 | 0.22 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/20/2013 | **21** | **11** | **21** | ND<0.5 | ND<0.5 | 0.25 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2013 | **42** | 4.1 | **110** | 0.58 | 0.73 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/24/2013 | **48** | 2.1 | **10** | 0.37 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/26/2013 | **63** | 4.4 | **11** | 1.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2013 | **48** | **5.8** | **6.3** | 0.81 | ND<0.5 | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/28/2014 | **78** | 1.8 | 4.6 | 1.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/27/2014 | **280** | **12** | **22** | 3.9 | ND<0.5 | 0.30 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/17/2014 | **74** | 2.1 | **8.6** | 0.37 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/8/2014 | **130** | 2.4 | **5.6** | 2.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/8/2014 | **66** | 2.5 | 4.2 | 0.95 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2014 | **37** | **6.3** | 4.5 | 0.37 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/24/2014 | **9.9** | 0.63 | **18** | 0.28 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/21/2014 | **29** | 0.52 | 0.31 J | 0.35 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/15/2014 | **24** | 1.5 | **12** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/14/2014 | **41** | 0.84 | 0.46 J | 0.62 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/13/2014 | **17** | 3.2 | 2.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/9/2014 | **120 B** | 3.4 | **5.8** | 1.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/22/2015 | **180** | **6.6** | **23** | 1.9 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/17/2015 | **75** | 2.3 | 4.8 | 0.94 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/27/2015 | **210** | 1.3 | 1.2 | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/1/2015 | **140** | 0.84 | 1.1 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/1/2015 | **34** | 0.49 J | 1.4 | 0.43 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/3/2015 | **23** | 0.89 | 1.9 | 0.47 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/1/2015 | **37** | 1.2 | 1.6 | 0.37 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/10/2015 | **21** | 0.59 | 1.2 | 0.24 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2015 | **15** | 0.54 | 1.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/5/2015 | **50** | 0.69 | 0.38 J | 0.65 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/5/2015 | **53** | 3.6 | **29** | 0.78 | 0.76 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/3/2015 | **24** | 2.5 | **37** | 0.34 J | 0.96 | 0.32 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/6/2016 | **170** | 1.8 | 3.2 | 2.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2016 | **67** | **5.3** | **5.9** | 0.28 J | 0.30 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2016 | **290** | 3.8 | **7.9** | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/5/2016 | **140** | 4.0 | **7.9** | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2016 | **78** | 2.8 | **5.7** | 0.74 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/7/2016 | 57 J | 1.6 | 3.0 | 0.43 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/7/2016 | **40** | 0.95 | 0.75 | 0.30 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/2/2016 | **22** | 0.75 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/1/2016 | **25** | 0.81 | 1.6 | 0.20 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/17/2016 | **29** | 2.6 | **8.5** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/14/2016 | **64** | **5.4** | **38** | 0.84 | 0.41 J | 0.28 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2016 | **58** | 0.54 | 1.9 | 0.51 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/9/2017 | **120** | 1.9 | 1.7 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/2/2017 | **460** | **8.5** | **20** | 3.5 | ND<0.5 | 0.59 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2017 | **110** | 3.9 | **6.3** | 0.82 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/7/2017 | **240** | 3.8 | 2.2 | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/3/2017 | **200** | 2.0 | 2.3 | 2.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/1/2017 | **94** | 2.5 | 4.5 | 0.55 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/6/2017 | 3.6 | ND<0.5 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**TABLE 5**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Focused Recovery Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| FRW-1 | 8/1/2017 | **16** | 0.41 J | 0.44 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| Cont'd | 9/5/2017 | **34** | 0.93 | 2.9 | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/4/2017 | **56** | 1.7 | **7.8** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/1/2017 | **72** | 1.3 | 1.7 | 0.37 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/5/2017 | **55** | 1.5 | 3.4 | 0.40 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2018 | **63** | **7.4** | **28** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2018 | **110** | 2.7 | 1.8 | 1.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/2/2018 | **83** | 0.31 J | ND<0.5 | 0.25 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2018 | **97** | 0.86 | 0.46 J | 0.75 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/20/2018 | **25** | 0.76 | 0.68 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/2/2018 | **22** | 0.66 | 0.60 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/28/2018 | **7** | 4.10 | **9.10** | ND<0.5 | 0.22 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/21/2018 | **20** | 1.25 | 2.43 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| FRW-2 | 1/9/2013 | **27** | **6.4** | **7.3** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/20/2013 | **9.1** | 1.7 | **70** | 0.37 J | 2.1 | 0.31 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/20/2013 | **6.8** | 1.2 | **69** | 0.27 J | **9.1** | 0.39 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/23/2013 | 4.0 | 1.4 | **47** | 0.16 J | **7.9** | 0.6 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/20/2013 | **6.0** | 2.4 | **49** | 0.20 J | **7.2** | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/12/2013 | **45** | 2.7 | **22** | 0.35 J | 3.1 | 1.3 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2013 | **210** | **9.8** | **14** | 1.7 | 1.0 | 0.7 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/23/2013 | **28** | 3.1 | **17** | ND<0.5 | 2.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/20/2013 | **36** | 1.7 | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2013 | **20** | 2.2 | **160** | 0.47 J | **5.0** | 0.23 J | ND<0.5 | 0.20 J | ND<0.5 |
| | 10/24/2013 | **35** | **5.4** | **7.0** | ND<0.5 | 2.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/26/2013 | **39** | **6.0** | **16** | 0.20 J | 0.62 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2013 | **24** | 3.2 | 4.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/28/2014 | **46** | 3.1 | 3.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/27/2014 | **64** | 3.8 | **19** | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/17/2014 | **11** | 1.9 | **15** | ND<0.5 | 0.96 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/8/2014 | **46** | 3.3 | **25** | ND<0.5 | 1.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/8/2014 | **10** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2014 | **27** | 0.86 | 0.34 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/24/2014 | **13** | 1.2 | **5.6** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/21/2014 | **15** | 0.23 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/15/2014 | **19** | 2.8 | **15** | ND<0.5 | 0.81 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/14/2014 | **29** | 1.5 | 0.46 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/13/2014 | **25** | 3.8 | 0.94 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/9/2014 | **63** | 2.1 | 0.77 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/22/2015 | **36** | 2.4 | **6.4** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/17/2015 | **33** | 0.77 | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/27/2015 | **110** | **13** | **81** | 1.2 | 0.89 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/1/2015 | **140** | **8.0** | **8.6** | 0.62 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/1/2015 | **23** | 0.64 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/3/2015 | **9.0** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/1/2015 | **24** | 0.83 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/10/2015 | **22** | 0.53 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2015 | **14** | 1.1 | 0.35 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/5/2015 | **29** | 1.4 | 0.30 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/5/2015 | **49** | 4.2 | 3.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/3/2015 | **37** | **8.1** | **34** | ND<0.5 | 0.83 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/6/2016 | **53** | 4.3 | 2.3 | ND<0.5 | 0.21 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2016 | **280** | 3.3 | **5.2** | 3.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2016 | **55** | 1.8 | 1.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/5/2016 | **32** | 0.72 | 0.31 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2016 | **16** | 0.39 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/7/2016 | **39** | **5.7** | 2.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/7/2016 | **21** | 1.4 | 0.30 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/2/2016 | **22** | 1.0 | 0.55 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/1/2016 | **26** | 1.2 | 0.39 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**TABLE 5**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Focused Recovery Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| FRW-2 | 10/17/2016 | 3.1 | 2.7 | **41** | ND<0.5 | 4.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| Cont'd | 11/14/2016 | **19** | **6.5** | **19** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2016 | **32** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/9/2017 | **27** | **6.4** | **7.3** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/2/2017 | **100** | **10** | **39** | 0.63 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2017 | **40** | 1.0 | 0.52 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/7/2017 | **93** | 2.6 | 1.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/3/2017 | **68** | **11** | **9.3** | 0.35 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/1/2017 | **16** | 1.0 | 0.92 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/6/2017 | 0.57 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/1/2017 | **7.0** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/5/2017 | **33** | 0.85 | 0.59 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/4/2017 | **50** | 2.7 | 0.91 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/1/2017 | **45** | 0.76 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/5/2017 | **38** | 3.4 | 1.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2018 | **37** | 3.2 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2018 | **48** | 0.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/2/2018 | **140** | 1.2 | 0.36 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2018 | **29** | 0.92 | 0.29 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/20/2018 | 3.8 | 1.4 | 0.44 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/2/2018 | 3.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/28/2018 | ND<0.5 | 0.30 | **29** | ND<0.5 | **2.48** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/21/2018 | **11.9** | 1.83 | **14.5** | ND<0.5 | 0.73 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| FRW-3 | 1/9/2013 | **53** | **5.1** | **17** | 0.40 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/20/2013 | **35** | **7.7** | **69** | 0.47 J | **5.4** | 0.6 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/20/2013 | **25** | **7.8** | **120** | 0.71 | 3.4 | 1.3 | ND<0.5 | 0.14 J | ND<0.5 |
| | 4/23/2013 | 1.3 | 0.31 J | **370** | 0.56 | ND<0.5 | 3.6 | ND<0.5 | 0.35 J | ND<0.5 |
| | 5/20/2013 | 1.4 | 0.25 J | **320** | ND<0.5 | **9.2** | **5** | ND<0.5 | 0.29 J | 0.68 |
| | 6/12/2013 | **9.9** | **6.9** | **46** | 1.3 | 0.93 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2013 | **230** | **18** | **70** | 3.6 | **5.4** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/23/2013 | **52** | **9.6** | **35** | 0.42 J | 2.4 | 0.28 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/20/2013 | **12** | 1.7 | **8.5** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2013 | **27** | 3.1 | **21** | 0.23 J | 2.5 | 0.30 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/24/2013 | **18** | 1.9 | **13** | ND<0.5 | 0.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/26/2013 | **23** | 3.6 | **10** | ND<0.5 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2013 | **13** | 1.0 | **8.1** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/28/2014 | **31** | 4.7 | **14** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/27/2014 | **31** | **8.1** | **75** | 0.7 | ND<0.5 | 0.34 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/17/2014 | **49** | **8.0** | **37** | 0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/8/2014 | **110** | **7.7** | **30** | 0.33 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/8/2014 | **51** | 1.5 | 3.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2014 | **32** | **7.9** | **13** | ND<0.5 | 0.92 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/24/2014 | **30** | 3.3 | 4.9 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/21/2014 | **43** | 2.3 | 1.3 | 0.36 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/15/2014 | **33** | **5.6** | **27** | 0.28 J | 0.38 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/14/2014 | **8.0** | 1.6 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/13/2014 | **9.7** | 2.7 | 2.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/9/2014 | **35 B** | 2.5 | 2 | 0.26 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/22/2015 | **84** | **14** | **77** | 1.4 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/17/2015 | **73** | **7.4** | **29** | 0.83 | 0.28 J | ND<0.5 | 0.35 J | ND<0.5 | ND<0.5 |
| | 3/27/2015 | **41** | 2.6 | **13** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/1/2015 | **190** | **7.1** | **21** | 1.8 | 0.33 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/1/2015 | **89** | 3.9 | **5.3** | 0.87 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/3/2015 | **67** | 3.2 | **5.1** | 0.58 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/1/2015 | **57** | 4.2 | 4 | 0.23 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/10/2015 | **12** | 2.2 | 1.9 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2015 | **7.7** | 2.5 | **10** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/5/2015 | **24** | 1.6 | 1.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/5/2015 | **30** | 3.6 | **49** | 0.30 J | 0.41 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**TABLE 5**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Focused Recovery Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| FRW-3 | 12/3/2015 | **34** | 3.8 | **96** | 0.38 J | 0.7 | 0.29 J | ND<0.5 | ND<0.5 | ND<0.5 |
| Cont'd | 1/6/2016 | **34** | 3.1 | **15** | 0.34 J | 0.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2016 | **50** | 4.1 | **23** | 0.23 J | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2016 | **62** | **7.1** | **29** | ND<0.5 | 0.62 | 0.30 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/5/2016 | **43** | 2.5 | **24** | ND<0.5 | 0.27 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2016 | **150** | **7.3** | **17** | 0.52 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/7/2016 | **54** | 4.8 | **7.8** | 0.29 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/7/2016 | **15** | 1.7 | 2.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/2/2016 | **8.1** | 0.7 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/1/2016 | **17** | 1.4 | 2.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/17/2016 | **9.0** | 2.4 | **23** | ND<0.5 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/14/2016 | **79** | **5.6** | **14** | 0.67 | 0.48 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2016 | **24** | 4.1 | **16** | ND<0.5 | 0.42 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/9/2017 | **53** | **5.1** | **17** | 0.40 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/2/2017 | **18** | 3.7 | **24** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2017 | **50** | **5.7** | **20** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/7/2017 | **65** | **5.0** | **41** | ND<0.5 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/11/2017 | **130** | **5.8** | **8.5** | 0.35 J | 0.24 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/1/2017 | **83** | **5.8** | **12** | ND<0.5 | 0.37 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/6/2017 | 3.4 | 0.7 | 1.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/1/2017 | **35** | 1.9 | 1.9 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/5/2017 | **15** | 1.7 | **6.1** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/4/2017 | **21** | **6.0** | **15** | ND<0.5 | 1.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/1/2017 | **17** | 1.2 | 3.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/5/2017 | **37** | 1.8 | 2.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2018 | **22** | 2.0 | 3.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2018 | **120** | **7.9** | **18** | 0.65 | ND<0.5 | 0.26 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/2/2018 | **170** | 4.5 | 0.2 J | 0.71 | 0.25 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2018 | **140** | **9.4** | **11** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/20/2018 | **39** | **6.8** | 4.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/2/2018 | **49** | 1.4 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/28/2018 | **6.2** | 1.0 | **20.3** | ND<0.5 | 0.84 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/21/2018 | **19.6** | 3.0 | **19.8** | ND<0.5 | **2.04** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| FRW-4 | 1/9/2013 | **16** | 1.8 | **6.4** | 0.27 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/20/2013 | **15** | 1.9 | 2.4 | 0.72 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/20/2013 | **62** | **8.8** | **43** | 2.4 | 0.10 J | 1.9 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/23/2013 | **82** | **11** | **39** | 2.7 | ND<0.5 | 1.7 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/20/2013 | **47** | **13** | **22** | 3.5 | ND<0.5 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/12/2013 | **25** | **7.5** | **9.3** | 0.99 | ND<0.5 | 0.49 J | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2013 | **12** | 2.1 | 3.0 | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/23/2013 | **27** | 4.9 | 4.9 | 0.69 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/20/2013 | **6.1** | 0.76 | 1.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2013 | **19** | 2.7 | 4.1 | 0.34 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/24/2013 | **10** | 2.1 | **5.7** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/26/2013 | 4.1 | 1.6 | **7.5** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2013 | 4.9 | 0.78 | **6.4** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/28/2014 | **8.9** | 1.1 | **6.4** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/27/2014 | **6.2** | 1.0 | 3.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/17/2014 | **7.5** | 1.7 | 1.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/8/2014 | **17** | 1.8 | 3.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/8/2014 | 2.2 | 0.29 J | 0.57 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/17/2014 | **21** | 1.7 | 4.3 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/24/2014 | **8.2** | 1.2 | **6.0** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/21/2014 | 4.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/15/2014 | **28** | 1.2 | **11** | 0.52 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/14/2014 | 2.8 | 0.55 | 0.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/13/2014 | 3.8 | 0.97 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/9/2014 | 3.7 | 0.36 J | 2.9 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/22/2015 | **46** | 3.6 | **7.8** | 0.9 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/17/2015 | **8.6** | 0.57 | 0.72 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/27/2015 | **34** | 2.1 | 3.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/1/2015 | **9.4** | 0.66 | 1.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/1/2015 | **5.1** | 0.29 J | 0.48 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**TABLE 5**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**Updated FDSA Characterization - Groundwater VOC Results for Focused Recovery Wells (ug/l)**

| Well ID | Date Sampled | Analyte | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | PCE | TCE | cis-1,2-DCE | 1,1,1-TCA | VC | 1,1-DCA | 1,2-DCA | 1,1-DCE | CA |
| | ARARs | 5 | 5 | 5 | 5 | 2 [1/] | 5 | 0.6 [1/] | 5 | 5 [1/] |
| FRW-4 | 6/3/2015 | 3.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| Cont'd | 7/1/2015 | **15** | 2.4 | 1.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/10/2015 | **6.5** | 0.49 J | 0.64 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/11/2015 | 1.4 | ND<0.5 | 0.61 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/5/2015 | 2.7 | ND<0.5 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/5/2015 | 0.87 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/3/2015 | 2.7 | ND<0.5 | 0.28 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/6/2016 | 2.4 | 0.37 J | **7.9** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2016 | **5.0** | 0.68 | 4.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2016 | **15** | 1.1 | **5.4** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/5/2016 | **11** | 0.7 | 3.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2016 | **6.7** | 0.82 | 1.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/7/2016 | **8.5** | 0.91 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/7/2016 | **7.5** | 0.78 | 1.4 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/2/2016 | 3.5 | 0.5 | 2.6 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/1/2016 | 2.2 | 0.48 J | 3.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/17/2016 | 1.6 | 0.47 J | 4.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/14/2016 | 1.9 | 2.1 | **29** | ND<0.5 | 0.33 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/16/2016 | 2.0 | 0.5 | **7.8** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 1/9/2017 | **16** | 1.8 | **6.4** | 0.27 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/2/2017 | **5.1** | 1.4 | **17** | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2017 | 4.0 | 0.6 | 2.2 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/7/2017 | **7.6** | 1.2 | 2.9 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/3/2017 | **40** | 3.5 | **15** | 0.42 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/1/2017 | **8.8** | 0.5 | 2.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/6/2017 | 0.27 J | ND<0.5 | 0.28 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/1/2017 | 0.8 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/5/2017 | 2.7 | 0.42 J | 0.51 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 10/4/2017 | **9.8** | 3.9 | 4.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 11/1/2017 | 3.0 | 0.32 J | 0.78 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 12/5/2017 | **5.1** | ND<0.5 | 1.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 2/1/2018 | **21** | 2.5 | **7.0** | 0.27 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 3/1/2018 | 3.0 | ND<0.5 | 0.47 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 4/2/2018 | 3.2 | ND<0.5 | 1.0 | 0.32 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 5/2/2018 | **19** | ND<0.5 | 1.1 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 6/20/2018 | 1.4 | 0.22 J | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 7/2/2018 | 1.7 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 8/28/2018 | ND<0.5 | 0.45 | 5.0 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |
| | 9/21/2018 | 4.21 | 1.02 | 1.38 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 |

**Notes**

| | | | |
|---|---|---|---|
| **ARARs** | Applicable Relevant and Appropriate Requirements for aquifer restoration established for the Site. | | |
| **PCE** | Tetrachloroethylene | **1,1-DCA** | 1,1-Dichloroethane |
| **TCE** | Trichoroethylene | **1,2-DCA** | 1,2-Dichloroethane |
| **cis-1,2-DCE** | cis-1,2-Dichloroethylene | **1,1-DCE** | 1,1-Dichloroethylene |
| **1,1,1-TCA** | 1,1,1-Trichloroethane | **CA** | Chloroethane |
| **VC** | Vinyl Chloride | **ND** | Not detected above laboratory reporting limit. |
| **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 | | |

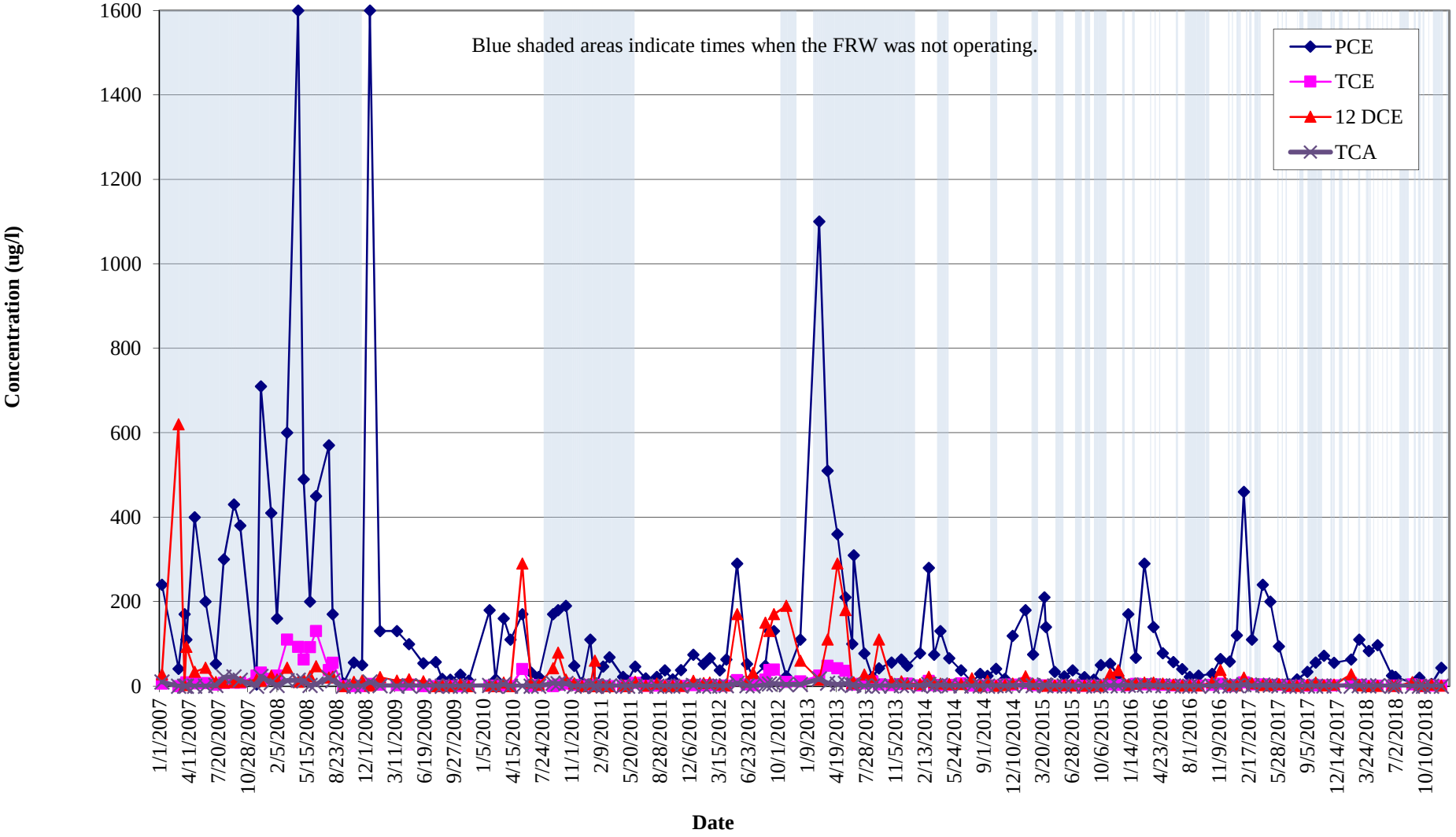
[1/] The NYSDEC ambient water quality standards for these compounds are presented because site-specific ARARs for these compounds were not established.

# GRAPHS

**GRAPH 1**

**SUPPLEMENTAL CHARACTERIZATION AND FOCUSED GROUNDWATER REMEDIATION FEASABILITY STUDY**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

**FP&T Recovery Well VOC Concentrations for FRW-1 for 2007 through 2018**




K:\Jobs\Kraft Foods Global, Inc\ROWE Industries\Ground Water\O&M\FDSA\2018 FDSA\Report\graphs\
FP&T Graphs 1, 2,3,4
Graph 1 FRW-1 (Hist)

**WSP USA**

**GRAPH 2**

**SUPPLEMENTAL CHARACTERIZATION AND FOCUSED GROUNDWATER REMEDIATION FEASABILITY STUDY**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

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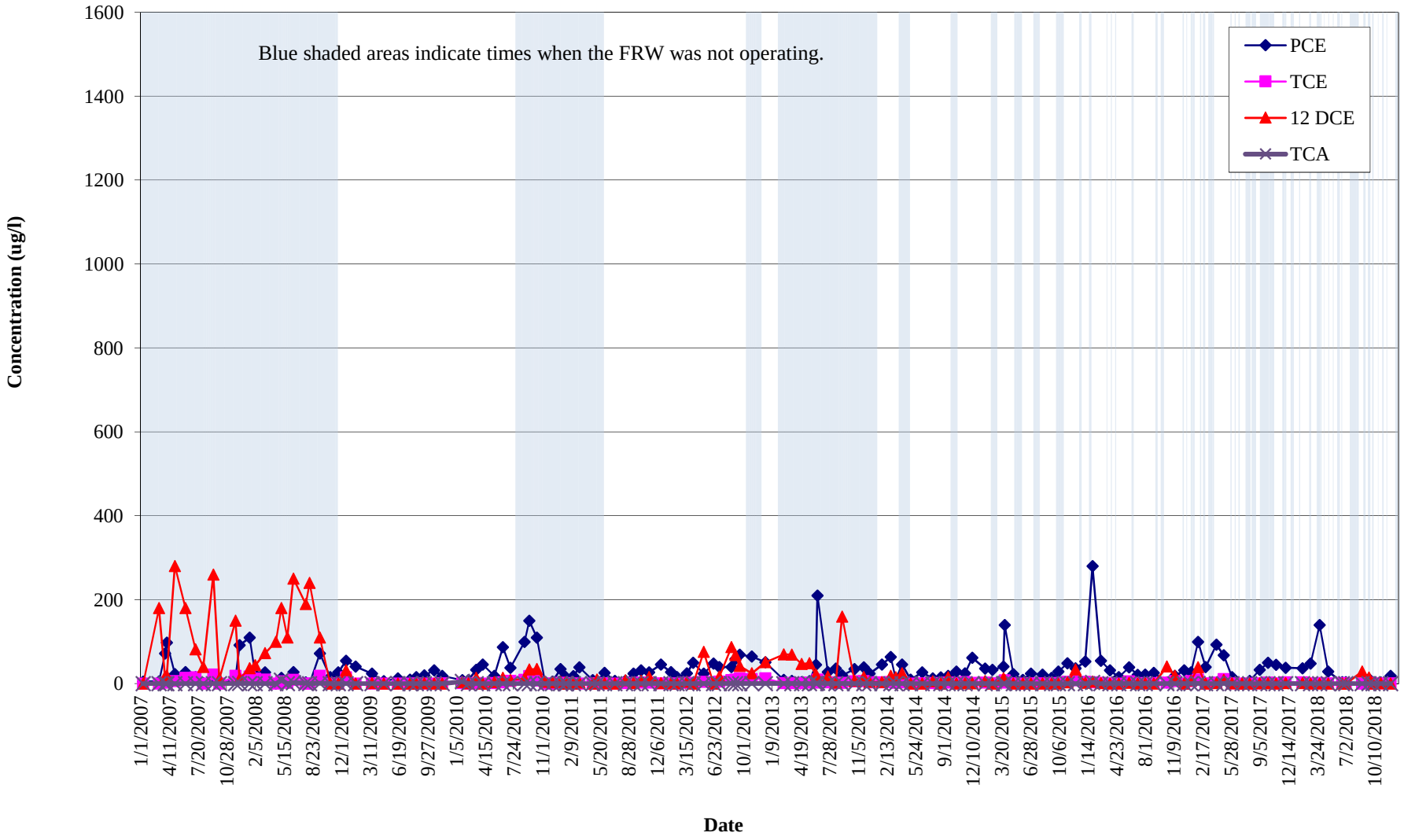
**FP&T Recovery Well VOC Concentrations for FRW-2 for 2007 through 2018**

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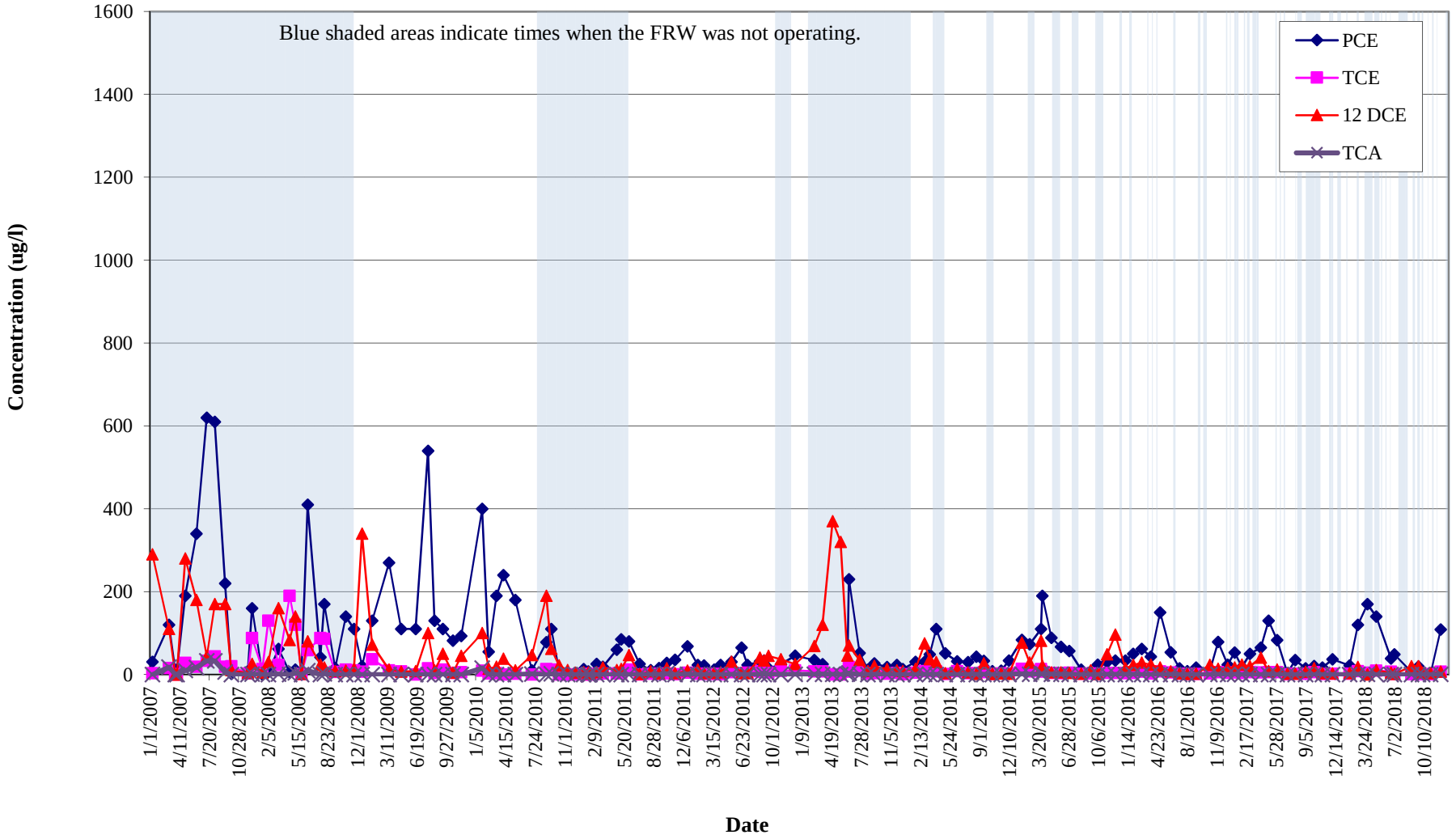
FP&T Graphs 1, 2,3,4
Graph 2 FRW-2 (Hist)

**WSP USA**

**GRAPH 3**

**SUPPLEMENTAL CHARACTERIZATION AND FOCUSED GROUNDWATER REMEDIATION FEASABILITY STUDY**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

## FP&T Recovery Well VOC Concentrations for FRW-3 for 2007 through 2018

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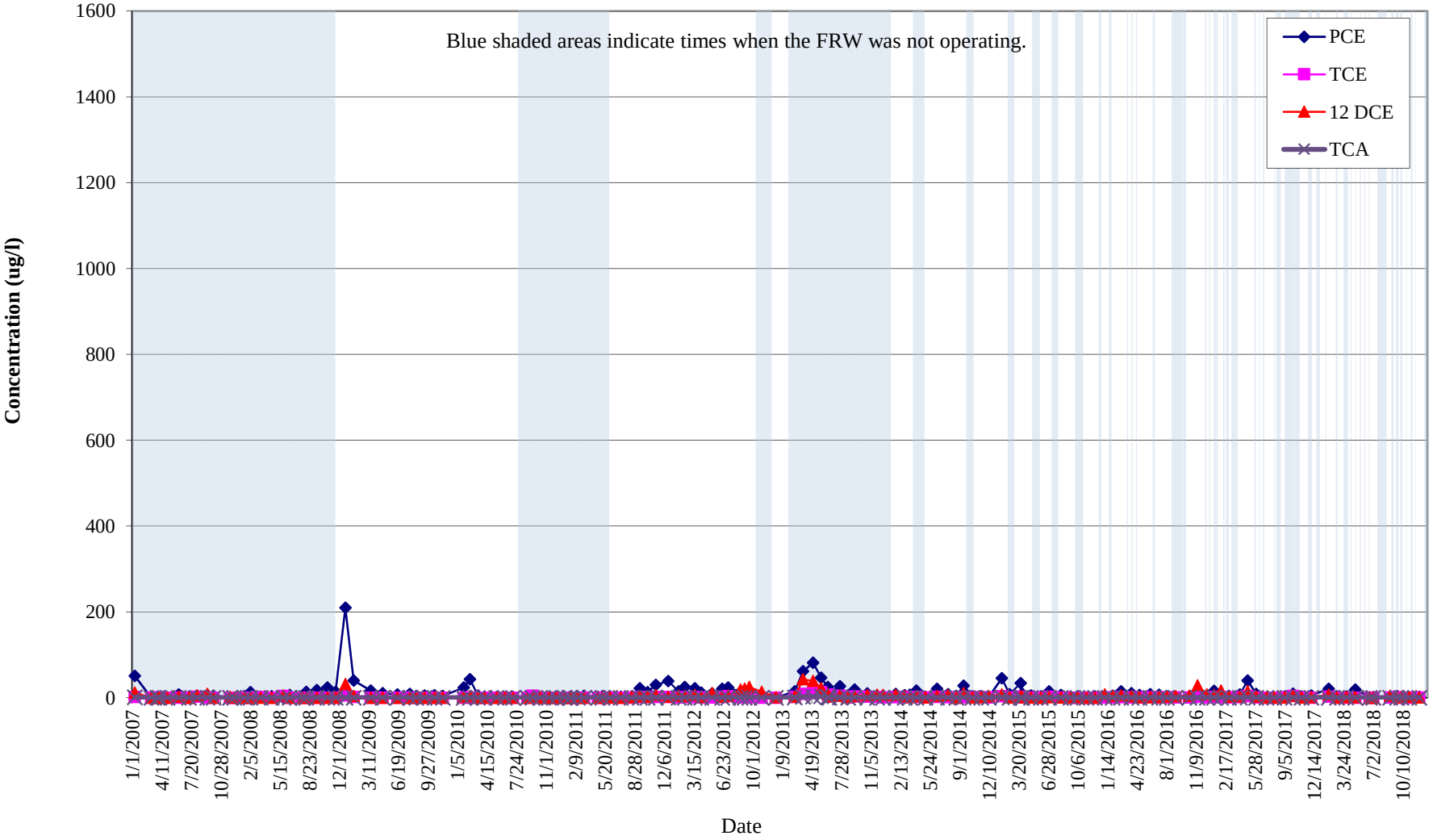
FP&T Graphs 1, 2,3,4
Graph 3 FRW-3 (Hist)

**WSP USA**

**GRAPH 4**

**SUPPLEMENTAL CHARACTERIZATION AND FOCUSED GROUNDWATER REMEDIATION FEASABILITY STUDY**
**FORMER ROWE INDUSTRIES SUPERFUND SITE**
**1668 SAG HARBOR TURNPIKE**
**SAG HARBOR, NEW YORK**

## FP&T Recovery Well VOC Concentrations for FRW-4 for 2007 through 2018

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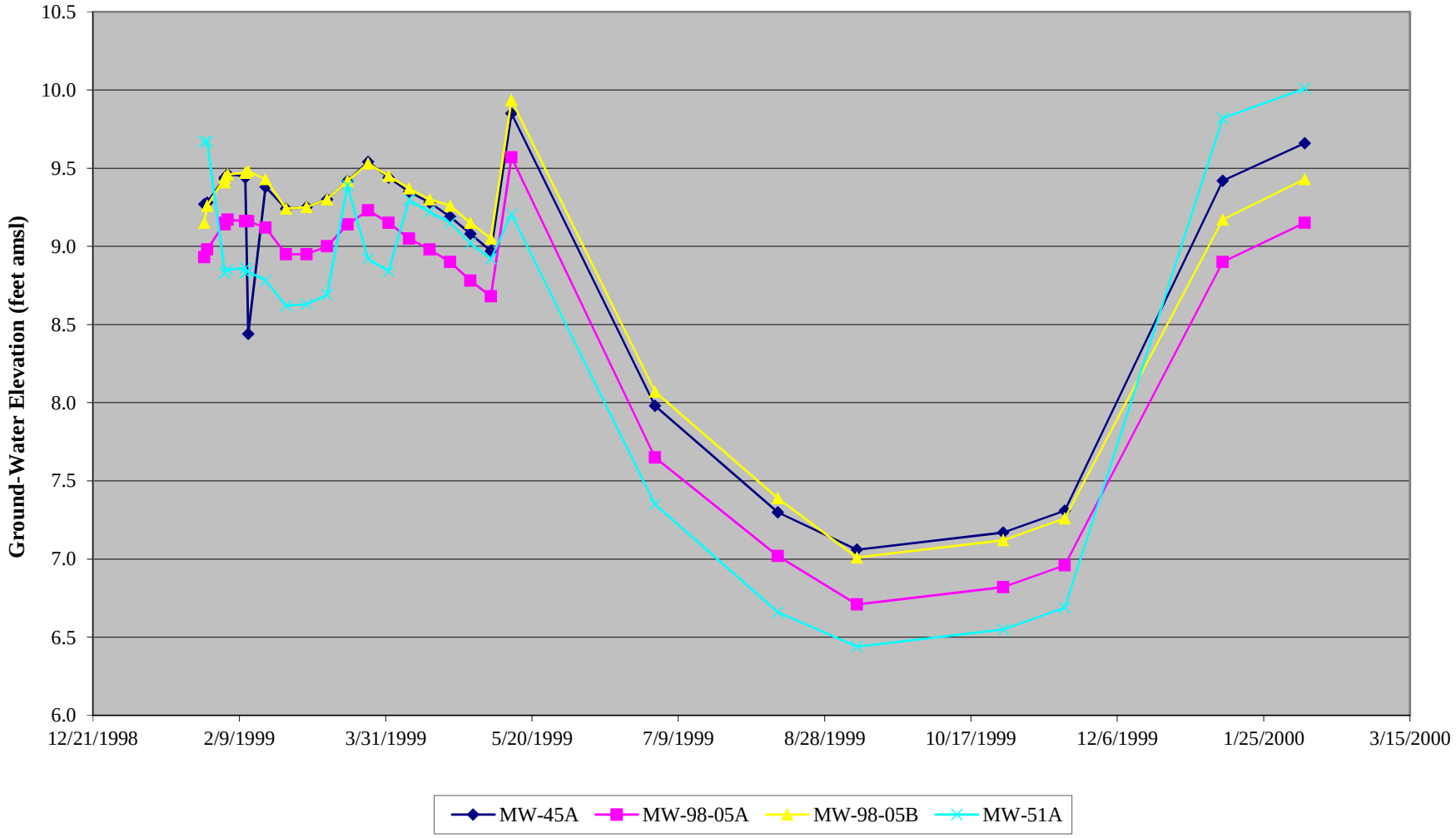
FP&T Graphs 1, 2,3,4
Graph 4 FRW-4 (Hist)

**WSP USA**

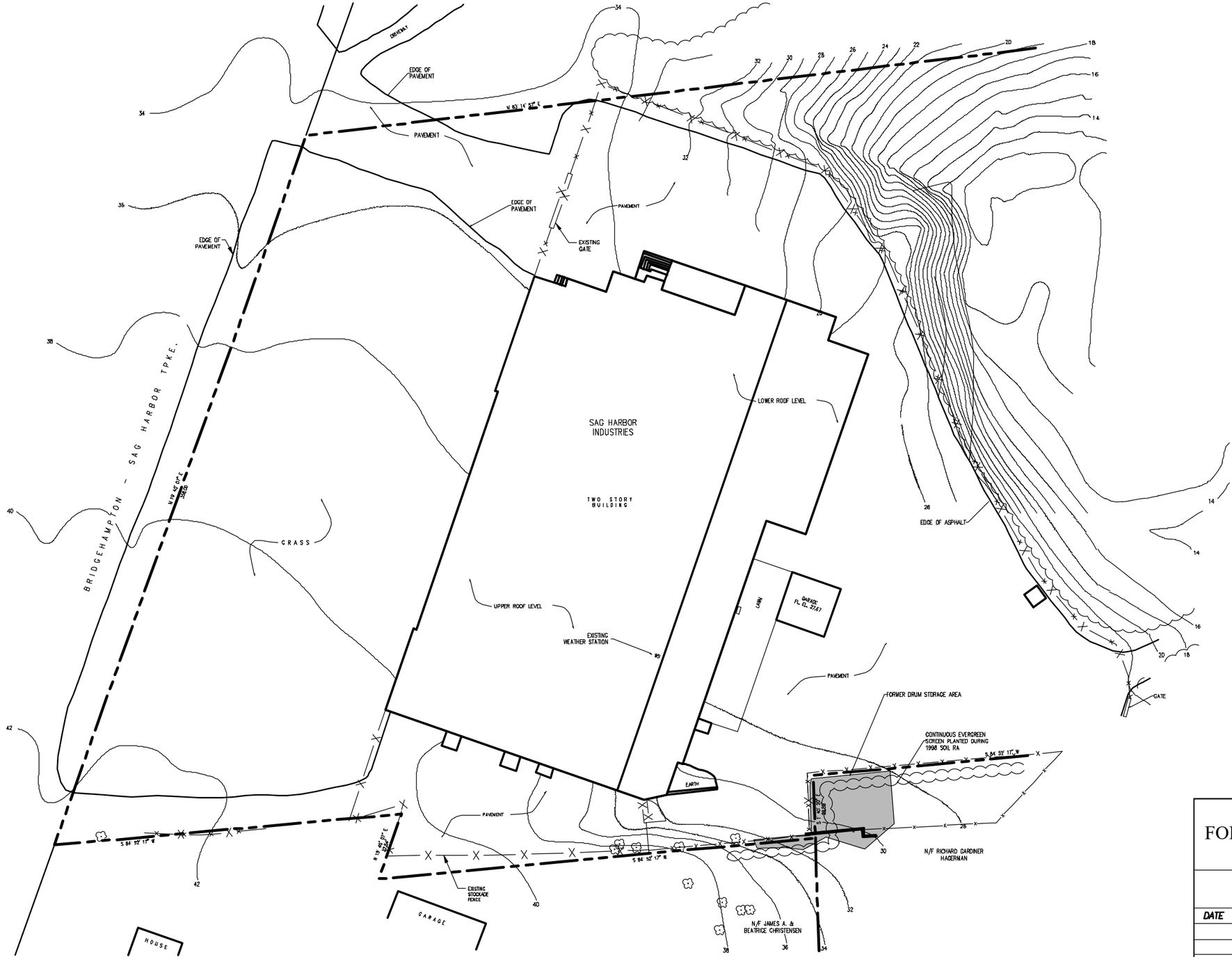
# GRAPH 5

## SUPPLEMENTAL CHARACTERIZATION AND FOCUSED GROUNDWATER REMEDIATION FEASABILITY STUDY
## ROWE INDUSTRIES SITE
## SAG HARBOR, NEW YORK

### Pre-Focused Pump and Treat System Operation Water Level Elevations - FDSA Monitoring Wells



# FIGURES




LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE (EXISTING)
- CHAIN LINK FENCE (FORMER)
- APPROXIMATE TREELINE
- 38 GROUND SURFACE ELEVATION (FEET ABOVE MEAN SEA LEVEL)

0 10

SCALE IN FEET

# GROUNDWATER REMEDIAL ACTION
# FORMER ROWE INDUSTRIES SUPERFUND SITE
# SAG HARBOR, NEW YORK

## FORMER ROWE INDUSTRIES SUPERFUND SITE MAP

| DATE | REVISED |
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| | |

PREPARED BY:

WSP USA
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

| DRAWN: | RAC | CHECKED: | MG | DATE: | 02/21/19 | FIGURE: | 1 |
|---|---|---|---|---|---|---|---|

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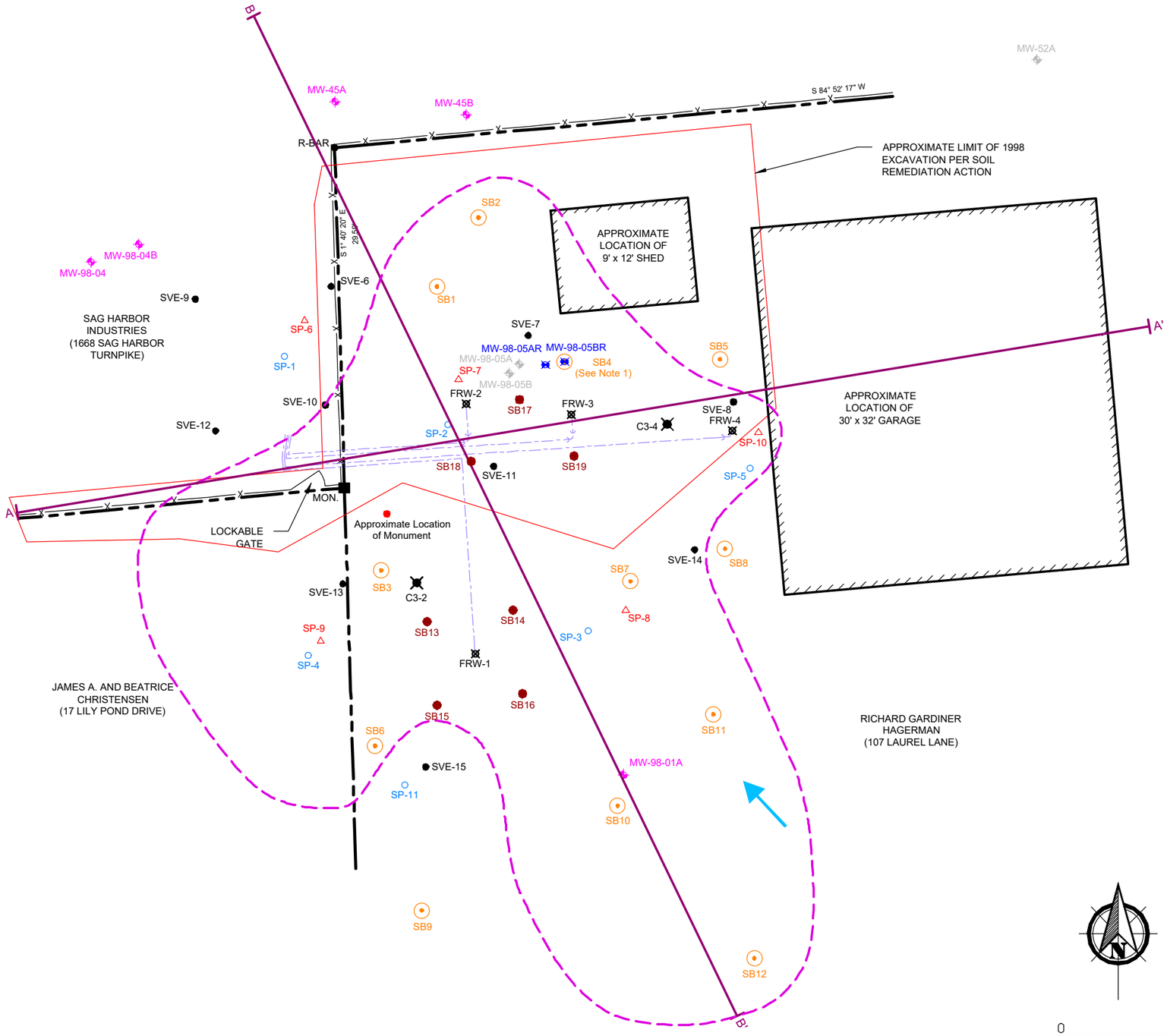


LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- APPROXIMATE LOCATION OF FOCUSED REMEDIATION GROUNDWATER RECOVERY PIPING
- APPROXIMATE EXTENT OF CLAY LENS (~25 - 33 ft.bg.)
- FRW-3 — FOCUSED REMEDIATION RECOVERY WELL (APPROXIMATE LOCATION)
- MW-98-04 — GROUNDWATER MONITOR WELL LOCATION
- JANUARY 2003 BORING LOCATION
- DECEMBER 2015 BORING LOCATION
- MW-98-05B — DECOMMISSIONED MONITOR WELL
- REPLACEMENT MONITOR WELL INSTALLED IN DECEMBER 2015
- SP-10 — SHALLOW AIR SPARGE WELL LOCATION
- SP-5 — DEEP AIR SPARGE WELL LOCATION
- SVE-9 — SVE WELL LOCATION
- JUNE 2018 SOIL BORING
- GENERAL DIRECTION OF GROUNDWATER FLOW

NOTE:
1. BORING SB4 WAS COMPLETED AS MW-98-05BR.

0 10
SCALE IN FEET

# GROUNDWATER REMEDIAL ACTION
# FORMER ROWE INDUSTRIES SUPERFUND SITE
# SAG HARBOR, NEW YORK

## FDSA SITE MAP FEATURES

| DATE | REVISED |
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PREPARED BY:

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4 Research Drive
Suite 204
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(203) 929-8555

| DRAWN: | RAC | CHECKED: | MG | DATE: | 02/21/19 | FIGURE: | 2 |
|---|---|---|---|---|---|---|---|

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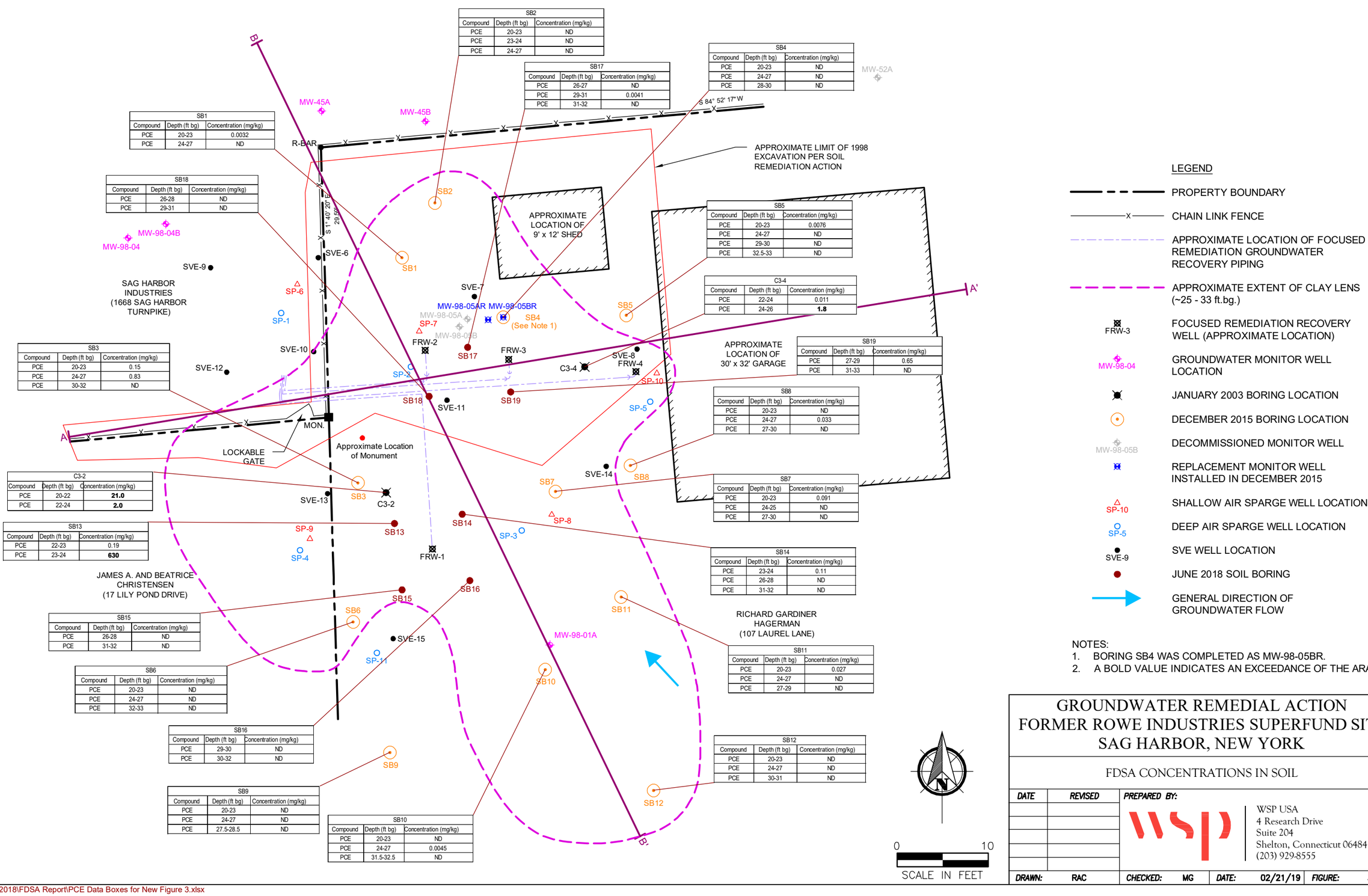


| SB2 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | ND |
| PCE | 23-24 | ND |
| PCE | 24-27 | ND |

| SB17 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 26-27 | ND |
| PCE | 29-31 | 0.0041 |
| PCE | 31-32 | ND |

| SB4 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | ND |
| PCE | 24-27 | ND |
| PCE | 28-30 | ND |

| SB1 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | 0.0032 |
| PCE | 24-27 | ND |

| SB18 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 26-28 | ND |
| PCE | 29-31 | ND |

| SB5 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | 0.0076 |
| PCE | 24-27 | ND |
| PCE | 29-30 | ND |
| PCE | 32.5-33 | ND |

| C3-4 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 22-24 | 0.011 |
| PCE | 24-26 | **1.8** |

| SB3 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | 0.15 |
| PCE | 24-27 | 0.83 |
| PCE | 30-32 | ND |

| SB19 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 27-29 | 0.65 |
| PCE | 31-33 | ND |

| SB8 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | ND |
| PCE | 24-27 | 0.033 |
| PCE | 27-30 | ND |

| C3-2 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-22 | **21.0** |
| PCE | 22-24 | **2.0** |

| SB7 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | 0.091 |
| PCE | 24-25 | ND |
| PCE | 27-30 | ND |

| SB13 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 22-23 | 0.19 |
| PCE | 23-24 | **630** |

| SB14 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 23-24 | 0.11 |
| PCE | 26-28 | ND |
| PCE | 31-32 | ND |

| SB15 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 26-28 | ND |
| PCE | 31-32 | ND |

| SB11 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | 0.027 |
| PCE | 24-27 | ND |
| PCE | 27-29 | ND |

| SB6 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | ND |
| PCE | 24-27 | ND |
| PCE | 32-33 | ND |

| SB16 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 29-30 | ND |
| PCE | 30-32 | ND |

| SB12 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | ND |
| PCE | 24-27 | ND |
| PCE | 30-31 | ND |

| SB9 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | ND |
| PCE | 24-27 | ND |
| PCE | 27.5-28.5 | ND |

| SB10 | | |
|---|---|---|
| Compound | Depth (ft bg) | Concentration (mg/kg) |
| PCE | 20-23 | ND |
| PCE | 24-27 | 0.0045 |
| PCE | 31.5-32.5 | ND |

LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- APPROXIMATE LOCATION OF FOCUSED REMEDIATION GROUNDWATER RECOVERY PIPING
- APPROXIMATE EXTENT OF CLAY LENS (~25 - 33 ft.bg.)
- FRW-3 — FOCUSED REMEDIATION RECOVERY WELL (APPROXIMATE LOCATION)
- MW-98-04 — GROUNDWATER MONITOR WELL LOCATION
- JANUARY 2003 BORING LOCATION
- DECEMBER 2015 BORING LOCATION
- MW-98-05B — DECOMMISSIONED MONITOR WELL
- REPLACEMENT MONITOR WELL INSTALLED IN DECEMBER 2015
- SP-10 — SHALLOW AIR SPARGE WELL LOCATION
- SP-5 — DEEP AIR SPARGE WELL LOCATION
- SVE-9 — SVE WELL LOCATION
- JUNE 2018 SOIL BORING
- GENERAL DIRECTION OF GROUNDWATER FLOW

NOTES:
1. BORING SB4 WAS COMPLETED AS MW-98-05BR.
2. A BOLD VALUE INDICATES AN EXCEEDANCE OF THE ARAR.

# GROUNDWATER REMEDIAL ACTION
# FORMER ROWE INDUSTRIES SUPERFUND SITE
# SAG HARBOR, NEW YORK

## FDSA CONCENTRATIONS IN SOIL

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4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

| DRAWN: | RAC | CHECKED: | MG | DATE: | 02/21/19 | FIGURE: | 3 |
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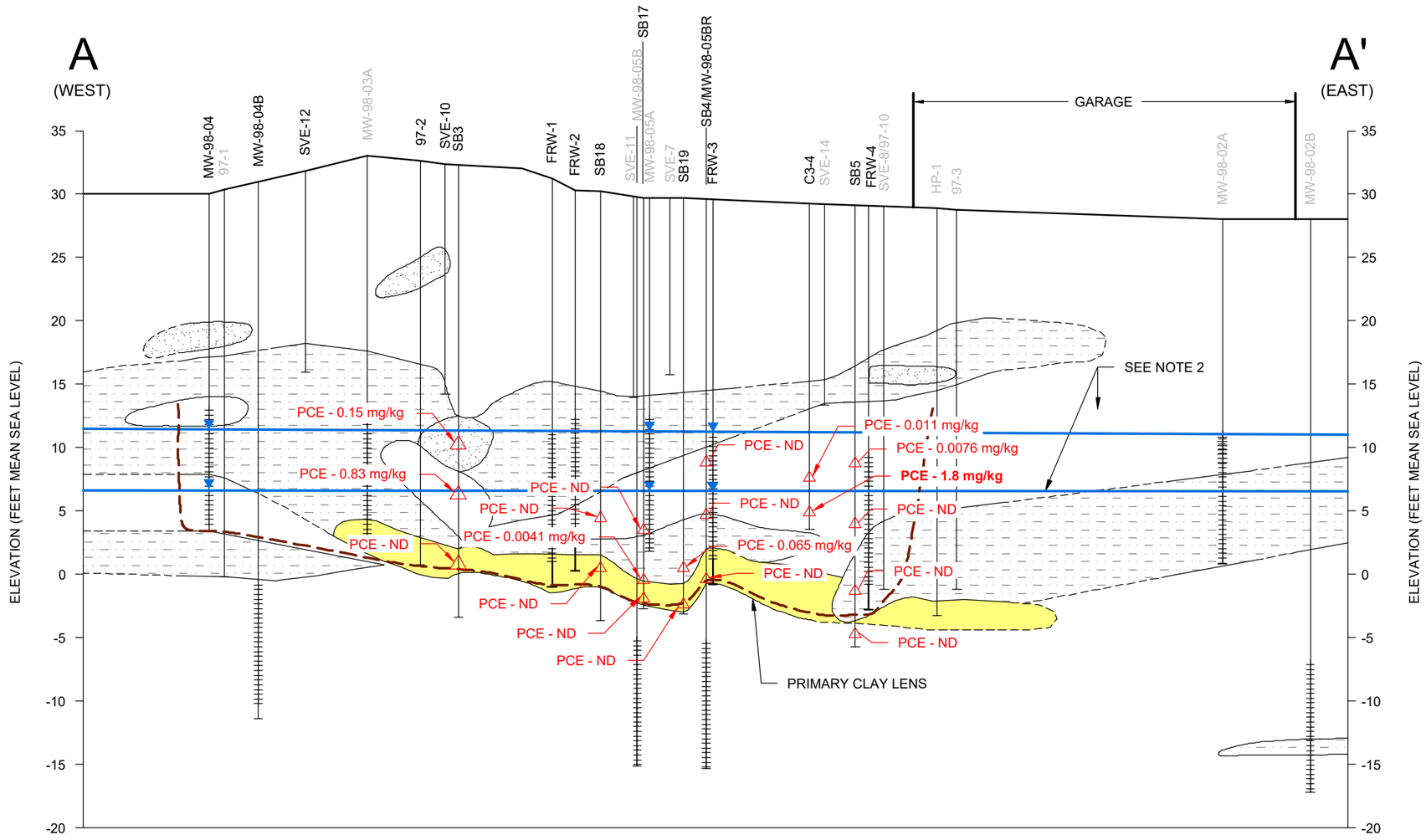


LEGEND

- WATER TABLE ELEVATION
- SCREEN SETTING
- DEPTH OF BORING
- FINE TO COARSE SAND
- FINE TO COARSE SAND AND SILTY CLAY
- FINE SAND AND SILT
- SILT AND CLAY
- MW-98-03A — UNLOCATED OR DECOMMISSIONED MONITOR WELL, NOT USED IN DETERMINING GROUNDWATER ELEVATION, ONLY GEOLOGY
- ESTIMATED GEOLOGIC BOUNDARY
- APPROXIMATE BOUNDARY WHERE PCE CONCENTRATIONS IN THE GROUNDWATER EXCEED THE ARAR AT LEAST PART OF THE TIME
- △ SATURATED SOIL SAMPLE LOCATION

NOTES:

1. HORIZONTAL CROSS SECTION LINES ARE DEPICTED ON FIGURE 1.
2. LOW AND HIGH GROUNDWATER ELEVATIONS SHOWN ARE FOR RECORDED WATER ELEVATION DATA FROM 2003 TO 2018 AND RANGE FROM APPROXIMATELY 6.1 FT TO 11 FT ABOVE MEAN SEA LEVEL.
3. BOLD VALUE INDICATES AN EXCEEDANCE OF THE ARAR.

0 10 HORIZONTAL SCALE IN FEET

0 10 VERTICAL SCALE IN FEET

# GROUNDWATER REMEDIAL ACTION
# FORMER ROWE INDUSTRIES SUPERFUND SITE
# SAG HARBOR, NEW YORK

## FDSA CROSS-SECTION A-A'

| DATE | REVISED |
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Suite 204
Shelton, Connecticut 06484
(203) 929-8555

| DRAWN: | RAC | CHECKED: | MG | DATE: | 02/21/19 | FIGURE: | 4 |
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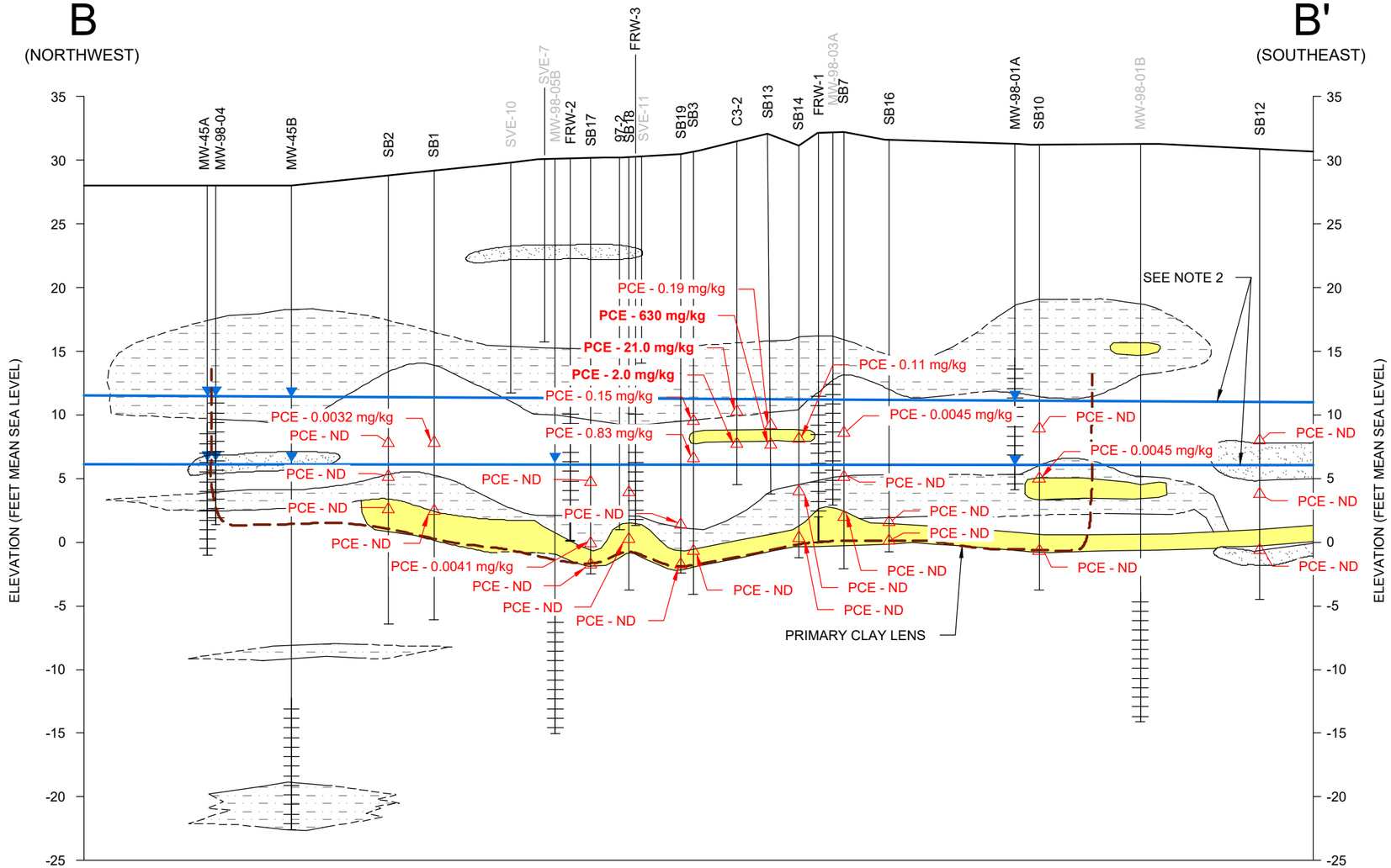


LEGEND

- WATER TABLE ELEVATION
- SCREEN SETTING
- DEPTH OF BORING
- FINE TO COARSE SAND
- FINE TO COARSE SAND AND SILTY CLAY
- FINE SAND AND SILT
- SILT AND CLAY
- MW-98-03A — UNLOCATED OR DECOMMISSIONED MONITOR WELL, NOT USED IN DETERMINING GROUNDWATER ELEVATION, ONLY GEOLOGY
- ESTIMATED GEOLOGIC BOUNDARY
- APPROXIMATE BOUNDARY WHERE PCE CONCENTRATIONS IN THE GROUNDWATER EXCEED THE ARAR AT LEAST PART OF THE TIME
- △ SATURATED SOIL SAMPLE LOCATION

NOTES:
1. HORIZONTAL CROSS SECTION LINES ARE DEPICTED ON FIGURE 1.
2. LOW AND HIGH GROUNDWATER ELEVATIONS SHOWN ARE FOR RECORDED WATER ELEVATION DATA FROM 2003 TO 2018 AND RANGE FROM APPROXIMATELY 6.1 FT TO 11 FT ABOVE MEAN SEA LEVEL.
3. BOLD VALUE INDICATES AN EXCEEDANCE OF THE ARAR.

0 10 HORIZONTAL SCALE IN FEET

0 10 VERTICAL SCALE IN FEET

# GROUNDWATER REMEDIAL ACTION
# FORMER ROWE INDUSTRIES SUPERFUND SITE
# SAG HARBOR, NEW YORK

## FDSA CROSS-SECTION B-B'

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WSP USA
4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555

| DRAWN: | RAC | CHECKED: | MG | DATE: | 12/19/18 | FIGURE: | 5 |
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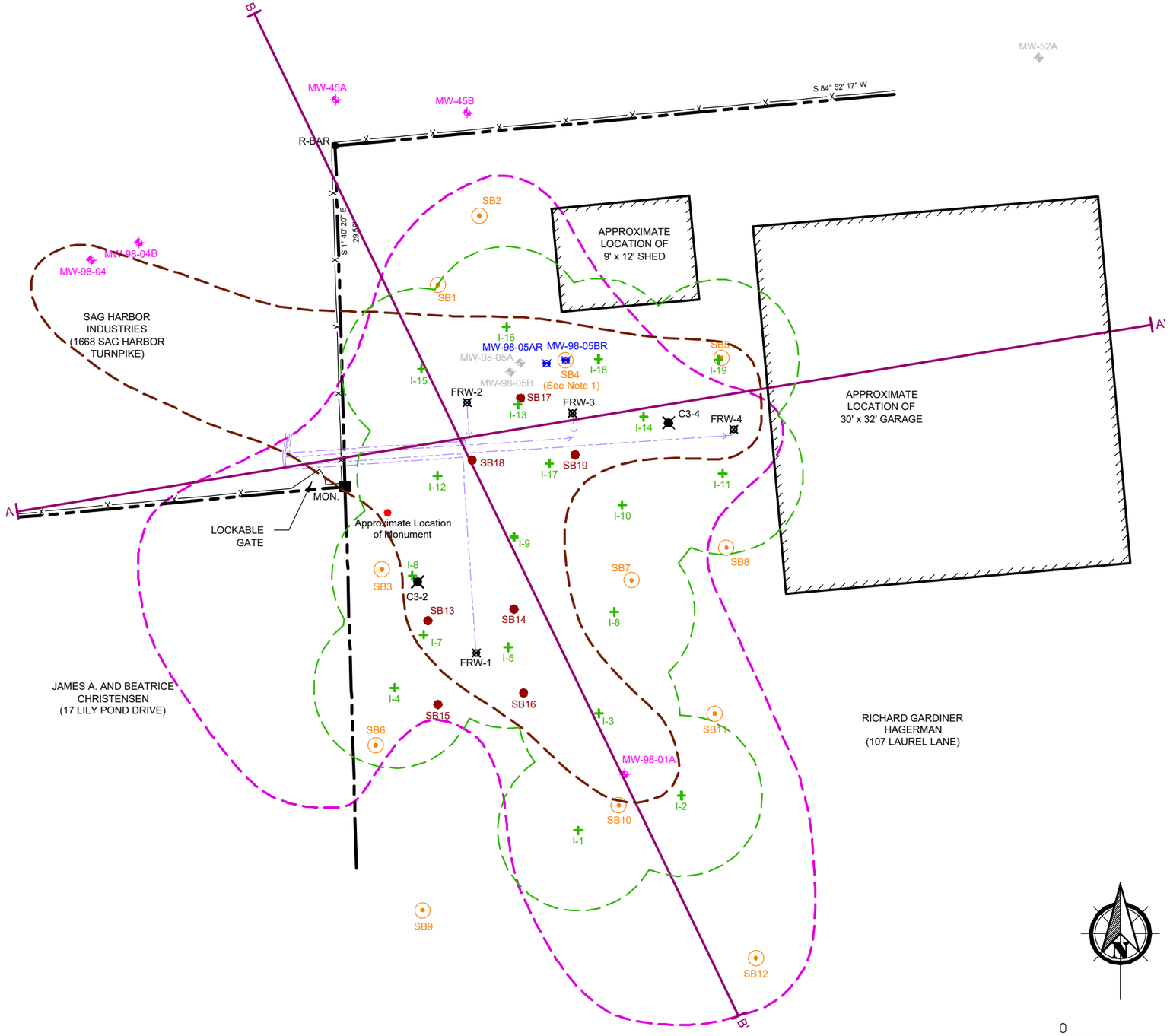


LEGEND

- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- APPROXIMATE LOCATION OF FOCUSED REMEDIATION GROUNDWATER RECOVERY PIPING
- APPROXIMATE EXTENT OF CLAY LENS (~25 - 33 ft.bg.)
- FRW-3 — FOCUSED REMEDIATION RECOVERY WELL (APPROXIMATE LOCATION)
- MW-98-04 — GROUNDWATER MONITOR WELL LOCATION
- JANUARY 2003 BORING LOCATION
- DECEMBER 2015 BORING LOCATION
- MW-98-05B — DECOMMISSIONED MONITOR WELL
- MW-98-05BR — REPLACEMENT MONITOR WELL INSTALLED IN DECEMBER 2015
- JUNE 2018 SOIL BORING
- APPROXIMATE BOUNDARY WHERE PCE CONCENTRATIONS IN THE GROUNDWATER EXCEED THE ARAR AT LEAST PART OF THE TIME
- ESTIMATED BOUNDARY FOR DISTRIBUTION OF INJECTANTS (AREA ~ 1,700 SF). ASSUMES AN APPROXIMATE SEVEN (7) FOOT RADIUS AROUND EACH INJECTION POINT.
- I-12 — PROPOSED INJECTION POINT

NOTE:
1. BORING SB4 WAS COMPLETED AS MW-98-05BR.

0 10
SCALE IN FEET

# GROUNDWATER REMEDIAL ACTION
# FORMER ROWE INDUSTRIES SUPERFUND SITE
# SAG HARBOR, NEW YORK

## FDSA SITE MAP WITH PROPOSED INJECTION POINTS

| DATE | REVISED |
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4 Research Drive
Suite 204
Shelton, Connecticut 06484
(203) 929-8555


| DRAWN: | RAC | CHECKED: | MG | DATE: | 02/21/19 | FIGURE: | 6 |
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# APPENDIX

## I. BORING LOGS

| | |
|---|---|
| **GEOLOGIC LOG**<br>**WSP USA**<br>**SHELTON, CONNECTICUT** | **OWNER:** Kraft Heinz Food Company<br>(as successor to Kraft Foods Group, Inc.) |
| | **BORING NO:** SB13 |
| | **PAGE** 1 **OF** 2 **PAGE** |
| **SITE LOCATION:** Former Rowe Industries Superfund Site<br>1668 Sag Harbor Turnpike, Sag Harbor, NY | **SCREEN SIZE & TYPE:** NA **SLOT NO:** NA<br>**SETTING:** NA |
| **DATE COMPLETED:** June 18, 2018 | **SAND PACK SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING COMPANY:** Aquifer Drilling & Testing<br>75 E 2nd Street, Mineola, NY | **CASING SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING METHOD:** Direct push (Geoprobe) | |
| **SAMPLING METHOD:** Macro core | **SEAL TYPE:** NA<br>**SETTING:** |
| **OBSERVER:** Sierra Anseeuw | |
| **REFERENCE POINT (RP):** Grade | **BACKFILL TYPE:** Bentonite chips 0-28; topsoil/grass seed |
| **ELEVATION OF RP:** Not measured | **STATIC WATER LEVEL:** ~22 ftbg |
| **STICK-UP:** NA | **DEVELOPMENT METHOD:** NA |
| **SURFACE COMPLETION:** Backfill to grade | **DURATION:** NA **YIELD:** NA |
| **REMARKS:** Sampled (22-23) at 14:25; (23-24) at 14:30 | |
| **GPS COORDINATES:** | |
| **ABBREVIATIONS:** SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million | |

| DEPTH (FEET) FROM | DEPTH (FEET) TO | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| 4 | 8 | MC | -- | 4.0 | 0 | 4-8: SAND, fine – medium, orangish brown; trace gravel, small – medium, sub-rounded; semi-compact; dry; no odor; no staining |
| 8 | 12 | MC | -- | 4.0 | 0 | 8-12: SAND, fine – medium, brown; semi-compact; dry; no odor; no staining |
| 12 | 16 | MC | -- | 4.0 | 0 | 12-13.2: SAND, fine, orangish brown; little gravel, medium, sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | | 13.2-16: SAND, fine, brown; semi-compact; dry; no odor; no staining |
| 16 | 20 | MC | -- | 4.0 | 0 | 16-17.5: SAND, fine, brown; trace gravel, small, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | | 17.5-18: SAND, medium, light tan; trace gravel, small, sub-rounded; loose; dry; no odor; no staining |
| | | | | | | 18-18.3: Sand and Silt, very fine – fine, brown; semi-compact; dry, no odor; no staining |
| | | | | | | 18.3-20: SAND, fine – medium, tan; semi-compact; dry; no odor; no staining |

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**WELL NO.:** SB13 **PAGE** 2 **OF** 2 **PAGES**

| DEPTH (FEET) FROM | DEPTH (FEET) TO | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| 20 | 24 | MC | -- | 3.7 | 0 | 20-21.9: SAND, fine, brown; little gravel, small-medium, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 3.5 | 21.9-22.4: SAND, very fine – fine, with Silt, tan; semi-compact; dry; no odor; no staining |
| | | | | | 52.6 | 22.4-23: SAND, medium, light tan; little gravel, small, sub-rounded, semi-compact; wet; very slight odor; no staining |
| | | | | | 352 | 23-23.7: CLAY, gray; compact; wet; strong odor; no staining |
| 24 | 28 | MC | -- | 2.1 | 0 | 24-26.1: SAND, fine-medium, tan; some gravel, small – medium, sub-rounded; semi-compact; wet; no odor; no staining |
| | 28 | -- | -- | -- | -- | End of Boring |
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| **GEOLOGIC LOG**<br>**WSP USA**<br>**SHELTON, CONNECTICUT** | **OWNER:** Kraft Heinz Food Company<br>(as successor to Kraft Foods Group, Inc.) |
| | **BORING NO:** SB14 |
| | **PAGE** 1 **OF** 2 **PAGE** |

| | |
|---|---|
| **SITE LOCATION:** Former Rowe Industries Superfund Site<br>1668 Sag Harbor Turnpike, Sag Harbor, NY | **SCREEN SIZE & TYPE:** NA **SLOT NO:** NA<br>**SETTING:** NA |
| **DATE COMPLETED:** June 18, 2018 | **SAND PACK SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING COMPANY:** Aquifer Drilling & Testing<br>75 E 2nd Street, Mineola, NY | **CASING SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING METHOD:** Direct push (Geoprobe) | |
| **SAMPLING METHOD:** Macro core | **SEAL TYPE:** NA<br>**SETTING:** |
| **OBSERVER:** Sierra Anseeuw | |
| **REFERENCE POINT (RP):** Grade | **BACKFILL TYPE:** Bentonite chips 0-32, topsoil, seed |
| **ELEVATION OF RP:** Not measured | **STATIC WATER LEVEL:** ~22 ft bg |
| **STICK-UP:** NA | **DEVELOPMENT METHOD:** NA |
| **SURFACE COMPLETION:** Backfill to grade | **DURATION:** NA **YIELD:** NA |
| **REMARKS:** Sampled (23-24) at 16:45; (26-28) at 16:50; (~30-31) –> Clay layer at 17:00 | |
| **GPS COORDINATES:** | |
| **ABBREVIATIONS:** SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million | |

| DEPTH (FEET) FROM | DEPTH (FEET) TO | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| 3 | 4 | MC | -- | 0.5 | 0 | 3-3.5: SAND, medium, tan; semi-compact; dry; no odor; no staining |
| 4 | 8 | MC | -- | 2.8 | 0 | 4-6.8: SAND, fine, brown; some gravel, medium – large, sub-angular; semi-compact; dry; no odor; no staining |
| 8 | 12 | MC | -- | 4.0 | 0 | 8-12: SAND, fine, orangish brown; little gravel, small – medium, sub-rounded; semi-compact; dry; no odor; no staining |
| 12 | 16 | MC | -- | 4.0 | 0 | 12-16: SAND, fine – medium, light brown; semi-compact; dry; no odor; no staining |
| 16 | 20 | MC | -- | 4.0 | 0 | 16-17.1: SAND, fine, brown; trace gravel, small – medium, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 17.1-18.8: SAND, medium, tan; loose; dry; no odor; no staining |
| | | | | | 0 | 18.8-19: SAND, very fine; with Silt; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 19-19.3: White Crushed Rock |

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**WELL NO.:** SB14 **PAGE** 2 **OF** 2 **PAGES**

| DEPTH (FEET) | | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| FROM | TO | | | | | |
| | | | | | 0 | 19.3-20: 17.1-18.8: SAND, medium, tan; loose; dry; no odor; no staining |
| 20 | 24 | MC | -- | 4.0 | 0 | 20-22: SAND, fine, brown; trace gravel, small – medium; sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 4.8 | 22-22.8: SAND, fine, gray; wet; semi-compact; no odor; no staining |
| | | | | | 42.1 | 22.8-23.1: CLAY, gray; wet; compact; no odor; no staining |
| | | | | | 65.5 | 23.1-24: SAND, medium, tan; loose; wet; no odor; no staining |
| 24 | 28 | MC | -- | 4.0 | 14.2 | 24-26.1: SAND, medium, gray; wet; no odor; no staining |
| | | | | | 365 | 26.1-28: SAND, medium – coarse, tan; loose; wet; strong odor; no staining |
| 28 | 32 | MC | -- | 3.3 | 300 | 28-30: SAND, medium – coarse, tan; loose; wet; strong odor; no staining |
| | | | | | 5.2 | 30-30.5: SAND; fine, orange, wet; no odor; no staining |
| | | | | | 19.2 | 30.3-31.1: CLAY, gray; compact; wet; no. odor; no staining |
| | | | | | 1.8 | 31.1-31.3: SAND, fine – medium, brown; semi-compact; wet; no odor; no staining |
| | 32 | -- | -- | -- | -- | End of Boring |
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| **GEOLOGIC LOG**<br>**WSP USA**<br>**SHELTON, CONNECTICUT** | **OWNER:** Kraft Heinz Food Company<br>(as successor to Kraft Foods Group, Inc.) |
| | **BORING NO:** SB15 |
| | **PAGE** 1 **OF** 1 **PAGE** |

| | |
|---|---|
| **SITE LOCATION:** Former Rowe Industries Superfund Site<br>1668 Sag Harbor Turnpike, Sag Harbor, NY | **SCREEN SIZE & TYPE:** NA **SLOT NO:** NA<br>**SETTING:** NA |
| **DATE COMPLETED:** June 18, 2018 | **SAND PACK SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING COMPANY:** Aquifer Drilling & Testing<br>75 E 2nd Street, Mineola, NY | **CASING SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING METHOD:** Direct push (Geoprobe) | |
| **SAMPLING METHOD:** Macro core | **SEAL TYPE:** NA<br>**SETTING:** |
| **OBSERVER:** Sierra Anseeuw | |
| **REFERENCE POINT (RP):** Grade | **BACKFILL TYPE:** Bentonite chips |
| **ELEVATION OF RP:** Not measured | **STATIC WATER LEVEL:** ~26 ft bg |
| **STICK-UP:** NA | **DEVELOPMENT METHOD:** NA |
| **SURFACE COMPLETION:** Backfill to grade | **DURATION:** NA **YIELD:** NA |
| **REMARKS:** Sampled (26-28) at 15:50; (31-32) at 16:00 | |
| **GPS COORDINATES:** | |
| **ABBREVIATIONS:** SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million | |

| DEPTH (FEET) FROM | DEPTH (FEET) TO | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| 3 | 4 | MC | -- | 0.5 | 0 | 3-3.5: SAND, medium, tan; semi-compact; dry; no odor; no staining |
| 4 | 8 | MC | -- | 4.0 | 0 | 4-8: SAND, fine – medium, tan; some gravel, medium, sub-rounded; semi-compact; dry; no odor; no staining |
| 8 | 12 | MC | -- | 3.2 | 0 | 8-10.3: SAND, fine, dark brown; trace gravel, small, sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 10.3-11.2: SAND, medium, tan; loose; dry; no odor; no staining |
| 12 | 16 | MC | -- | 3.6 | 0 | 12-14.4: SAND, fine, dark brown; some gravel at 13.5-14.4 ft, medium, sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 14.4-15.6: 10.3-11.2: SAND, medium, tan; loose; dry; no odor; no staining |
| 16 | 20 | MC | -- | 4.0 | 0 | 16-17.5: SAND, fine, dark brown; trace gravel, small – medium, sub-rounded – sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 17.5-18.4: SAND, medium, tan; loose; dry; no odor; no staining |

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**WELL NO.:** SB15 **PAGE** 2 **OF** 2 **PAGES**

| DEPTH (FEET) | | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| FROM | TO | | | | | |
| | | | | | 0 | 18.4-18.7: Sand and Silt; very fine, brown; compact; dry; no odor; no staining |
| | | | | | 0 | 18.7-20: 17.5-18.4: SAND, medium, tan; loose; dry; no odor; no staining |
| 20 | 24 | MC | -- | 4.0 | 0 | 20-22: SAND, fine, dark brown; some gravel, medium, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 22-22.9: SAND, fine, dark brown; little gravel, medium, sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 22.9-23.1: SAND, medium – coarse, tan; loose; dry; no odor; no staining |
| | | | | | 0 | 23.1-23.4: SAND, very fine, brown; with Silt; compact; dry; no odor; no staining |
| | | | | | 0 | 23.4-24: SAND, fine, brown; some gravel, medium – large, sub-angular; semi-compact; dry; no odor; no staining |
| 24 | 28 | MC | -- | 4.0 | 0 | 24-26: SAND, fine, brown; some gravel, medium – large, sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | 34.5 | 26-28: SAND, medium, light tan; wet; slight odor; no staining |
| 28 | 32 | MC | -- | 4.0 | 21.1 | 28-31: SAND, medium, light tan; wet; slight odor; no staining |
| | | | | | 19.8 | 31-31.8: CLAY, gray; compact; wet; slight odor; no staining |
| | | | | | 0 | 31.8-32: SAND, medium, light brown; loose; wet; no odor; no staining |
| | 32 | -- | -- | -- | -- | End of Boring |
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| **GEOLOGIC LOG**<br>**WSP USA**<br>**SHELTON, CONNECTICUT** | **OWNER:** Kraft Heinz Food Company<br>(as successor to Kraft Foods Group, Inc.) |
| | **BORING NO:** SB16 |
| | **PAGE** 1 **OF** 1 **PAGE** |

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|---|---|
| **SITE LOCATION:** Former Rowe Industries Superfund Site<br>1668 Sag Harbor Turnpike, Sag Harbor, NY | **SCREEN SIZE & TYPE:** NA **SLOT NO:** NA<br>**SETTING:** NA |
| **DATE COMPLETED:** June 18, 2018 | **SAND PACK SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING COMPANY:** Aquifer Drilling & Testing<br>75 E 2nd Street, Mineola, NY | **CASING SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING METHOD:** Direct push (Geoprobe) | |
| **SAMPLING METHOD:** Macro core | **SEAL TYPE:** NA |
| **OBSERVER:** Sierra Anseeuw | **SETTING:** |
| **REFERENCE POINT (RP):** Grade | **BACKFILL TYPE:** Bentonite chips 0-32; topsoil and seed |
| **ELEVATION OF RP:** Not measured | **STATIC WATER LEVEL:** ~26 ft bg |
| **STICK-UP:** NA | **DEVELOPMENT METHOD:** NA |
| **SURFACE COMPLETION:** Backfill to grade | **DURATION:** NA **YIELD:** NA |
| **REMARKS:** Sampled (29-30) at 17:50; (30-32) at 18:00 | |
| **GPS COORDINATES:** | |
| **ABBREVIATIONS:** SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million | |

| DEPTH (FEET) FROM | DEPTH (FEET) TO | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| 4 | 8 | MC | -- | 3.6 | 0 | 4-8: SAND, fine, orangish – brown; trace gravel, small, sub-angular; semi-compact; dry; no odor; no staining |
| 8 | 12 | MC | -- | 4.0 | 0 | 8-12: SAND, fine, orangish – brown; trace gravel, small, sub-angular; semi-compact; dry; no odor; no staining |
| 12 | 16 | MC | -- | 3.4 | 0 | 12-15.4: SAND, fine, tan; trace grave, small – medium, sub-rounded; semi-compact; dry; no odor; no staining |
| 16 | 20 | MC | -- | 4.0 | 0 | 16-18.1: SAND, fine, brown; trace silt; trace gravel, small, sub-rounded; semi-compact, dry; no odor; no staining |
| | | | | | 0 | 18.1-19.2: SAND, medium, tan; loose; dry; no odor; no staining |
| | | | | | 0 | 19.2-20: Sand with Silt; brown; compact; dry; no odor; no staining |
| 20 | 24 | MC | -- | 3.7 | 0 | 20-22: SAND, fine, brown; little gravel, small, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 2.8 | 22-23.7: SAND, fine, tan; loose; dry; no odor; no staining |

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**WELL NO.:** SB16 **PAGE** 2 **OF** 2 **PAGES**

| DEPTH (FEET) | | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| FROM | TO | | | | | |
| 24 | 28 | MC | -- | 3.6 | 1.2 | 24-26.7: SAND, fine, brown; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 26.7-27.6: SAND, medium, tan; loose; wet; no odor; no staining |
| 28 | 32 | MC | -- | 3.4 | 0 | 28-28.7: SAND, fine, brown; trace gravel, small – medium, sub-angular; semi-compact; wet; no odor; no staining |
| | | | | | 2.8 | 28.7-30.2: SAND, medium – coarse, tan; loose; wet; no odor; no staining |
| | | | | | 0 | 30.2-31.2: CLAY, gray; compact; wet; no odor; no staining |
| | | | | | 0 | 31.2-31.4: SAND, medium, light brown; loose; wet; no odor; no staining |
| | 32 | -- | -- | -- | -- | End of Boring |
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| **GEOLOGIC LOG**<br>**WSP USA**<br>**SHELTON, CONNECTICUT** | **OWNER:** Kraft Heinz Food Company<br>(as successor to Kraft Foods Group, Inc.) |
| | **BORING NO:** SB17 |
| | **PAGE** 1 **OF** 2 **PAGE** |
| **SITE LOCATION:** Former Rowe Industries Superfund Site<br>1668 Sag Harbor Turnpike, Sag Harbor, NY | **SCREEN SIZE & TYPE:** NA **SLOT NO:** NA<br>**SETTING:** NA |
| **DATE COMPLETED:** June 18, 2018 | **SAND PACK SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING COMPANY:** Aquifer Drilling & Testing<br>75 E 2nd Street, Mineola, NY | **CASING SIZE & TYPE:** NA<br>**SETTING:** NA |
| **DRILLING METHOD:** Direct push (Geoprobe) | |
| **SAMPLING METHOD:** Macro core | **SEAL TYPE:** NA<br>**SETTING:** |
| **OBSERVER:** Sierra Anseeuw | |
| **REFERENCE POINT (RP):** Grade | **BACKFILL TYPE:** Bentonite chips 0-32, topsoil and seed |
| **ELEVATION OF RP:** Not measured | **STATIC WATER LEVEL:** ~22 ft bg |
| **STICK-UP:** NA | **DEVELOPMENT METHOD:** NA |
| **SURFACE COMPLETION:** Backfill to grade | **DURATION:** NA **YIELD:** NA |
| **REMARKS:** Sampled (26-27) at 10:20; (29-31) at 10:30; (31-32) at 10:35 | |
| **GPS COORDINATES:** | |
| **ABBREVIATIONS:** SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million | |

| DEPTH (FEET) FROM | DEPTH (FEET) TO | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| 3 | 4 | MC | -- | 0.6 | 0 | 3-3.6: SAND, fine, tan; loose; dry; no odor; no staining |
| 4 | 8 | MC | -- | 3.4 | 0 | 4-7.4: SAND, fine, brown; trace silt; trace gravel, small – medium, sub-rounded; loose; dry; no odor; no staining |
| 8 | 12 | MC | -- | 3.9 | 0 | 8-9.9: SAND, fine; brown; trace gravel, small – medium; sub-rounded; loose; dry; no odor; no staining |
| | | | | | 0 | 9.9-11.9: SAND, fine, tan; trace silt; trace gravel, small – medium, sub-rounded; semi-compact; dry; no odor; no staining |
| 12 | 16 | MC | -- | 3.3 | 0 | 12-13: SAND, fine, tan; trace silt; trace gravel, small – medium, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 13-14.2: SAND, fine, tan; trace gravel, small, sub-rounded; loose; dry; no odor; no staining |
| | | | | | 0 | 14.2-15.2: SAND, fine, gray; little silt; sub-compact; dry; no odor; no staining |

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**WELL NO.:** SB17 **PAGE** 2 **OF** 2 **PAGES**

| DEPTH (FEET) | | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| FROM | TO | | | | | |
| 16 | 20 | MC | -- | 2.5 | 0 | 16-17.3: SAND, fine, gray; little gravel, small – medium, rounded; trace silt; sub-compact; dry; no odor; no staining |
| | | | | | 0 | 17.3-18.5: SAND, fine; yellowish brown; trace gravel, small, sub-angular; dry; no odor; no staining |
| 20 | 24 | MC | -- | 2.8 | 0 | 20-21.5: SAND, fine, brown; little gravel, small, sub-rounded; trace silt; dry; no odor; no staining |
| | | | | | 0 | 21.5-22.8: SAND, medium, light gray; trace gravel, small, sub-rounded, wet; no odor; no staining |
| 24 | 28 | MC | -- | 4.0 | 4.2 | 24-25.8: SAND, fine, tan; trace silt; trace gravel, small, sub-rounded, semi-compact; wet; no odor; no staining |
| | | | | | 14.0 | 25.8-26.3: SAND, medium, light tan; loose; wet; no odor; no staining |
| | | | | | 660 | 26.3-27: SAND, very fine – fine, gray; semi-compact; wet; strong odor; no staining |
| | | | | | 14.2 | SAND, fine, gray; some silt; semi-compact; wet; slight odor; no staining |
| | | | | | 3.6 | 27.3-28: SAND, fine, gray; trace silt; loose; wet; slight odor, no staining |
| 28 | 32 | MC | -- | 4.0 | 0 | 28-29.3: SAND, fine, brown; trace gravel, small, sub-rounded; wet; no odor; no staining |
| | | | | | 20.3 | 29.3-30.8: SAND, medium, gray; loose; wet; slight odor; no staining |
| | | | | | 0.4 | 30.8-31.7: CLAY, gray; compact; wet; slight odor; no staining |
| | | | | | 0 | 31.7-32: SAND, medium, light brown; loose; wet; no odor; no staining |
| | 32 | -- | -- | -- | -- | End of Boring |
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**GEOLOGIC LOG**
**WSP USA**
**SHELTON, CONNECTICUT**

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**BORING NO:** SB18

**PAGE** 1 **OF** 1 **PAGE**

**SITE LOCATION:** Former Rowe Industries Superfund Site
1668 Sag Harbor Turnpike, Sag Harbor, NY

**SCREEN SIZE & TYPE:** NA **SLOT NO:** NA
**SETTING:** NA

**DATE COMPLETED:** June 18, 2018

**SAND PACK SIZE & TYPE:** NA
**SETTING:** NA

**DRILLING COMPANY:** Aquifer Drilling & Testing
75 E 2nd Street, Mineola, NY

**CASING SIZE & TYPE:** NA
**SETTING:** NA

**DRILLING METHOD:** Direct push (Geoprobe)

**SAMPLING METHOD:** Macro core

**SEAL TYPE:** NA
**SETTING:**

**OBSERVER:** Sierra Anseeuw

**REFERENCE POINT (RP):** Grade

**BACKFILL TYPE:** Bentonite chips 0-33, topsoil, seed

**ELEVATION OF RP:** Not measured

**STATIC WATER LEVEL:** ~27 ft bg

**STICK-UP:** NA

**DEVELOPMENT METHOD:** NA

**SURFACE COMPLETION:** Backfill to grade

**DURATION:** NA **YIELD:** NA

**REMARKS:** Sampled (26-28) at 11:20; (29-31) at 11:30

**GPS COORDINATES:**

**ABBREVIATIONS:** SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million

| DEPTH (FEET) FROM | DEPTH (FEET) TO | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| 5 | 9 | MC | -- | 3.6 | 0 | 5-8.6: SAND, fine, orangish brown; semi-compact; dry; no odor; no staining |
| 9 | 13 | MC | -- | 4.0 | 0 | 9-13: SAND, fine, tan; trace gravel, small – medium, sub-angular; dry; no odor; no staining |
| 13 | 17 | MC | -- | 4.0 | 0 | 13-14.8: SAND, fine, brown; little gravel, medium, sub-angular to sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 14.8-15.9: SAND, fine, tan; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 15.9-17: SAND, medium, light brown; semi-compact; dry; no odor; no staining |
| 17 | 21 | MC | -- | 4.0 | 0 | 17-18.2: SAND, fine, brown; little gravel, small – medium; sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 18.2-19.5: SAND, fine-medium, tan; little gravel, sub-angular; semi-compact; dry; no odor; no staining |

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**WELL NO.:** SB18 **PAGE** 2 **OF** 2 **PAGES**

| DEPTH (FEET) | | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| FROM | TO | | | | | |
| | | | | | 0 | 19.5-19.8: SAND, fine, brown; trace silt; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 19.8-21: SAND, medium, light tan; loose; dry; no odor; no staining |
| 21 | 25 | MC | -- | 3.2 | 0 | 21-23.0: SAND, fine; little gravel, small – medium; sub-rounded to sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | 4.2 | 23-24.2: SAND, medium, light tan; loose; dry; no odor; no staining |
| 25 | 29 | MC | -- | 3.4 | 0 | 25-26.4: SAND, fine, brown; trace gravel, small, sub-angular; dry; no odor; no staining |
| | | | | | 32 | 26.4-27.1: SAND, medium, tan; loose; wet; slight odor; no staining |
| | | | | | 676 | 27.1-28.2: SAND, fine, light tan; semi-compact; wet; strong odor; no staining |
| | | | | | 8.3 | 28.2 – 28.4: CLAY, gray; compact; wet; slight odor; no staining |
| 29 | 33 | MC | -- | 2.3 | 19.2 | 29-31: CLAY, gray; compact; wet; slight odor; no staining |
| | | | | | 0 | 31-31.2: SAND, medium, light tan; loose; wet; no odor; no staining |
| -- | 33 | -- | -- | -- | -- | End of Boring |
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| **GEOLOGIC LOG**<br>**WSP USA**<br>**SHELTON, CONNECTICUT** | **OWNER:** Kraft Heinz Food Company<br>(as successor to Kraft Foods Group, Inc.) |
| | **BORING NO:** SB19 |
| | **PAGE** 1 **OF** 1 **PAGE** |

| | |
|---|---|
| **SITE LOCATION:** Former Rowe Industries Superfund Site<br>1668 Sag Harbor Turnpike, Sag Harbor, NY | **SCREEN SIZE & TYPE:** NA **SLOT NO:** NA<br>**SETTING:** NA |
| **DATE COMPLETED:** June 18, 2018 | **SAND PACK SIZE & TYPE:** NA |
| **DRILLING COMPANY:** Aquifer Drilling & Testing<br>75 E 2nd Street, Mineola, NY | **SETTING:** NA |
| | **CASING SIZE & TYPE:** NA |
| **DRILLING METHOD:** Direct push (Geoprobe) | **SETTING:** NA |
| **SAMPLING METHOD:** Macro core | **SEAL TYPE:** NA |
| **OBSERVER:** Sierra Anseeuw | **SETTING:** |
| **REFERENCE POINT (RP):** Grade | **BACKFILL TYPE:** Bentonite chips |
| **ELEVATION OF RP:** Not measured | **STATIC WATER LEVEL:** ~26 ft bg |
| **STICK-UP:** NA | **DEVELOPMENT METHOD:** NA |
| **SURFACE COMPLETION:** Backfill to grade | **DURATION:** NA **YIELD:** NA |
| **REMARKS:** | |
| **GPS COORDINATES:** | |
| **ABBREVIATIONS:** SS = split spoon W = wash C = cuttings G = grab ST = shelby tube REC = recovery PPM = parts per million | |

| DEPTH (FEET) | | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| FROM | TO | | | | | |
| 5 | 9 | MC | -- | 3.1 | 0 | 5-5.8: SAND, medium, brown; loose; dry; no odor; no staining |
| | | | | | 0 | 5.8-8.1: SAND, fine, orangish brown; little gravel, small – medium; sub-rounded; semi-compact; dry; no odor; no staining |
| 9 | 13 | MC | -- | 4.0 | 0 | 9-13: SAND, fine, tan; some gravel, small – large, sub-angular; semi-compact; dry; no odor; no staining |
| 13 | 17 | MC | -- | 3.5 | 0 | 13-16.1: SAND, fine, tan; trace gravel, small – large, sub-angular; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 16.1-16.5: SAND, fine – medium, gray; loose; dry; no odor; no staining |
| 17 | 21 | MC | -- | 3.5 | 0 | 17-19: SAND, fine, brown; trace gravel, small – medium, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 19-19.5: SAND, medium, tan; loose; dry; no odor; no staining |
| | | | | | 0 | 19.5-20: SILT, brown; compact; dry; no odor; no staining |

**OWNER:** Kraft Heinz Food Company (as successor to Kraft Foods Group, Inc.)

**WELL NO.:** SB19 **PAGE** 2 **OF** 2 **PAGES**

| DEPTH (FEET) | | SAMPLE TYPE | BLOW COUNT | REC. (FEET) | PID READING (PPM) | DESCRIPTION |
|---|---|---|---|---|---|---|
| FROM | TO | | | | | |
| | | | | | 0 | 20-20.5: SAND, medium, tan; loose; dry; no odor; no staining |
| 21 | 25 | MC | -- | 2.5 | 0 | 21-22.4: SAND, fine, tan; trace gravel, small, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 0 | 22.4-22.8: Sand and Gravel, fine – medium, sub-rounded, gray; loose; dry; no odor; no staining |
| | | | | | 1.8 | 22.8-23.5: SAND, medium, brown; loose; dry; no odor; no staining |
| 25 | 29 | MC | -- | 3.2 | 0 | 25-26.5: SAND, fine, tan to brown; trace gravel, small, sub-rounded; semi-compact; dry; no odor; no staining |
| | | | | | 1.3 | 26.5-27.6: SAND, medium, light tan; loose; wet; no odor; no staining |
| | | | | | 120 | 27.6-28.2: SAND, fine – medium, brown; semi-compact; wet; slight odor; no staining |
| 29 | 33 | MC | -- | 3.9 | 2.9 | 29-30.7: SAND, medium, light tan; loose; wet; slight odor; no staining |
| | | | | | 0 | 30.7-31.8: Sand and Silt; very fine; gray; semi-compact; wet; very slight odor; no staining |
| | | | | | 10.2 | 31.8-32.8: CLAY, gray, compact; wet; no odor; no staining |
| | | | | | 0 | 32.8-32.9: SAND, medium, light tan; loose; wet; no odor; no staining |
| -- | 33 | -- | -- | -- | -- | End of Boring |
| | | | | | | |
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# APPENDIX

# II. GROUNDWATER LOW-FLOW SAMPLING LOGS FOR JUNE 2018

# WSP USA

PAGE 1 OF _____

SAMPLE DATE: 6/19/18

TOTAL # WELLS: 3

## LOW-FLOW SAMPLING LOG

Client Name: Rowe Industries

Project Location: 1668 Sag Harbor Turnpike

Sampler(s): S. Ansteeuw

Sample Pump: Geopump

Tubing Type: LDPE - 45

Monitoring Equipment: Horiba

Well I.D. MW-98-05~~A~~ BR

Well Diameter (inches): 2

Total Depth (ft btoc): 46.15

Depth to Water (ft btoc): 20.43

Screen Setting (ft btoc): _____ to _____

Tubing Intake (ft btoc): 34

Comments: Pump on at 1132

Well Condition: Good

| Time (hours) | Depth to Water (ft btoc) | Evacuation Rate (ml/min) | Water Quality Monitoring Parameters: pH | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved oxygen (mg/l) | Temperature (°C) | ORP (mv) |
|---|---|---|---|---|---|---|---|---|
| 1135 | 20.45 | 260 | 6.91 | 0.257 | 6.4 | 2.36 | 18.41 | 113 |
| 1138 | | | 6.17 | 0.226 | 2.6 | 1.36 | 17.05 | 114 |
| 1141 | | | 6.09 | 0.214 | 2.3 | 1.11 | 16.59 | 111 |
| 1144 | | | 6.02 | 0.203 | 3.60 | 0.95 | 16.25 | 106 |
| 1147 | | | 6.02 | 0.201 | 3.3 | 0.85 | 16.34 | 107 |
| 1150 | | | 6.03 | 0.190 | 3.3 | 0.77 | 16.57 | 106 |
| 1153 | | | 6.00 | 0.187 | 3.5 | 0.86 | 16.28 | 105 |
| 1156 | | | 6.01 | 0.185 | 3.8 | 0.80 | 16.36 | 103 |
| 1159 | ↓ | ↓ | 5.99 | 0.184 | 3.7 | 0.87 | 16.37 | 101 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Total Volume of Groundwater Purged (gal): 2

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

| Time FROM | Time TO | Depth to Water (ft btoc) | Total Removed > Change in Storage (Y/N)? | pH | Conductivity (%) | Turbidity (%) | Dissolved oxygen (%) | Temperature (%) | ORP (mv) |
|---|---|---|---|---|---|---|---|---|---|
| 1153 | 1156 | 0 | Y | 0.01 | 1.1 | <5 | 7.0 | 0.5 | 2 |
| 1156 | 1159 | 0 | Y | 0.02 | 0.5 | ↓ | 8.0 | 0.1 | 2 |
| 1153 | 1159 | 0 | Y | 0.01 | 1.6 | ↓ | 1.1 | 0.5 | 4 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Recommended Stabilization | | ≤ 0.3 ft. total | NA | +/- 0.1 unit | +/- 3% | <5 NTU or +/- 10% | +/- 10% if >0.5 mg/L | +/- 3% | +/- 10 mv |
| Stabilization: (Yes/No) | | Y | Y | Y | Y | Y | Y | Y | Y |

Sample Time: 1205

| | | | | | |
|---|---|---|---|---|---|
| ft btoc | feet below top of casing | NTU | Nephelometric Turbidity Units | °C | degrees Celsius |
| ml/min | milliliters per minute | mg/l | milligrams per liter | mv | millivolts |
| µs/cm | microseimens per centimeter | ms/cm | milliseimens per centimeter | | |

# WSP USA

PAGE 1 OF _____

SAMPLE DATE: 6/19/18

## LOW-FLOW SAMPLING LOG

TOTAL # WELLS: _____

Client Name: Rowe Industries
Project Location: 1668 Sag Harbor Turnpike
Sampler(s): S. Anseeuw

Sample Pump: Geopump
Tubing Type: LDPE - 30
Monitoring Equipment: _____

Well I.D. MW-98-01A
Well Diameter (inches): 2
Total Depth (ft btoc): 26.76
Depth to Water (ft btoc): 21.52

Screen Setting (ft btoc): _____ to _____
Tubing Intake (ft btoc): 24
Comments: Pump on at 1252

Well Condition: Good

| Time (hours) | Depth to Water (ft btoc) | Evacuation Rate (ml/min) | Water Quality Monitoring Parameters: pH | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved oxygen (mg/l) | Temperature (°C) | ORP (mv) |
|---|---|---|---|---|---|---|---|---|
| 1259 | 21.53 | 800 | 6.43 | 0.174 | 486 | 2.85 | 17.73 | 33 |
| | *Wait for turbidity to clear | | | | | | | |
| 1333 | 21.54 | 800 | 6.11 | 0.180 | 17.0 | 0.57 | 15.58 | -88 |
| 1336 | | | 6.11 | 0.179 | 13.9 | 0.57 | 15.51 | -87 |
| 1339 | | | 6.09 | 0.179 | 13.0 | 0.57 | 15.59 | -87 |
| 1342 | | | 6.10 | 0.179 | 11.9 | 0.59 | 15.42 | -87 |
| 1345 | | | 6.09 | 0.179 | 9.3 | 0.58 | 15.35 | -86 |
| 1348 | | | 6.08 | 0.179 | 8.9 | 0.61 | 15.31 | -86 |
| 1351 | | | 6.08 | 0.178 | 8.8 | 0.60 | 15.31 | -87 |
| ~~1354~~ | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Total Volume of Groundwater Purged (gal): 4.5

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

| Time FROM | Time TO | Depth to Water (ft btoc) | Total Removed > Change in Storage (Y/N)? | pH | Conductivity (%) | Turbidity (%) | Dissolved oxygen (%) | Temperature (%) | ORP (mv) |
|---|---|---|---|---|---|---|---|---|---|
| 1345 | 1348 | 0 | Y | 0.01 | 0 | 4.3 | 4.9 | 0.3 | 0 |
| 1348 | 1351 | 0 | Y | 0 | 0.6 | 1.1 | 1.6 | 0.3 | 1 |
| 1345 | 1351 | 0 | Y | 0.01 | 0.6 | 5.4 | 3.3 | 0 | 1 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Recommended Stabilization | | ≤ 0.3 ft. total | NA | +/- 0.1 unit | +/- 3% | <5 NTU or +/- 10% | +/- 10% if >0.5 mg/L | +/- 3% | +/- 10 mv |
| Stabilization: (Yes/No) | | Y | Y | Y | Y | Y | Y | Y | Y |

Sample Time: 1355

| | | | | | |
|---|---|---|---|---|---|
| ft btoc | feet below top of casing | NTU | Nephelometric Turbidity Units | °C | degrees Celsius |
| ml/min | milliliters per minute | mg/l | milligrams per liter | mv | millivolts |
| µs/cm | microseimens per centimeter | ms/cm | milliseimens per centimeter | | |

# WSP USA

PAGE 1 OF _____

SAMPLE DATE: 6/19/18

TOTAL # WELLS: 3

## LOW-FLOW SAMPLING LOG

Client Name: Rowe Industries
Project Location: 16608 Sag Harbor Turnpike
Sampler(s): S. Anseeuw

Sample Pump: Geopump
Tubing Type: LDPE - 30'
Monitoring Equipment: Horiba

Well I.D. MW-98-04
Well Diameter (inches): 2
Total Depth (ft btoc): 21.05
Depth to Water (ft btoc): 19.15

Screen Setting (ft btoc): _____ to _____
Tubing Intake (ft btoc): ~22
Comments: Pump on at 1434

Well Condition: Good

| Time (hours) | Depth to Water (ft btoc) | Evacuation Rate (ml/min) | Water Quality Monitoring Parameters: pH | Conductivity (mS/cm) | Turbidity (NTU) | Dissolved oxygen (mg/l) | Temperature (°C) | ORP (mv) |
|---|---|---|---|---|---|---|---|---|
| 1440 | 19.15 | 250 | 6.08 | 0.193 | 160 | 2.22 | 18.85 | 59 |
| | Wait For turbidity | | | | | | | |
| 1455 | 19.15 | 250 | 5.65 | 0.190 | 8.0 | 1.45 | 15.02 | 92 |
| 1458 | | | 5.68 | 0.193 | 5.6 | 1.46 | 14.96 | 87 |
| 1501 | | | 5.73 | 0.202 | 4.7 | 1.49 | 14.79 | 85 |
| 1504 | | | 5.80 | 0.205 | 4.8 | 1.47 | 14.68 | 82 |
| 1507 | | | 5.81 | 0.208 | 2.6 | 1.55 | 14.85 | 74 |
| 1510 | | | 5.83 | 0.210 | 2.5 | 1.51 | 14.66 | 77 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Total Volume of Groundwater Purged (gal): 2

Stabilization of Parameters (stabilization achieved for three consecutive measurements)

| Time FROM | Time TO | Depth to Water (ft btoc) | Total Removed > Change in Storage (Y/N)? | pH | Conductivity (%) | Turbidity (%) | Dissolved oxygen (%) | Temperature (%) | ORP (mv) |
|---|---|---|---|---|---|---|---|---|---|
| 1504 | 1507 | 0 | Y | 0.01 | 1.4 | <5 | 5.2 | 1.1 | 6 |
| 1507 | 1510 | 0 | Y | 0.02 | 2.4 | 1 | 2.6 | 1.3 | 3 |
| 1504 | 1510 | 0 | Y | 0.03 | 1 | 1 | 2.6 | 0.1 | 5 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Recommended Stabilization | | ≤ 0.3 ft. total | NA | +/- 0.1 unit | +/- 3% | <5 NTU or +/- 10% | +/- 10% if >0.5 mg/L | +/- 3% | +/- 10 mv |
| Stabilization: (Yes/No) | | Y | Y | Y | Y | Y | Y | Y | Y |

Sample Time: 1515

| | | | | | |
|---|---|---|---|---|---|
| ft btoc | feet below top of casing | NTU | Nephelometric Turbidity Units | °C | degrees Celsius |
| ml/min | milliliters per minute | mg/l | milligrams per liter | mv | millivolts |
| µs/cm | microseimens per centimeter | ms/cm | milliseimens per centimeter | | |

# APPENDIX

# III. LABORATORY RESULTS FOR JUNE AND JULY 2018 SOIL AND GROUNDWATER QUALITY

# Technical Report

prepared for:

**WSP USA, Inc. (Shelton)**
4 Research Drive, Suite 204
Shelton CT, 06484
**Attention: Mark Goldberg**

Report Date: 06/29/2018
**Client Project ID: 31401451.000**
York Project (SDG) No.: 18F0837

**Revision No. 1.0**

CT Cert. No. PH-0723 New Jersey Cert. No. CT005 and NY037 New York Cert. Nos. 10854 and 12058 PA Cert. No. 68-04440

120 RESEARCH DRIVE STRATFORD, CT 06615 ■ 132-02 89th AVENUE RICHMOND HILL, NY 11418
www.YORKLAB.com (203) 325-1371 FAX (203) 357-0166 ClientServices@yorklab.com

Report Date: 06/29/2018
Client Project ID: 31401451.000
York Project (SDG) No.: 18F0837

**WSP USA, Inc. (Shelton)**
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Mark Goldberg

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on June 20, 2018 and listed below. The project was identified as your project: **31401451.000**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

| York Sample ID | Client Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 18F0837-01 | SB17(26-27) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-02 | SB17(29-31) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-03 | SB17(31-32) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-04 | SB18(26-28) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-05 | SB18(29-31) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-06 | SB19(27-29) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-07 | SB19(31-33) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-08 | SB13(22-23) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-09 | SB13(23-24) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-10 | SB15(26-28) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-11 | SB15(31-32) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-12 | SB14(23-24) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-13 | SB14(26-28) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-14 | SB14(31-32) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-15 | SB16(29-30) | Soil | 06/18/2018 | 06/20/2018 |
| 18F0837-16 | SB16(30-32) | Soil | 06/18/2018 | 06/20/2018 |

## General Notes for York Project (SDG) No.: 18F0837

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:** 

**Date:** 06/29/2018

Benjamin Gulizia
Laboratory Director

## Sample Information

**Client Sample ID:** SB17(26-27) **York Sample ID:** 18F0837-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:20 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 50 | 100 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB17(26-27)

**York Sample ID:** 18F0837-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:20 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **29** | SCAL-E | ug/kg dry | 5.0 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5.0 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:43<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB17(26-27) **York Sample ID:** 18F0837-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:20 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 75-09-2 | **Methylene chloride** | **6.6** | SCAL-E, J | ug/kg dry | 5.0 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 16:43 | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5.0 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 16:43 | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.5 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH | 06/26/2018 16:43 | RDS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:43 | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 7.5 | 15 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 16:43 | RDS |

| Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|

## Sample Information

**Client Sample ID:** SB17(26-27) **York Sample ID:** 18F0837-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:20 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *102 %* | | | *77-125* | | | | | | |
| 2037-26-5 | *Surrogate: Toluene-d8* | *262 %* | S-09 | | *85-120* | | | | | | |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *93.9 %* | | | *76-130* | | | | | | |

### Total Solids

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **80.6** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: CTDOH | | | |

## Analyzed by: Phoenix Environmental Laboratories, Inc. S

### Total Organic Carbon (TOC-SUB)

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Total Organic Carbon (TOC)** | **4500** | | mg/kg | 100 | 1 | SW9060A/L.. Kahn | 06/20/2018 00:00 | 06/23/2018 00:00 | PHO |
| | | | | | | | Certifications: | | | |

## Sample Information

**Client Sample ID:** SB17(29-31) **York Sample ID:** 18F0837-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:30 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 15:50 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 15:50 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 15:50 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 15:50 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | | |

## Sample Information

**Client Sample ID:** SB17(29-31) **York Sample ID:** 18F0837-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:30 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 61 | 120 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **29** | SCAL-E | ug/kg dry | 6.1 | 12 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 6.1 | 12 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 15:50<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB17(29-31) **York Sample ID:** 18F0837-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:30 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-09-2 | **Methylene chloride** | **8.1** | SCAL-E, J | ug/kg dry | 6.1 | 12 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |

## Sample Information

**Client Sample ID:** SB17(29-31) **York Sample ID:** 18F0837-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:30 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 15:50 | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 6.1 | 12 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 15:50 | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 3.1 | 12 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 127-18-4 | **Tetrachloroethylene** | **4.1** | J | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH | 06/26/2018 15:50 | RDS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 3.1 | 6.1 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 15:50 | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 9.2 | 18 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 15:50 | RDS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *105 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *106 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *104 %* | *76-130* |

### Total Solids

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|

## Sample Information

**Client Sample ID:** SB17(29-31) **York Sample ID:** 18F0837-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:30 am | 06/20/2018 |

**Total Solids** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **84.3** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: CTDOH | | | |

## Sample Information

**Client Sample ID:** SB17(31-32) **York Sample ID:** 18F0837-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:35 am | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |

## Sample Information

**Client Sample ID:** SB17(31-32) **York Sample ID:** 18F0837-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:35 am | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 50 | 99 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **35** | SCAL-E | ug/kg dry | 5.0 | 9.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5.0 | 9.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB17(31-32) **York Sample ID:** 18F0837-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:35 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | **Methylene chloride** | **7.7** | SCAL-E, J | ug/kg dry | 5.0 | 9.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5.0 | 9.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.5 | 9.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 02:44<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB17(31-32) **York Sample ID:** 18F0837-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 10:35 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH | | |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.5 | 5.0 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 7.4 | 15 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 02:44 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *111 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *104 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *95.2 %* | *76-130* |

### Total Solids

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **79.4** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: | CTDOH | | |

## Sample Information

**Client Sample ID:** SB18(26-28) **York Sample ID:** 18F0837-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:20 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:11 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |

## Sample Information

**Client Sample ID:** SB18(26-28) **York Sample ID:** 18F0837-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:20 am | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 49 | 98 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **29** | SCAL-E | ug/kg dry | 4.9 | 9.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB18(26-28) **York Sample ID:** 18F0837-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:20 am | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-02-8 | Acrolein | ND | | ug/kg dry | 4.9 | 9.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB18(26-28) **York Sample ID:** 18F0837-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:20 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | Methylene chloride | ND | | ug/kg dry | 4.9 | 9.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 4.9 | 9.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.5 | 9.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH | RDS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.5 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 7.4 | 15 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:11<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *101 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *117 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *101 %* | *76-130* |

## Sample Information

**Client Sample ID:** SB18(26-28) **York Sample ID:** 18F0837-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:20 am | 06/20/2018 |

**Total Solids** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **79.8** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: CTDOH | | | |

**Analyzed by: Phoenix Environmental Laboratories, Inc. S**

**Total Organic Carbon (TOC-SUB)** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Total Organic Carbon (TOC)** | **13000** | | mg/kg | 100 | 1 | SW9060A/L.. Kahn | 06/20/2018 00:00 | 06/23/2018 00:00 | PHO |
| | | | | | | | Certifications: | | | |

## Sample Information

**Client Sample ID:** SB18(29-31) **York Sample ID:** 18F0837-05

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:30 am | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |

## Sample Information

**Client Sample ID:** SB18(29-31) **York Sample ID:** 18F0837-05

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:30 am | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 49 | 97 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **29** | SCAL-E | ug/kg dry | 4.9 | 9.7 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 4.9 | 9.7 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB18(29-31) **York Sample ID:** 18F0837-05

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:30 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | **Methylcyclohexane** | **2.9** | J | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | Methylene chloride | ND | | ug/kg dry | 4.9 | 9.7 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 4.9 | 9.7 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 03:38<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB18(29-31) **York Sample ID:** 18F0837-05

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 11:30 am | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.4 | 9.7 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH | | |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.4 | 4.9 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 7.3 | 15 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 03:38 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *101 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *114 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *96.6 %* | *76-130* |

### Total Solids

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **78.5** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: | CTDOH | | |

## Sample Information

**Client Sample ID:** SB19(27-29) **York Sample ID:** 18F0837-06

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:40 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 5400 | 11000 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB19(27-29) **York Sample ID:** 18F0837-06

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:40 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | | ug/kg dry | 540 | 1100 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 540 | 1100 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 71-43-2 | Benzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:07 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |

## Sample Information

**Client Sample ID:** SB19(27-29) **York Sample ID:** 18F0837-06

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:40 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 75-09-2 | Methylene chloride | ND | | ug/kg dry | 540 | 1100 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 22:07 | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 540 | 1100 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 22:07 | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 270 | 1100 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 127-18-4 | **Tetrachloroethylene** | **650** | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH | 06/26/2018 22:07 | RDS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 270 | 540 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:07 | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 810 | 1600 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 22:07 | RDS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *78.7 %* | *77-125* |

## Sample Information

**Client Sample ID:** SB19(27-29) **York Sample ID:** 18F0837-06

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:40 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2037-26-5 | *Surrogate: Toluene-d8* | *232 %* | S-09 | | *85-120* | | | | | | |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *94.5 %* | | | *76-130* | | | | | | |

### Total Solids

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **82.5** | | % | 0.100 | 1 | SM 2540G<br>Certifications: CTDOH | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |

## Analyzed by: Phoenix Environmental Laboratories, Inc. S

### Total Organic Carbon (TOC-SUB)

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Total Organic Carbon (TOC)** | **12000** | | mg/kg | 100 | 1 | SW9060A/L.. Kahn<br>Certifications: | 06/20/2018 00:00 | 06/23/2018 00:00 | PHO |

## Sample Information

**Client Sample ID:** SB19(31-33) **York Sample ID:** 18F0837-07

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |

## Sample Information

**Client Sample ID:** SB19(31-33) **York Sample ID:** 18F0837-07

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 54 | 110 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **19** | SCAL-E | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB19(31-33) **York Sample ID:** 18F0837-07

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | **Methylene chloride** | **6.5** | SCAL-E, J | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:32<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

# Sample Information

**Client Sample ID:** SB19(31-33) **York Sample ID:** 18F0837-07

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:50 pm | 06/20/2018 |

## Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | | |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | | |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.7 | 11 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH | | |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 8.0 | 16 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 04:32 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *99.5 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *109 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *96.0 %* | *76-130* |

## Total Solids

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **76.8** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: | CTDOH | | |

## Sample Information

**Client Sample ID:** SB19(31-33) **York Sample ID:** 18F0837-07

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 12:50 pm | 06/20/2018 |

## Sample Information

**Client Sample ID:** SB13(22-23) **York Sample ID:** 18F0837-08

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:25 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB13(22-23) **York Sample ID:** 18F0837-08

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:25 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 43 | 85 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **22** | SCAL-E | ug/kg dry | 4.3 | 8.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 4.3 | 8.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 04:59<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB13(22-23) **York Sample ID:** 18F0837-08

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:25 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 75-09-2 | **Methylene chloride** | **5.7** | SCAL-E, J | ug/kg dry | 4.3 | 8.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 04:59 | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 4.3 | 8.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 04:59 | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.1 | 8.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 127-18-4 | **Tetrachloroethylene** | **190** | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH | 06/26/2018 04:59 | RDS |

## Sample Information

**Client Sample ID:** SB13(22-23) **York Sample ID:** 18F0837-08

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:25 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.1 | 4.3 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 04:59 | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 6.4 | 13 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 04:59 | RDS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *107 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *106 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *95.2 %* | *76-130* |

### Total Solids

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **90.9** | | % | 0.100 | 1 | SM 2540G<br>Certifications: CTDOH | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |

## Sample Information

**Client Sample ID:** SB13(23-24) **York Sample ID:** 18F0837-09

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:30 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:34 | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:34 | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:34 | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 22:34 | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 22:34 | RDS |

## Sample Information

**Client Sample ID:** SB13(23-24) **York Sample ID:** 18F0837-09

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:30 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | **1,2,4-Trimethylbenzene** | **640** | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | **1,3,5-Trimethylbenzene** | **1500** | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 5200 | 10000 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | Acetone | ND | | ug/kg dry | 520 | 1000 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 520 | 1000 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB13(23-24) **York Sample ID:** 18F0837-09

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:30 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-82-8 | **Isopropylbenzene** | **1300** | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | **Methylcyclohexane** | **18000** | | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | Methylene chloride | ND | | ug/kg dry | 520 | 1000 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | **n-Butylbenzene** | **290** | CCV-E, J | ug/kg dry | 260 | 520 | 100 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 22:34<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB13(23-24) **York Sample ID:** 18F0837-09

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:30 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 103-65-1 | **n-Propylbenzene** | **1100** | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | | |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 520 | 1000 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | | |
| 99-87-6 | **p-Isopropyltoluene** | **340** | J | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 100-42-5 | Styrene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 260 | 1000 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 127-18-4 | **Tetrachloroethylene** | **630000** | | ug/kg dry | 26000 | 52000 | 10000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:02 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 108-88-3 | Toluene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH | | |
| 79-01-6 | **Trichloroethylene** | **920** | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 260 | 520 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 780 | 1600 | 100 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 22:34 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | | Acceptance Range |
|---|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *94.3 %* | | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *182 %* | S-09 | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *92.3 %* | | *76-130* |

### Total Solids

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|

## Sample Information

**Client Sample ID:** SB13(23-24) **York Sample ID:** 18F0837-09

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 2:30 pm | 06/20/2018 |

**Total Solids** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | * % Solids | 74.2 | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: CTDOH | | | |

**Analyzed by: Phoenix Environmental Laboratories, Inc. S**

**Total Organic Carbon (TOC-SUB)** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total Organic Carbon (TOC) | 36000 | | mg/kg | 100 | 1 | SW9060A/L.. Kahn | 06/20/2018 00:00 | 06/23/2018 00:00 | PHO |
| | | | | | | | Certifications: | | | |

## Sample Information

**Client Sample ID:** SB15(26-28) **York Sample ID:** 18F0837-10

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 3:50 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |

## Sample Information

**Client Sample ID:** SB15(26-28) **York Sample ID:** 18F0837-10

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 3:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP | SS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 54 | 110 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 67-64-1 | **Acetone** | **25** | SCAL-E | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |

## Sample Information

**Client Sample ID:** SB15(26-28) **York Sample ID:** 18F0837-10

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 3:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-09-2 | **Methylene chloride** | **12** | | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5.4 | 11 | 1 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 13:07<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |

## Sample Information

**Client Sample ID:** SB15(26-28) **York Sample ID:** 18F0837-10

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 3:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.7 | 27 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH | | |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.7 | 5.4 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 8.1 | 16 | 1 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 13:07 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *93.1 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *104 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *120 %* | *76-130* |

### Total Solids

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **84.6** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: | CTDOH | | |

**Analyzed by: Phoenix Environmental Laboratories, Inc. S**

### Total Organic Carbon (TOC-SUB)

**Log-in Notes:** **Sample Notes:**

## Sample Information

**Client Sample ID:** SB15(26-28) **York Sample ID:** 18F0837-10

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 3:50 pm | 06/20/2018 |

## Analyzed by: Phoenix Environmental Laboratories, Inc. S

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Total Organic Carbon (TOC)** | **6000** | | mg/kg | 100 | 1 | SW9060A/L.. Kahn<br>Certifications: | 06/20/2018 00:00 | 06/23/2018 00:00 | PHO |

## Sample Information

**Client Sample ID:** SB15(31-32) **York Sample ID:** 18F0837-11

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:00 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |

## Sample Information

**Client Sample ID:** SB15(31-32) **York Sample ID:** 18F0837-11

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 48 | 95 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **13** | SCAL-E | ug/kg dry | 4.8 | 9.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 4.8 | 9.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB15(31-32) **York Sample ID:** 18F0837-11

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | **Methylene chloride** | **5.6** | SCAL-E, J | ug/kg dry | 4.8 | 9.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 4.8 | 9.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.4 | 9.5 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB15(31-32) **York Sample ID:** 18F0837-11

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH | | |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.4 | 4.8 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 7.1 | 14 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:20 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *98.3 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *102 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *96.6 %* | *76-130* |

### Total Solids

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **80.3** | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: | CTDOH | | |

## Sample Information

**Client Sample ID:** SB14(23-24) **York Sample ID:** 18F0837-12

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:45 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |

## Sample Information

**Client Sample ID:** SB14(23-24) **York Sample ID:** 18F0837-12

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:45 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | **1,3,5-Trimethylbenzene** | **3.4** | J | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 52 | 100 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **12** | SCAL-E | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB14(23-24) **York Sample ID:** 18F0837-12

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:45 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 98-82-8 | **Isopropylbenzene** | **2.6** | J | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |

## Sample Information

**Client Sample ID:** SB14(23-24) **York Sample ID:** 18F0837-12

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:45 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | **Methylene chloride** | **7.4** | SCAL-E, J | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 103-65-1 | **n-Propylbenzene** | **3.0** | J | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.6 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 127-18-4 | **Tetrachloroethylene** | **110** | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH | RDS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 7.8 | 16 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 06:47<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *100 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *107 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *99.0 %* | *76-130* |

## Sample Information

**Client Sample ID:** SB14(23-24) **York Sample ID:** 18F0837-12

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:45 pm | 06/20/2018 |

**Total Solids** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | * % Solids | 97.7 | | % | 0.100 | 1 | SM 2540G | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |
| | | | | | | | Certifications: CTDOH | | | |

## Sample Information

**Client Sample ID:** SB14(26-28) **York Sample ID:** 18F0837-13

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:50 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive** **Log-in Notes:** **Sample Notes:** Rep-04

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| | | | | | | | | Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | | |

## Sample Information

**Client Sample ID:** SB14(26-28) **York Sample ID:** 18F0837-13

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:50 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:** Rep-04

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 53000 | 110000 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 67-64-1 | Acetone | ND | | ug/kg dry | 5300 | 11000 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5300 | 11000 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |

## Sample Information

**Client Sample ID:** SB14(26-28) **York Sample ID:** 18F0837-13

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:** Rep-04

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-09-2 | Methylene chloride | ND | | ug/kg dry | 5300 | 11000 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5300 | 11000 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2700 | 27000 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: | 06/27/2018 07:30 | 06/27/2018 12:33<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |

## Sample Information

**Client Sample ID:** SB14(26-28) **York Sample ID:** 18F0837-13

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 4:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:** Rep-04

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-88-3 | Toluene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: CTDOH | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2700 | 5300 | 1000 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 8000 | 16000 | 1000 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/27/2018 07:30 | 06/27/2018 12:33 | SS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *90.5 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *93.1 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *110 %* | *76-130* |

### Total Solids

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **85.0** | | % | 0.100 | 1 | SM 2540G<br>Certifications: CTDOH | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |

## Analyzed by: Phoenix Environmental Laboratories, Inc. S

### Total Organic Carbon (TOC-SUB)

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Total Organic Carbon (TOC)** | **8400** | | mg/kg | 100 | 1 | SW9060A/L.. Kahn<br>Certifications: | 06/20/2018 00:00 | 06/23/2018 00:00 | PHO |

## Sample Information

**Client Sample ID:** SB14(31-32) **York Sample ID:** 18F0837-14

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:00 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>NELAC-NY10854,NELAC-NY12058,NJDEP | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 57 | 110 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 16:16<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB14(31-32) **York Sample ID:** 18F0837-14

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:00 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-64-1 | **Acetone** | **19** | SCAL-E | ug/kg dry | 5.7 | 11 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5.7 | 11 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C | 06/26/2018 07:30 | 06/26/2018 16:16 | RDS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |

## Sample Information

**Client Sample ID:** SB14(31-32) **York Sample ID:** 18F0837-14

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 75-09-2 | **Methylene chloride** | **7.6** | SCAL-E, J | ug/kg dry | 5.7 | 11 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 16:16 | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5.7 | 11 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | 06/26/2018 16:16 | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.9 | 11 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH | 06/26/2018 16:16 | RDS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.9 | 5.7 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 16:16 | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 8.6 | 17 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 16:16 | RDS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *107 %* | *77-125* |

## Sample Information

**Client Sample ID:** SB14(31-32) **York Sample ID:** 18F0837-14

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2037-26-5 | *Surrogate: Toluene-d8* | *105 %* | | | *85-120* | | | | | | |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *96.1 %* | | | *76-130* | | | | | | |

### Total Solids

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **76.4** | | % | 0.100 | 1 | SM 2540G<br>Certifications: CTDOH | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |

## Sample Information

**Client Sample ID:** SB16(29-30) **York Sample ID:** 18F0837-15

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 07:30 | 06/26/2018 08:08 | RDS |

## Sample Information

**Client Sample ID:** **SB16(29-30)** **York Sample ID:** **18F0837-15**

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | IS-LO | ug/kg dry | 52 | 100 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **20** | IS-LO, SCAL-E | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | IS-LO | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB16(29-30) **York Sample ID:** 18F0837-15

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-90-7 | Chlorobenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-87-3 | Chloromethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 110-82-7 | Cyclohexane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 124-48-1 | Dibromochloromethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-95-3 | Dibromomethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-71-8 | Dichlorodifluoromethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 100-41-4 | Ethyl Benzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 87-68-3 | Hexachlorobutadiene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 98-82-8 | Isopropylbenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 79-20-9 | Methyl acetate | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-87-2 | Methylcyclohexane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-09-2 | **Methylene chloride** | **8.4** | IS-LO, SCAL-E, J | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 104-51-8 | n-Butylbenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 103-65-1 | n-Propylbenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 95-47-6 | o-Xylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 179601-23-1 | p- & m- Xylenes | ND | IS-LO | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | RDS |
| 99-87-6 | p-Isopropyltoluene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 135-98-8 | sec-Butylbenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30 | 06/26/2018 08:08<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB16(29-30) **York Sample ID:** 18F0837-15

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:50 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 100-42-5 | Styrene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | IS-LO | ug/kg dry | 2.6 | 10 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 98-06-6 | tert-Butylbenzene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 127-18-4 | Tetrachloroethylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 108-88-3 | Toluene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH | 06/26/2018 08:08 | RDS |
| 79-01-6 | Trichloroethylene | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 75-01-4 | Vinyl Chloride | ND | IS-LO | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:08 | RDS |
| 1330-20-7 | Xylenes, Total | ND | IS-LO | ug/kg dry | 7.7 | 15 | 1 | EPA 8260C<br>Certifications: | 06/26/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 08:08 | RDS |

| | Surrogate Recoveries | Result | | Acceptance Range |
|---|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *98.0 %* | IS-LO | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *104 %* | IS-LO | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *98.4 %* | IS-LO | *76-130* |

### Total Solids

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **89.1** | | % | 0.100 | 1 | SM 2540G<br>Certifications: CTDOH | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |

## Analyzed by: Phoenix Environmental Laboratories, Inc. S

### Total Organic Carbon (TOC-SUB)

**Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|

## Sample Information

**Client Sample ID:** SB16(29-30) **York Sample ID:** 18F0837-15

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 5:50 pm | 06/20/2018 |

## Analyzed by: Phoenix Environmental Laboratories, Inc. S

**Total Organic Carbon (TOC-SUB)** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: *** DEFAULT PREP ***

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Total Organic Carbon (TOC)** | **7900** | | mg/kg | 100 | 1 | SW9060A/L.. Kahn<br>Certifications: | 06/20/2018 00:00 | 06/23/2018 00:00 | PHO |

## Sample Information

**Client Sample ID:** SB16(30-32) **York Sample ID:** 18F0837-16

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 6:00 pm | 06/20/2018 |

**Volatile Organics, 8260 - Comprehensive** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS |

## Sample Information

**Client Sample ID:** SB16(30-32) **York Sample ID:** 18F0837-16

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 6:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 123-91-1 | 1,4-Dioxane | ND | | ug/kg dry | 52 | 100 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 78-93-3 | 2-Butanone | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 591-78-6 | 2-Hexanone | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-10-1 | 4-Methyl-2-pentanone | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-64-1 | **Acetone** | **17** | SCAL-E | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-02-8 | Acrolein | ND | | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 107-13-1 | Acrylonitrile | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 71-43-2 | Benzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-97-5 | Bromochloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-27-4 | Bromodichloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-25-2 | Bromoform | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 74-83-9 | Bromomethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-15-0 | Carbon disulfide | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 108-90-7 | Chlorobenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 75-00-3 | Chloroethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |
| 67-66-3 | Chloroform | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | RDS |

## Sample Information

**Client Sample ID:** SB16(30-32) **York Sample ID:** 18F0837-16

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 6:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 110-82-7 | Cyclohexane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 124-48-1 | Dibromochloromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-95-3 | Dibromomethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 100-41-4 | Ethyl Benzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 98-82-8 | Isopropylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 79-20-9 | Methyl acetate | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 108-87-2 | Methylcyclohexane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-09-2 | Methylene chloride | ND | | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 104-51-8 | n-Butylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 103-65-1 | n-Propylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 95-47-6 | o-Xylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/kg dry | 5.2 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 135-98-8 | sec-Butylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 100-42-5 | Styrene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-65-0 | tert-Butyl alcohol (TBA) | ND | | ug/kg dry | 2.6 | 10 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 98-06-6 | tert-Butylbenzene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30 | 06/26/2018 08:35 | RDS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |

## Sample Information

**Client Sample ID:** SB16(30-32) **York Sample ID:** 18F0837-16

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18F0837 | 31401451.000 | Soil | June 18, 2018 6:00 pm | 06/20/2018 |

### Volatile Organics, 8260 - Comprehensive

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127-18-4 | Tetrachloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:35 | RDS |
| 108-88-3 | Toluene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:35 | RDS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:35 | RDS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:35 | RDS |
| 110-57-6 | * trans-1,4-dichloro-2-butene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH | 06/26/2018 08:35 | RDS |
| 79-01-6 | Trichloroethylene | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:35 | RDS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:35 | RDS |
| 75-01-4 | Vinyl Chloride | ND | | ug/kg dry | 2.6 | 5.2 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 06/26/2018 08:35 | RDS |
| 1330-20-7 | Xylenes, Total | ND | | ug/kg dry | 7.8 | 16 | 1 | EPA 8260C<br>Certifications: | 06/25/2018 14:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | 06/26/2018 08:35 | RDS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *96.0 %* | *77-125* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *105 %* | *85-120* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *93.0 %* | *76-130* |

### Total Solids

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| solids | *** % Solids** | **78.0** | | % | 0.100 | 1 | SM 2540G<br>Certifications: CTDOH | 06/27/2018 10:03 | 06/27/2018 16:09 | LAB |

# Analytical Batch Summary

**Batch ID:** 6/23/2018 **Preparation Method:** *** DEFAULT PREP *** **Prepared By:**

| YORK Sample ID | Client Sample ID | Preparation Date |
|---|---|---|
| 18F0837-01 | SB17(26-27) | 06/20/18 |
| 18F0837-04 | SB18(26-28) | 06/20/18 |
| 18F0837-06 | SB19(27-29) | 06/20/18 |
| 18F0837-09 | SB13(23-24) | 06/20/18 |
| 18F0837-10 | SB15(26-28) | 06/20/18 |
| 18F0837-13 | SB14(26-28) | 06/20/18 |
| 18F0837-15 | SB16(29-30) | 06/20/18 |

**Batch ID:** BF81359 **Preparation Method:** EPA 5035A **Prepared By:** TAB

| YORK Sample ID | Client Sample ID | Preparation Date |
|---|---|---|
| 18F0837-03 | SB17(31-32) | 06/25/18 |
| 18F0837-04 | SB18(26-28) | 06/25/18 |
| 18F0837-05 | SB18(29-31) | 06/25/18 |
| 18F0837-07 | SB19(31-33) | 06/25/18 |
| 18F0837-08 | SB13(22-23) | 06/25/18 |
| 18F0837-11 | SB15(31-32) | 06/25/18 |
| 18F0837-12 | SB14(23-24) | 06/25/18 |
| 18F0837-16 | SB16(30-32) | 06/25/18 |
| BF81359-BLK1 | Blank | 06/25/18 |
| BF81359-BS1 | LCS | 06/25/18 |
| BF81359-BSD1 | LCS Dup | 06/25/18 |

**Batch ID:** BF81388 **Preparation Method:** EPA 5035A **Prepared By:** RDS

| YORK Sample ID | Client Sample ID | Preparation Date |
|---|---|---|
| 18F0837-01 | SB17(26-27) | 06/26/18 |
| 18F0837-02 | SB17(29-31) | 06/26/18 |
| 18F0837-06 | SB19(27-29) | 06/26/18 |
| 18F0837-09 | SB13(23-24) | 06/26/18 |
| 18F0837-14 | SB14(31-32) | 06/26/18 |
| 18F0837-15 | SB16(29-30) | 06/26/18 |
| BF81388-BLK1 | Blank | 06/26/18 |
| BF81388-BLK2 | Blank | 06/26/18 |
| BF81388-BS1 | LCS | 06/26/18 |
| BF81388-BSD1 | LCS Dup | 06/26/18 |

**Batch ID:** BF81466 **Preparation Method:** EPA 5035A **Prepared By:** TAB

| YORK Sample ID | Client Sample ID | Preparation Date |
|---|---|---|
| 18F0837-09RE1 | SB13(23-24) | 06/27/18 |
| 18F0837-10 | SB15(26-28) | 06/27/18 |
| 18F0837-13 | SB14(26-28) | 06/27/18 |
| BF81466-BLK1 | Blank | 06/27/18 |

| | | |
|---|---|---|
| BF81466-BLK2 | Blank | 06/27/18 |
| BF81466-BS1 | LCS | 06/27/18 |
| BF81466-BSD1 | LCS Dup | 06/27/18 |

**Batch ID:** BF81490 **Preparation Method:** % Solids Prep **Prepared By:** TAJ

| YORK Sample ID | Client Sample ID | Preparation Date |
|---|---|---|
| 18F0837-01 | SB17(26-27) | 06/27/18 |
| 18F0837-02 | SB17(29-31) | 06/27/18 |
| 18F0837-03 | SB17(31-32) | 06/27/18 |
| 18F0837-04 | SB18(26-28) | 06/27/18 |
| 18F0837-05 | SB18(29-31) | 06/27/18 |
| 18F0837-06 | SB19(27-29) | 06/27/18 |
| 18F0837-07 | SB19(31-33) | 06/27/18 |
| 18F0837-08 | SB13(22-23) | 06/27/18 |
| 18F0837-09 | SB13(23-24) | 06/27/18 |
| 18F0837-10 | SB15(26-28) | 06/27/18 |
| 18F0837-11 | SB15(31-32) | 06/27/18 |
| 18F0837-12 | SB14(23-24) | 06/27/18 |
| 18F0837-13 | SB14(26-28) | 06/27/18 |
| 18F0837-14 | SB14(31-32) | 06/27/18 |
| 18F0837-15 | SB16(29-30) | 06/27/18 |
| 18F0837-16 | SB16(30-32) | 06/27/18 |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81359 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81359-BLK1)** | | | | | | | | | | | |
| Prepared: 06/25/2018 Analyzed: 06/26/2018 | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg wet | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 5.0 | " | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1-Dichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 5.0 | " | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 5.0 | " | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dibromoethane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichloropropane | ND | 5.0 | " | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 5.0 | " | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,4-Dioxane | ND | 100 | " | | | | | | | | |
| 2-Butanone | ND | 5.0 | " | | | | | | | | |
| 2-Hexanone | ND | 5.0 | " | | | | | | | | |
| 4-Methyl-2-pentanone | ND | 5.0 | " | | | | | | | | |
| Acetone | ND | 10 | " | | | | | | | | |
| Acrolein | ND | 10 | " | | | | | | | | |
| Acrylonitrile | ND | 5.0 | " | | | | | | | | |
| Benzene | ND | 5.0 | " | | | | | | | | |
| Bromochloromethane | ND | 5.0 | " | | | | | | | | |
| Bromodichloromethane | ND | 5.0 | " | | | | | | | | |
| Bromoform | ND | 5.0 | " | | | | | | | | |
| Bromomethane | ND | 5.0 | " | | | | | | | | |
| Carbon disulfide | ND | 5.0 | " | | | | | | | | |
| Carbon tetrachloride | ND | 5.0 | " | | | | | | | | |
| Chlorobenzene | ND | 5.0 | " | | | | | | | | |
| Chloroethane | ND | 5.0 | " | | | | | | | | |
| Chloroform | ND | 5.0 | " | | | | | | | | |
| Chloromethane | ND | 5.0 | " | | | | | | | | |
| cis-1,2-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| cis-1,3-Dichloropropylene | ND | 5.0 | " | | | | | | | | |
| Cyclohexane | ND | 5.0 | " | | | | | | | | |
| Dibromochloromethane | ND | 5.0 | " | | | | | | | | |
| Dibromomethane | ND | 5.0 | " | | | | | | | | |
| Dichlorodifluoromethane | ND | 5.0 | " | | | | | | | | |
| Ethyl Benzene | ND | 5.0 | " | | | | | | | | |
| Hexachlorobutadiene | ND | 5.0 | " | | | | | | | | |
| Isopropylbenzene | ND | 5.0 | " | | | | | | | | |
| Methyl acetate | ND | 5.0 | " | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 5.0 | " | | | | | | | | |
| Methylcyclohexane | ND | 5.0 | " | | | | | | | | |
| Methylene chloride | ND | 10 | " | | | | | | | | |

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

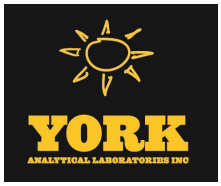
## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81359 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81359-BLK1)** | | | | | | | | Prepared: 06/25/2018 Analyzed: 06/26/2018 | | | |
| n-Butylbenzene | ND | 5.0 | ug/kg wet | | | | | | | | |
| n-Propylbenzene | ND | 5.0 | " | | | | | | | | |
| o-Xylene | ND | 5.0 | " | | | | | | | | |
| p- & m- Xylenes | ND | 10 | " | | | | | | | | |
| p-Isopropyltoluene | ND | 5.0 | " | | | | | | | | |
| sec-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| Styrene | ND | 5.0 | " | | | | | | | | |
| tert-Butyl alcohol (TBA) | ND | 10 | " | | | | | | | | |
| tert-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| Tetrachloroethylene | ND | 5.0 | " | | | | | | | | |
| Toluene | ND | 5.0 | " | | | | | | | | |
| trans-1,2-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| trans-1,3-Dichloropropylene | ND | 5.0 | " | | | | | | | | |
| trans-1,4-dichloro-2-butene | ND | 5.0 | " | | | | | | | | |
| Trichloroethylene | ND | 5.0 | " | | | | | | | | |
| Trichlorofluoromethane | ND | 5.0 | " | | | | | | | | |
| Vinyl Chloride | ND | 5.0 | " | | | | | | | | |
| Xylenes, Total | ND | 15 | " | | | | | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *47.6* | | *ug/L* | *50.0* | | *95.1* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *54.4* | | *"* | *50.0* | | *109* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *49.6* | | *"* | *50.0* | | *99.3* | *76-130* | | | | |
| **LCS (BF81359-BS1)** | | | | | | | | Prepared: 06/25/2018 Analyzed: 06/26/2018 | | | |
| 1,1,1,2-Tetrachloroethane | 47 | | ug/L | 50.0 | | 94.2 | 75-129 | | | | |
| 1,1,1-Trichloroethane | 46 | | " | 50.0 | | 92.3 | 71-137 | | | | |
| 1,1,2,2-Tetrachloroethane | 48 | | " | 50.0 | | 95.4 | 79-129 | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 53 | | " | 50.0 | | 105 | 58-146 | | | | |
| 1,1,2-Trichloroethane | 43 | | " | 50.0 | | 86.6 | 83-123 | | | | |
| 1,1-Dichloroethane | 47 | | " | 50.0 | | 93.3 | 75-130 | | | | |
| 1,1-Dichloroethylene | 48 | | " | 50.0 | | 95.5 | 64-137 | | | | |
| 1,2,3-Trichlorobenzene | 41 | | " | 50.0 | | 82.2 | 81-140 | | | | |
| 1,2,3-Trichloropropane | 46 | | " | 50.0 | | 93.0 | 81-126 | | | | |
| 1,2,4-Trichlorobenzene | 39 | | " | 50.0 | | 79.0 | 80-141 | Low Bias | | | |
| 1,2,4-Trimethylbenzene | 45 | | " | 50.0 | | 90.8 | 84-125 | | | | |
| 1,2-Dibromo-3-chloropropane | 48 | | " | 50.0 | | 95.3 | 74-142 | | | | |
| 1,2-Dibromoethane | 46 | | " | 50.0 | | 91.5 | 86-123 | | | | |
| 1,2-Dichlorobenzene | 48 | | " | 50.0 | | 96.7 | 85-122 | | | | |
| 1,2-Dichloroethane | 46 | | " | 50.0 | | 92.8 | 71-133 | | | | |
| 1,2-Dichloropropane | 48 | | " | 50.0 | | 95.4 | 81-122 | | | | |
| 1,3,5-Trimethylbenzene | 47 | | " | 50.0 | | 93.3 | 82-126 | | | | |
| 1,3-Dichlorobenzene | 46 | | " | 50.0 | | 91.4 | 84-124 | | | | |
| 1,4-Dichlorobenzene | 45 | | " | 50.0 | | 89.1 | 84-124 | | | | |
| 1,4-Dioxane | 1100 | | " | 1050 | | 101 | 10-228 | | | | |
| 2-Butanone | 48 | | " | 50.0 | | 96.7 | 58-147 | | | | |
| 2-Hexanone | 44 | | " | 50.0 | | 87.1 | 70-139 | | | | |
| 4-Methyl-2-pentanone | 45 | | " | 50.0 | | 89.4 | 72-132 | | | | |
| Acetone | 39 | | " | 50.0 | | 77.7 | 36-155 | | | | |
| Acrolein | 28 | | " | 50.0 | | 56.6 | 10-238 | | | | |
| Acrylonitrile | 43 | | " | 50.0 | | 86.6 | 66-141 | | | | |
| Benzene | 47 | | " | 50.0 | | 93.1 | 77-127 | | | | |
| Bromochloromethane | 48 | | " | 50.0 | | 95.1 | 74-129 | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81359 - EPA 5035A** | | | | | | | | | | | |
| **LCS (BF81359-BS1)** | | | | | | | | | | | |
| Prepared: 06/25/2018 Analyzed: 06/26/2018 | | | | | | | | | | | |
| Bromodichloromethane | 46 | | ug/L | 50.0 | | 91.6 | 81-124 | | | | |
| Bromoform | 41 | | " | 50.0 | | 82.8 | 80-136 | | | | |
| Bromomethane | 55 | | " | 50.0 | | 109 | 32-177 | | | | |
| Carbon disulfide | 52 | | " | 50.0 | | 104 | 10-136 | | | | |
| Carbon tetrachloride | 47 | | " | 50.0 | | 93.5 | 66-143 | | | | |
| Chlorobenzene | 48 | | " | 50.0 | | 96.8 | 86-120 | | | | |
| Chloroethane | 52 | | " | 50.0 | | 104 | 51-142 | | | | |
| Chloroform | 46 | | " | 50.0 | | 92.2 | 76-131 | | | | |
| Chloromethane | 49 | | " | 50.0 | | 97.8 | 49-132 | | | | |
| cis-1,2-Dichloroethylene | 48 | | " | 50.0 | | 96.5 | 74-132 | | | | |
| cis-1,3-Dichloropropylene | 45 | | " | 50.0 | | 89.3 | 81-129 | | | | |
| Cyclohexane | 50 | | " | 50.0 | | 100 | 70-130 | | | | |
| Dibromochloromethane | 44 | | " | 50.0 | | 88.4 | 10-200 | | | | |
| Dibromomethane | 47 | | " | 50.0 | | 94.5 | 83-124 | | | | |
| Dichlorodifluoromethane | 57 | | " | 50.0 | | 115 | 28-158 | | | | |
| Ethyl Benzene | 50 | | " | 50.0 | | 99.2 | 84-125 | | | | |
| Hexachlorobutadiene | 43 | | " | 50.0 | | 86.5 | 83-133 | | | | |
| Isopropylbenzene | 49 | | " | 50.0 | | 97.2 | 81-127 | | | | |
| Methyl acetate | 44 | | " | 50.0 | | 87.4 | 41-143 | | | | |
| Methyl tert-butyl ether (MTBE) | 46 | | " | 50.0 | | 92.6 | 74-131 | | | | |
| Methylcyclohexane | 51 | | " | 50.0 | | 103 | 70-130 | | | | |
| Methylene chloride | 42 | | " | 50.0 | | 84.8 | 57-141 | | | | |
| n-Butylbenzene | 42 | | " | 50.0 | | 83.7 | 80-130 | | | | |
| n-Propylbenzene | 47 | | " | 50.0 | | 94.8 | 74-136 | | | | |
| o-Xylene | 49 | | " | 50.0 | | 97.3 | 83-123 | | | | |
| p- & m- Xylenes | 94 | | " | 100 | | 94.4 | 82-128 | | | | |
| p-Isopropyltoluene | 47 | | " | 50.0 | | 93.6 | 85-125 | | | | |
| sec-Butylbenzene | 52 | | " | 50.0 | | 103 | 83-125 | | | | |
| Styrene | 46 | | " | 50.0 | | 91.1 | 86-126 | | | | |
| tert-Butyl alcohol (TBA) | 210 | | " | 250 | | 83.8 | 70-130 | | | | |
| tert-Butylbenzene | 42 | | " | 50.0 | | 83.1 | 80-127 | | | | |
| Tetrachloroethylene | 46 | | " | 50.0 | | 92.7 | 80-129 | | | | |
| Toluene | 48 | | " | 50.0 | | 96.8 | 85-121 | | | | |
| trans-1,2-Dichloroethylene | 47 | | " | 50.0 | | 93.8 | 72-132 | | | | |
| trans-1,3-Dichloropropylene | 43 | | " | 50.0 | | 86.8 | 78-132 | | | | |
| trans-1,4-dichloro-2-butene | 44 | | " | 50.0 | | 87.4 | 75-135 | | | | |
| Trichloroethylene | 50 | | " | 50.0 | | 100 | 84-123 | | | | |
| Trichlorofluoromethane | 47 | | " | 50.0 | | 94.0 | 62-140 | | | | |
| Vinyl Chloride | 53 | | " | 50.0 | | 107 | 52-130 | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *50.9* | | *"* | *50.0* | | *102* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *53.7* | | *"* | *50.0* | | *107* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *46.9* | | *"* | *50.0* | | *93.7* | *76-130* | | | | |




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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81359 - EPA 5035A** | | | | | | | | | | | |
| **LCS Dup (BF81359-BSD1)** | | | | | | | | | Prepared: 06/25/2018 Analyzed: 06/26/2018 | | |
| 1,1,1,2-Tetrachloroethane | 47 | | ug/L | 50.0 | | 93.0 | 75-129 | | 1.22 | 30 | |
| 1,1,1-Trichloroethane | 47 | | " | 50.0 | | 94.1 | 71-137 | | 1.93 | 30 | |
| 1,1,2,2-Tetrachloroethane | 49 | | " | 50.0 | | 98.1 | 79-129 | | 2.77 | 30 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 53 | | " | 50.0 | | 107 | 58-146 | | 1.19 | 30 | |
| 1,1,2-Trichloroethane | 45 | | " | 50.0 | | 89.2 | 83-123 | | 2.91 | 30 | |
| 1,1-Dichloroethane | 47 | | " | 50.0 | | 93.9 | 75-130 | | 0.662 | 30 | |
| 1,1-Dichloroethylene | 49 | | " | 50.0 | | 97.9 | 64-137 | | 2.42 | 30 | |
| 1,2,3-Trichlorobenzene | 42 | | " | 50.0 | | 83.9 | 81-140 | | 2.02 | 30 | |
| 1,2,3-Trichloropropane | 48 | | " | 50.0 | | 96.0 | 81-126 | | 3.17 | 30 | |
| 1,2,4-Trichlorobenzene | 40 | | " | 50.0 | | 80.0 | 80-141 | | 1.28 | 30 | |
| 1,2,4-Trimethylbenzene | 47 | | " | 50.0 | | 93.7 | 84-125 | | 3.16 | 30 | |
| 1,2-Dibromo-3-chloropropane | 48 | | " | 50.0 | | 95.7 | 74-142 | | 0.356 | 30 | |
| 1,2-Dibromoethane | 48 | | " | 50.0 | | 95.3 | 86-123 | | 4.07 | 30 | |
| 1,2-Dichlorobenzene | 47 | | " | 50.0 | | 94.0 | 85-122 | | 2.85 | 30 | |
| 1,2-Dichloroethane | 47 | | " | 50.0 | | 93.6 | 71-133 | | 0.880 | 30 | |
| 1,2-Dichloropropane | 47 | | " | 50.0 | | 94.1 | 81-122 | | 1.35 | 30 | |
| 1,3,5-Trimethylbenzene | 48 | | " | 50.0 | | 95.0 | 82-126 | | 1.87 | 30 | |
| 1,3-Dichlorobenzene | 45 | | " | 50.0 | | 90.8 | 84-124 | | 0.659 | 30 | |
| 1,4-Dichlorobenzene | 45 | | " | 50.0 | | 89.1 | 84-124 | | 0.0898 | 30 | |
| 1,4-Dioxane | 1100 | | " | 1050 | | 100 | 10-228 | | 0.968 | 30 | |
| 2-Butanone | 47 | | " | 50.0 | | 93.1 | 58-147 | | 3.75 | 30 | |
| 2-Hexanone | 45 | | " | 50.0 | | 89.1 | 70-139 | | 2.20 | 30 | |
| 4-Methyl-2-pentanone | 47 | | " | 50.0 | | 94.3 | 72-132 | | 5.40 | 30 | |
| Acetone | 41 | | " | 50.0 | | 81.6 | 36-155 | | 4.95 | 30 | |
| Acrolein | 27 | | " | 50.0 | | 55.0 | 10-238 | | 2.90 | 30 | |
| Acrylonitrile | 46 | | " | 50.0 | | 91.7 | 66-141 | | 5.75 | 30 | |
| Benzene | 47 | | " | 50.0 | | 93.2 | 77-127 | | 0.0644 | 30 | |
| Bromochloromethane | 49 | | " | 50.0 | | 97.4 | 74-129 | | 2.41 | 30 | |
| Bromodichloromethane | 46 | | " | 50.0 | | 91.6 | 81-124 | | 0.0218 | 30 | |
| Bromoform | 41 | | " | 50.0 | | 81.5 | 80-136 | | 1.53 | 30 | |
| Bromomethane | 56 | | " | 50.0 | | 111 | 32-177 | | 1.56 | 30 | |
| Carbon disulfide | 53 | | " | 50.0 | | 105 | 10-136 | | 1.21 | 30 | |
| Carbon tetrachloride | 48 | | " | 50.0 | | 95.4 | 66-143 | | 2.03 | 30 | |
| Chlorobenzene | 48 | | " | 50.0 | | 96.0 | 86-120 | | 0.830 | 30 | |
| Chloroethane | 54 | | " | 50.0 | | 108 | 51-142 | | 3.87 | 30 | |
| Chloroform | 47 | | " | 50.0 | | 93.6 | 76-131 | | 1.49 | 30 | |
| Chloromethane | 50 | | " | 50.0 | | 99.2 | 49-132 | | 1.36 | 30 | |
| cis-1,2-Dichloroethylene | 48 | | " | 50.0 | | 96.0 | 74-132 | | 0.499 | 30 | |
| cis-1,3-Dichloropropylene | 44 | | " | 50.0 | | 88.5 | 81-129 | | 0.878 | 30 | |
| Cyclohexane | 51 | | " | 50.0 | | 101 | 70-130 | | 0.853 | 30 | |
| Dibromochloromethane | 45 | | " | 50.0 | | 89.3 | 10-200 | | 0.968 | 30 | |
| Dibromomethane | 47 | | " | 50.0 | | 94.7 | 83-124 | | 0.169 | 30 | |
| Dichlorodifluoromethane | 58 | | " | 50.0 | | 116 | 28-158 | | 0.955 | 30 | |
| Ethyl Benzene | 49 | | " | 50.0 | | 98.9 | 84-125 | | 0.263 | 30 | |
| Hexachlorobutadiene | 44 | | " | 50.0 | | 88.8 | 83-133 | | 2.67 | 30 | |
| Isopropylbenzene | 49 | | " | 50.0 | | 98.6 | 81-127 | | 1.39 | 30 | |
| Methyl acetate | 46 | | " | 50.0 | | 91.4 | 41-143 | | 4.43 | 30 | |
| Methyl tert-butyl ether (MTBE) | 48 | | " | 50.0 | | 95.7 | 74-131 | | 3.38 | 30 | |
| Methylcyclohexane | 51 | | " | 50.0 | | 102 | 70-130 | | 0.508 | 30 | |
| Methylene chloride | 42 | | " | 50.0 | | 84.9 | 57-141 | | 0.165 | 30 | |
| n-Butylbenzene | 49 | | " | 50.0 | | 98.1 | 80-130 | | 15.8 | 30 | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81359 - EPA 5035A** | | | | | | | | | | | |
| **LCS Dup (BF81359-BSD1)** | | | | | | | | | Prepared: 06/25/2018 Analyzed: 06/26/2018 | | |
| n-Propylbenzene | 49 | | ug/L | 50.0 | | 98.1 | 74-136 | | 3.50 | 30 | |
| o-Xylene | 49 | | " | 50.0 | | 97.5 | 83-123 | | 0.144 | 30 | |
| p- & m- Xylenes | 95 | | " | 100 | | 94.9 | 82-128 | | 0.518 | 30 | |
| p-Isopropyltoluene | 48 | | " | 50.0 | | 95.2 | 85-125 | | 1.65 | 30 | |
| sec-Butylbenzene | 53 | | " | 50.0 | | 105 | 83-125 | | 2.01 | 30 | |
| Styrene | 46 | | " | 50.0 | | 92.5 | 86-126 | | 1.59 | 30 | |
| tert-Butyl alcohol (TBA) | 210 | | " | 250 | | 84.8 | 70-130 | | 1.23 | 30 | |
| tert-Butylbenzene | 42 | | " | 50.0 | | 83.8 | 80-127 | | 0.863 | 30 | |
| Tetrachloroethylene | 46 | | " | 50.0 | | 92.3 | 80-129 | | 0.411 | 30 | |
| Toluene | 49 | | " | 50.0 | | 97.9 | 85-121 | | 1.05 | 30 | |
| trans-1,2-Dichloroethylene | 48 | | " | 50.0 | | 96.1 | 72-132 | | 2.42 | 30 | |
| trans-1,3-Dichloropropylene | 44 | | " | 50.0 | | 87.5 | 78-132 | | 0.872 | 30 | |
| trans-1,4-dichloro-2-butene | 45 | | " | 50.0 | | 89.2 | 75-135 | | 1.99 | 30 | |
| Trichloroethylene | 49 | | " | 50.0 | | 97.4 | 84-123 | | 2.83 | 30 | |
| Trichlorofluoromethane | 48 | | " | 50.0 | | 96.0 | 62-140 | | 2.08 | 30 | |
| Vinyl Chloride | 53 | | " | 50.0 | | 107 | 52-130 | | 0.113 | 30 | |
| *Surrogate: 1,2-Dichloroethane-d4* | *51.6* | | *"* | *50.0* | | *103* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *54.0* | | *"* | *50.0* | | *108* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *48.3* | | *"* | *50.0* | | *96.6* | *76-130* | | | | |
| **Batch BF81388 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81388-BLK1)** | | | | | | | | | Prepared & Analyzed: 06/26/2018 | | |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg wet | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 5.0 | " | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1-Dichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 5.0 | " | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 5.0 | " | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dibromoethane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichloropropane | ND | 5.0 | " | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 5.0 | " | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,4-Dioxane | ND | 100 | " | | | | | | | | |
| 2-Butanone | ND | 5.0 | " | | | | | | | | |
| 2-Hexanone | ND | 5.0 | " | | | | | | | | |
| 4-Methyl-2-pentanone | ND | 5.0 | " | | | | | | | | |
| Acetone | ND | 10 | " | | | | | | | | |
| Acrolein | ND | 10 | " | | | | | | | | |
| Acrylonitrile | ND | 5.0 | " | | | | | | | | |
| Benzene | ND | 5.0 | " | | | | | | | | |
| Bromochloromethane | ND | 5.0 | " | | | | | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81388 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81388-BLK1)** | | | | | | | | | | | |
| Prepared & Analyzed: 06/26/2018 | | | | | | | | | | | |
| Bromodichloromethane | ND | 5.0 | ug/kg wet | | | | | | | | |
| Bromoform | ND | 5.0 | " | | | | | | | | |
| Bromomethane | ND | 5.0 | " | | | | | | | | |
| Carbon disulfide | ND | 5.0 | " | | | | | | | | |
| Carbon tetrachloride | ND | 5.0 | " | | | | | | | | |
| Chlorobenzene | ND | 5.0 | " | | | | | | | | |
| Chloroethane | ND | 5.0 | " | | | | | | | | |
| Chloroform | ND | 5.0 | " | | | | | | | | |
| Chloromethane | ND | 5.0 | " | | | | | | | | |
| cis-1,2-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| cis-1,3-Dichloropropylene | ND | 5.0 | " | | | | | | | | |
| Cyclohexane | ND | 5.0 | " | | | | | | | | |
| Dibromochloromethane | ND | 5.0 | " | | | | | | | | |
| Dibromomethane | ND | 5.0 | " | | | | | | | | |
| Dichlorodifluoromethane | ND | 5.0 | " | | | | | | | | |
| Ethyl Benzene | ND | 5.0 | " | | | | | | | | |
| Hexachlorobutadiene | ND | 5.0 | " | | | | | | | | |
| Isopropylbenzene | ND | 5.0 | " | | | | | | | | |
| Methyl acetate | ND | 5.0 | " | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 5.0 | " | | | | | | | | |
| Methylcyclohexane | ND | 5.0 | " | | | | | | | | |
| Methylene chloride | ND | 10 | " | | | | | | | | |
| n-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| n-Propylbenzene | ND | 5.0 | " | | | | | | | | |
| o-Xylene | ND | 5.0 | " | | | | | | | | |
| p- & m- Xylenes | ND | 10 | " | | | | | | | | |
| p-Isopropyltoluene | ND | 5.0 | " | | | | | | | | |
| sec-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| Styrene | ND | 5.0 | " | | | | | | | | |
| tert-Butyl alcohol (TBA) | ND | 10 | " | | | | | | | | |
| tert-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| Tetrachloroethylene | ND | 5.0 | " | | | | | | | | |
| Toluene | ND | 5.0 | " | | | | | | | | |
| trans-1,2-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| trans-1,3-Dichloropropylene | ND | 5.0 | " | | | | | | | | |
| trans-1,4-dichloro-2-butene | ND | 5.0 | " | | | | | | | | |
| Trichloroethylene | ND | 5.0 | " | | | | | | | | |
| Trichlorofluoromethane | ND | 5.0 | " | | | | | | | | |
| Vinyl Chloride | ND | 5.0 | " | | | | | | | | |
| Xylenes, Total | ND | 15 | " | | | | | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *46.5* | | *ug/L* | *50.0* | | *93.0* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *54.2* | | *"* | *50.0* | | *108* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *48.6* | | *"* | *50.0* | | *97.3* | *76-130* | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81388 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81388-BLK2)** | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | 500 | ug/kg wet | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 500 | " | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 500 | " | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 500 | " | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 500 | " | | | | | | | | |
| 1,1-Dichloroethane | ND | 500 | " | | | | | | | | |
| 1,1-Dichloroethylene | ND | 500 | " | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 500 | " | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 500 | " | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | 500 | " | | | | | | | | |
| 1,2-Dibromoethane | ND | 500 | " | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,2-Dichloroethane | ND | 500 | " | | | | | | | | |
| 1,2-Dichloropropane | ND | 500 | " | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 500 | " | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,4-Dioxane | ND | 10000 | " | | | | | | | | |
| 2-Butanone | ND | 500 | " | | | | | | | | |
| 2-Hexanone | ND | 500 | " | | | | | | | | |
| 4-Methyl-2-pentanone | ND | 500 | " | | | | | | | | |
| Acetone | ND | 1000 | " | | | | | | | | |
| Acrolein | ND | 1000 | " | | | | | | | | |
| Acrylonitrile | ND | 500 | " | | | | | | | | |
| Benzene | ND | 500 | " | | | | | | | | |
| Bromochloromethane | ND | 500 | " | | | | | | | | |
| Bromodichloromethane | ND | 500 | " | | | | | | | | |
| Bromoform | ND | 500 | " | | | | | | | | |
| Bromomethane | ND | 500 | " | | | | | | | | |
| Carbon disulfide | ND | 500 | " | | | | | | | | |
| Carbon tetrachloride | ND | 500 | " | | | | | | | | |
| Chlorobenzene | ND | 500 | " | | | | | | | | |
| Chloroethane | ND | 500 | " | | | | | | | | |
| Chloroform | ND | 500 | " | | | | | | | | |
| Chloromethane | ND | 500 | " | | | | | | | | |
| cis-1,2-Dichloroethylene | ND | 500 | " | | | | | | | | |
| cis-1,3-Dichloropropylene | ND | 500 | " | | | | | | | | |
| Cyclohexane | ND | 500 | " | | | | | | | | |
| Dibromochloromethane | ND | 500 | " | | | | | | | | |
| Dibromomethane | ND | 500 | " | | | | | | | | |
| Dichlorodifluoromethane | ND | 500 | " | | | | | | | | |
| Ethyl Benzene | ND | 500 | " | | | | | | | | |
| Hexachlorobutadiene | ND | 500 | " | | | | | | | | |
| Isopropylbenzene | ND | 500 | " | | | | | | | | |
| Methyl acetate | ND | 500 | " | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 500 | " | | | | | | | | |
| Methylcyclohexane | ND | 500 | " | | | | | | | | |
| Methylene chloride | ND | 1000 | " | | | | | | | | |
| n-Butylbenzene | ND | 500 | " | | | | | | | | |

Prepared & Analyzed: 06/26/2018

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

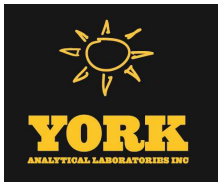
## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81388 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81388-BLK2)** | | | | | | | | | Prepared & Analyzed: 06/26/2018 | | |
| n-Propylbenzene | ND | 500 | ug/kg wet | | | | | | | | |
| o-Xylene | ND | 500 | " | | | | | | | | |
| p- & m- Xylenes | ND | 1000 | " | | | | | | | | |
| p-Isopropyltoluene | ND | 500 | " | | | | | | | | |
| sec-Butylbenzene | ND | 500 | " | | | | | | | | |
| Styrene | ND | 500 | " | | | | | | | | |
| tert-Butyl alcohol (TBA) | ND | 1000 | " | | | | | | | | |
| tert-Butylbenzene | ND | 500 | " | | | | | | | | |
| Tetrachloroethylene | ND | 500 | " | | | | | | | | |
| Toluene | ND | 500 | " | | | | | | | | |
| trans-1,2-Dichloroethylene | ND | 500 | " | | | | | | | | |
| trans-1,3-Dichloropropylene | ND | 500 | " | | | | | | | | |
| trans-1,4-dichloro-2-butene | ND | 500 | " | | | | | | | | |
| Trichloroethylene | ND | 500 | " | | | | | | | | |
| Trichlorofluoromethane | ND | 500 | " | | | | | | | | |
| Vinyl Chloride | ND | 500 | " | | | | | | | | |
| Xylenes, Total | ND | 1500 | " | | | | | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *47.3* | | *ug/L* | *50.0* | | *94.6* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *54.3* | | *"* | *50.0* | | *109* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *48.6* | | *"* | *50.0* | | *97.1* | *76-130* | | | | |
| **LCS (BF81388-BS1)** | | | | | | | | | Prepared & Analyzed: 06/26/2018 | | |
| 1,1,1,2-Tetrachloroethane | 49 | | ug/L | 50.0 | | 97.1 | 75-129 | | | | |
| 1,1,1-Trichloroethane | 44 | | " | 50.0 | | 88.7 | 71-137 | | | | |
| 1,1,2,2-Tetrachloroethane | 46 | | " | 50.0 | | 91.4 | 79-129 | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 48 | | " | 50.0 | | 97.0 | 58-146 | | | | |
| 1,1,2-Trichloroethane | 44 | | " | 50.0 | | 88.3 | 83-123 | | | | |
| 1,1-Dichloroethane | 46 | | " | 50.0 | | 91.3 | 75-130 | | | | |
| 1,1-Dichloroethylene | 46 | | " | 50.0 | | 92.4 | 64-137 | | | | |
| 1,2,3-Trichlorobenzene | 43 | | " | 50.0 | | 86.4 | 81-140 | | | | |
| 1,2,3-Trichloropropane | 46 | | " | 50.0 | | 92.7 | 81-126 | | | | |
| 1,2,4-Trichlorobenzene | 42 | | " | 50.0 | | 84.2 | 80-141 | | | | |
| 1,2,4-Trimethylbenzene | 45 | | " | 50.0 | | 90.7 | 84-125 | | | | |
| 1,2-Dibromo-3-chloropropane | 48 | | " | 50.0 | | 95.4 | 74-142 | | | | |
| 1,2-Dibromoethane | 46 | | " | 50.0 | | 91.9 | 86-123 | | | | |
| 1,2-Dichlorobenzene | 48 | | " | 50.0 | | 95.6 | 85-122 | | | | |
| 1,2-Dichloroethane | 45 | | " | 50.0 | | 90.3 | 71-133 | | | | |
| 1,2-Dichloropropane | 46 | | " | 50.0 | | 91.1 | 81-122 | | | | |
| 1,3,5-Trimethylbenzene | 47 | | " | 50.0 | | 93.0 | 82-126 | | | | |
| 1,3-Dichlorobenzene | 46 | | " | 50.0 | | 92.9 | 84-124 | | | | |
| 1,4-Dichlorobenzene | 45 | | " | 50.0 | | 90.8 | 84-124 | | | | |
| 1,4-Dioxane | 1200 | | " | 1050 | | 111 | 10-228 | | | | |
| 2-Butanone | 46 | | " | 50.0 | | 92.9 | 58-147 | | | | |
| 2-Hexanone | 42 | | " | 50.0 | | 84.7 | 70-139 | | | | |
| 4-Methyl-2-pentanone | 44 | | " | 50.0 | | 87.4 | 72-132 | | | | |
| Acetone | 43 | | " | 50.0 | | 85.0 | 36-155 | | | | |
| Acrolein | 25 | | " | 50.0 | | 50.0 | 10-238 | | | | |
| Acrylonitrile | 42 | | " | 50.0 | | 84.5 | 66-141 | | | | |
| Benzene | 45 | | " | 50.0 | | 89.4 | 77-127 | | | | |
| Bromochloromethane | 44 | | " | 50.0 | | 87.3 | 74-129 | | | | |
| Bromodichloromethane | 45 | | " | 50.0 | | 90.0 | 81-124 | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81388 - EPA 5035A** | | | | | | | | | | | |
| **LCS (BF81388-BS1)** | | | | | | | | Prepared & Analyzed: 06/26/2018 | | | |
| Bromoform | 42 | | ug/L | 50.0 | | 83.8 | 80-136 | | | | |
| Bromomethane | 47 | | " | 50.0 | | 93.9 | 32-177 | | | | |
| Carbon disulfide | 50 | | " | 50.0 | | 100 | 10-136 | | | | |
| Carbon tetrachloride | 46 | | " | 50.0 | | 92.6 | 66-143 | | | | |
| Chlorobenzene | 48 | | " | 50.0 | | 96.0 | 86-120 | | | | |
| Chloroethane | 45 | | " | 50.0 | | 89.4 | 51-142 | | | | |
| Chloroform | 44 | | " | 50.0 | | 88.2 | 76-131 | | | | |
| Chloromethane | 42 | | " | 50.0 | | 83.7 | 49-132 | | | | |
| cis-1,2-Dichloroethylene | 45 | | " | 50.0 | | 89.1 | 74-132 | | | | |
| cis-1,3-Dichloropropylene | 45 | | " | 50.0 | | 90.3 | 81-129 | | | | |
| Cyclohexane | 47 | | " | 50.0 | | 94.7 | 70-130 | | | | |
| Dibromochloromethane | 45 | | " | 50.0 | | 90.6 | 10-200 | | | | |
| Dibromomethane | 47 | | " | 50.0 | | 93.7 | 83-124 | | | | |
| Dichlorodifluoromethane | 50 | | " | 50.0 | | 101 | 28-158 | | | | |
| Ethyl Benzene | 48 | | " | 50.0 | | 95.6 | 84-125 | | | | |
| Hexachlorobutadiene | 47 | | " | 50.0 | | 93.0 | 83-133 | | | | |
| Isopropylbenzene | 47 | | " | 50.0 | | 93.6 | 81-127 | | | | |
| Methyl acetate | 41 | | " | 50.0 | | 82.7 | 41-143 | | | | |
| Methyl tert-butyl ether (MTBE) | 45 | | " | 50.0 | | 91.0 | 74-131 | | | | |
| Methylcyclohexane | 49 | | " | 50.0 | | 97.9 | 70-130 | | | | |
| Methylene chloride | 40 | | " | 50.0 | | 80.8 | 57-141 | | | | |
| n-Butylbenzene | 48 | | " | 50.0 | | 97.0 | 80-130 | | | | |
| n-Propylbenzene | 47 | | " | 50.0 | | 94.4 | 74-136 | | | | |
| o-Xylene | 47 | | " | 50.0 | | 94.8 | 83-123 | | | | |
| p- & m- Xylenes | 92 | | " | 100 | | 92.0 | 82-128 | | | | |
| p-Isopropyltoluene | 47 | | " | 50.0 | | 94.9 | 85-125 | | | | |
| sec-Butylbenzene | 50 | | " | 50.0 | | 99.8 | 83-125 | | | | |
| Styrene | 45 | | " | 50.0 | | 89.9 | 86-126 | | | | |
| tert-Butyl alcohol (TBA) | 220 | | " | 250 | | 86.0 | 70-130 | | | | |
| tert-Butylbenzene | 41 | | " | 50.0 | | 82.7 | 80-127 | | | | |
| Tetrachloroethylene | 47 | | " | 50.0 | | 93.3 | 80-129 | | | | |
| Toluene | 47 | | " | 50.0 | | 94.2 | 85-121 | | | | |
| trans-1,2-Dichloroethylene | 44 | | " | 50.0 | | 88.3 | 72-132 | | | | |
| trans-1,3-Dichloropropylene | 43 | | " | 50.0 | | 86.9 | 78-132 | | | | |
| trans-1,4-dichloro-2-butene | 42 | | " | 50.0 | | 83.6 | 75-135 | | | | |
| Trichloroethylene | 47 | | " | 50.0 | | 94.7 | 84-123 | | | | |
| Trichlorofluoromethane | 43 | | " | 50.0 | | 86.7 | 62-140 | | | | |
| Vinyl Chloride | 45 | | " | 50.0 | | 90.6 | 52-130 | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *50.7* | | *"* | *50.0* | | *101* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *54.2* | | *"* | *50.0* | | *108* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *47.9* | | *"* | *50.0* | | *95.8* | *76-130* | | | | |




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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81388 - EPA 5035A** | | | | | | | | | | | |
| **LCS Dup (BF81388-BSD1)** | | | | | | | | Prepared & Analyzed: 06/26/2018 | | | |
| 1,1,1,2-Tetrachloroethane | 47 | | ug/L | 50.0 | | 94.4 | 75-129 | | 2.80 | 30 | |
| 1,1,1-Trichloroethane | 46 | | " | 50.0 | | 91.6 | 71-137 | | 3.15 | 30 | |
| 1,1,2,2-Tetrachloroethane | 49 | | " | 50.0 | | 97.9 | 79-129 | | 6.82 | 30 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 51 | | " | 50.0 | | 103 | 58-146 | | 5.71 | 30 | |
| 1,1,2-Trichloroethane | 43 | | " | 50.0 | | 86.6 | 83-123 | | 1.94 | 30 | |
| 1,1-Dichloroethane | 45 | | " | 50.0 | | 90.6 | 75-130 | | 0.726 | 30 | |
| 1,1-Dichloroethylene | 46 | | " | 50.0 | | 92.2 | 64-137 | | 0.217 | 30 | |
| 1,2,3-Trichlorobenzene | 44 | | " | 50.0 | | 88.0 | 81-140 | | 1.83 | 30 | |
| 1,2,3-Trichloropropane | 45 | | " | 50.0 | | 90.9 | 81-126 | | 1.92 | 30 | |
| 1,2,4-Trichlorobenzene | 45 | | " | 50.0 | | 89.2 | 80-141 | | 5.77 | 30 | |
| 1,2,4-Trimethylbenzene | 47 | | " | 50.0 | | 93.3 | 84-125 | | 2.80 | 30 | |
| 1,2-Dibromo-3-chloropropane | 48 | | " | 50.0 | | 96.7 | 74-142 | | 1.35 | 30 | |
| 1,2-Dibromoethane | 45 | | " | 50.0 | | 89.4 | 86-123 | | 2.71 | 30 | |
| 1,2-Dichlorobenzene | 49 | | " | 50.0 | | 98.2 | 85-122 | | 2.72 | 30 | |
| 1,2-Dichloroethane | 45 | | " | 50.0 | | 89.8 | 71-133 | | 0.511 | 30 | |
| 1,2-Dichloropropane | 45 | | " | 50.0 | | 90.8 | 81-122 | | 0.330 | 30 | |
| 1,3,5-Trimethylbenzene | 48 | | " | 50.0 | | 95.5 | 82-126 | | 2.61 | 30 | |
| 1,3-Dichlorobenzene | 48 | | " | 50.0 | | 95.8 | 84-124 | | 3.12 | 30 | |
| 1,4-Dichlorobenzene | 47 | | " | 50.0 | | 93.9 | 84-124 | | 3.40 | 30 | |
| 1,4-Dioxane | 1000 | | " | 1050 | | 99.9 | 10-228 | | 10.8 | 30 | |
| 2-Butanone | 45 | | " | 50.0 | | 90.1 | 58-147 | | 3.06 | 30 | |
| 2-Hexanone | 42 | | " | 50.0 | | 83.9 | 70-139 | | 0.996 | 30 | |
| 4-Methyl-2-pentanone | 43 | | " | 50.0 | | 86.3 | 72-132 | | 1.22 | 30 | |
| Acetone | 40 | | " | 50.0 | | 79.4 | 36-155 | | 6.81 | 30 | |
| Acrolein | 26 | | " | 50.0 | | 51.2 | 10-238 | | 2.33 | 30 | |
| Acrylonitrile | 42 | | " | 50.0 | | 84.5 | 66-141 | | 0.0237 | 30 | |
| Benzene | 45 | | " | 50.0 | | 90.1 | 77-127 | | 0.735 | 30 | |
| Bromochloromethane | 44 | | " | 50.0 | | 88.5 | 74-129 | | 1.43 | 30 | |
| Bromodichloromethane | 44 | | " | 50.0 | | 88.8 | 81-124 | | 1.32 | 30 | |
| Bromoform | 40 | | " | 50.0 | | 80.9 | 80-136 | | 3.54 | 30 | |
| Bromomethane | 48 | | " | 50.0 | | 95.4 | 32-177 | | 1.56 | 30 | |
| Carbon disulfide | 51 | | " | 50.0 | | 102 | 10-136 | | 1.82 | 30 | |
| Carbon tetrachloride | 47 | | " | 50.0 | | 93.7 | 66-143 | | 1.14 | 30 | |
| Chlorobenzene | 48 | | " | 50.0 | | 96.3 | 86-120 | | 0.229 | 30 | |
| Chloroethane | 46 | | " | 50.0 | | 92.3 | 51-142 | | 3.13 | 30 | |
| Chloroform | 45 | | " | 50.0 | | 90.6 | 76-131 | | 2.64 | 30 | |
| Chloromethane | 42 | | " | 50.0 | | 83.5 | 49-132 | | 0.311 | 30 | |
| cis-1,2-Dichloroethylene | 46 | | " | 50.0 | | 92.6 | 74-132 | | 3.83 | 30 | |
| cis-1,3-Dichloropropylene | 43 | | " | 50.0 | | 86.9 | 81-129 | | 3.84 | 30 | |
| Cyclohexane | 48 | | " | 50.0 | | 95.9 | 70-130 | | 1.18 | 30 | |
| Dibromochloromethane | 45 | | " | 50.0 | | 89.2 | 10-200 | | 1.51 | 30 | |
| Dibromomethane | 46 | | " | 50.0 | | 91.5 | 83-124 | | 2.31 | 30 | |
| Dichlorodifluoromethane | 50 | | " | 50.0 | | 101 | 28-158 | | 0.159 | 30 | |
| Ethyl Benzene | 48 | | " | 50.0 | | 96.4 | 84-125 | | 0.771 | 30 | |
| Hexachlorobutadiene | 48 | | " | 50.0 | | 95.6 | 83-133 | | 2.71 | 30 | |
| Isopropylbenzene | 49 | | " | 50.0 | | 97.4 | 81-127 | | 4.04 | 30 | |
| Methyl acetate | 42 | | " | 50.0 | | 83.9 | 41-143 | | 1.37 | 30 | |
| Methyl tert-butyl ether (MTBE) | 45 | | " | 50.0 | | 90.8 | 74-131 | | 0.198 | 30 | |
| Methylcyclohexane | 49 | | " | 50.0 | | 98.4 | 70-130 | | 0.530 | 30 | |
| Methylene chloride | 40 | | " | 50.0 | | 79.2 | 57-141 | | 1.90 | 30 | |
| n-Butylbenzene | 41 | | " | 50.0 | | 82.9 | 80-130 | | 15.7 | 30 | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81388 - EPA 5035A** | | | | | | | | | | | |
| **LCS Dup (BF81388-BSD1)** | | | | | | | | | Prepared & Analyzed: 06/26/2018 | | |
| n-Propylbenzene | 49 | | ug/L | 50.0 | | 98.3 | 74-136 | | 4.13 | 30 | |
| o-Xylene | 47 | | " | 50.0 | | 93.9 | 83-123 | | 0.933 | 30 | |
| p- & m- Xylenes | 92 | | " | 100 | | 91.8 | 82-128 | | 0.305 | 30 | |
| p-Isopropyltoluene | 48 | | " | 50.0 | | 95.9 | 85-125 | | 1.05 | 30 | |
| sec-Butylbenzene | 51 | | " | 50.0 | | 103 | 83-125 | | 3.02 | 30 | |
| Styrene | 46 | | " | 50.0 | | 91.4 | 86-126 | | 1.70 | 30 | |
| tert-Butyl alcohol (TBA) | 210 | | " | 250 | | 82.9 | 70-130 | | 3.70 | 30 | |
| tert-Butylbenzene | 42 | | " | 50.0 | | 84.3 | 80-127 | | 1.92 | 30 | |
| Tetrachloroethylene | 46 | | " | 50.0 | | 92.8 | 80-129 | | 0.602 | 30 | |
| Toluene | 47 | | " | 50.0 | | 93.2 | 85-121 | | 1.11 | 30 | |
| trans-1,2-Dichloroethylene | 45 | | " | 50.0 | | 89.4 | 72-132 | | 1.28 | 30 | |
| trans-1,3-Dichloropropylene | 43 | | " | 50.0 | | 85.1 | 78-132 | | 2.05 | 30 | |
| trans-1,4-dichloro-2-butene | 46 | | " | 50.0 | | 91.7 | 75-135 | | 9.25 | 30 | |
| Trichloroethylene | 47 | | " | 50.0 | | 94.4 | 84-123 | | 0.254 | 30 | |
| Trichlorofluoromethane | 44 | | " | 50.0 | | 87.9 | 62-140 | | 1.44 | 30 | |
| Vinyl Chloride | 45 | | " | 50.0 | | 89.8 | 52-130 | | 0.931 | 30 | |
| *Surrogate: 1,2-Dichloroethane-d4* | *50.0* | | *"* | *50.0* | | *100* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *51.5* | | *"* | *50.0* | | *103* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *47.7* | | *"* | *50.0* | | *95.5* | *76-130* | | | | |
| **Batch BF81466 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81466-BLK1)** | | | | | | | | | Prepared & Analyzed: 06/27/2018 | | |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | ug/kg wet | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 5.0 | " | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1-Dichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,1-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 5.0 | " | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 5.0 | " | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dibromoethane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichloroethane | ND | 5.0 | " | | | | | | | | |
| 1,2-Dichloropropane | ND | 5.0 | " | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 5.0 | " | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 5.0 | " | | | | | | | | |
| 1,4-Dioxane | ND | 100 | " | | | | | | | | |
| 2-Butanone | ND | 5.0 | " | | | | | | | | |
| 2-Hexanone | ND | 5.0 | " | | | | | | | | |
| 4-Methyl-2-pentanone | ND | 5.0 | " | | | | | | | | |
| Acetone | ND | 10 | " | | | | | | | | |
| Acrolein | ND | 10 | " | | | | | | | | |
| Acrylonitrile | ND | 5.0 | " | | | | | | | | |
| Benzene | ND | 5.0 | " | | | | | | | | |
| Bromochloromethane | ND | 5.0 | " | | | | | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81466 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81466-BLK1)** | | | | | | | | | | | |
| Prepared & Analyzed: 06/27/2018 | | | | | | | | | | | |
| Bromodichloromethane | ND | 5.0 | ug/kg wet | | | | | | | | |
| Bromoform | ND | 5.0 | " | | | | | | | | |
| Bromomethane | ND | 5.0 | " | | | | | | | | |
| Carbon disulfide | ND | 5.0 | " | | | | | | | | |
| Carbon tetrachloride | ND | 5.0 | " | | | | | | | | |
| Chlorobenzene | ND | 5.0 | " | | | | | | | | |
| Chloroethane | ND | 5.0 | " | | | | | | | | |
| Chloroform | ND | 5.0 | " | | | | | | | | |
| Chloromethane | ND | 5.0 | " | | | | | | | | |
| cis-1,2-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| cis-1,3-Dichloropropylene | ND | 5.0 | " | | | | | | | | |
| Cyclohexane | ND | 5.0 | " | | | | | | | | |
| Dibromochloromethane | ND | 5.0 | " | | | | | | | | |
| Dibromomethane | ND | 5.0 | " | | | | | | | | |
| Dichlorodifluoromethane | ND | 5.0 | " | | | | | | | | |
| Ethyl Benzene | ND | 5.0 | " | | | | | | | | |
| Hexachlorobutadiene | ND | 5.0 | " | | | | | | | | |
| Isopropylbenzene | ND | 5.0 | " | | | | | | | | |
| Methyl acetate | ND | 5.0 | " | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 5.0 | " | | | | | | | | |
| Methylcyclohexane | ND | 5.0 | " | | | | | | | | |
| Methylene chloride | ND | 10 | " | | | | | | | | |
| n-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| n-Propylbenzene | ND | 5.0 | " | | | | | | | | |
| o-Xylene | ND | 5.0 | " | | | | | | | | |
| p- & m- Xylenes | ND | 10 | " | | | | | | | | |
| p-Isopropyltoluene | ND | 5.0 | " | | | | | | | | |
| sec-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| Styrene | ND | 5.0 | " | | | | | | | | |
| tert-Butyl alcohol (TBA) | ND | 25 | " | | | | | | | | |
| tert-Butylbenzene | ND | 5.0 | " | | | | | | | | |
| Tetrachloroethylene | ND | 5.0 | " | | | | | | | | |
| Toluene | ND | 5.0 | " | | | | | | | | |
| trans-1,2-Dichloroethylene | ND | 5.0 | " | | | | | | | | |
| trans-1,3-Dichloropropylene | ND | 5.0 | " | | | | | | | | |
| trans-1,4-dichloro-2-butene | ND | 5.0 | " | | | | | | | | |
| Trichloroethylene | ND | 5.0 | " | | | | | | | | |
| Trichlorofluoromethane | ND | 5.0 | " | | | | | | | | |
| Vinyl Chloride | ND | 5.0 | " | | | | | | | | |
| Xylenes, Total | ND | 15 | " | | | | | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *44.1* | | *ug/L* | *50.0* | | *88.2* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *50.3* | | *"* | *50.0* | | *101* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *53.1* | | *"* | *50.0* | | *106* | *76-130* | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81466 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81466-BLK2)** | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | 500 | ug/kg wet | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 500 | " | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 500 | " | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 500 | " | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 500 | " | | | | | | | | |
| 1,1-Dichloroethane | ND | 500 | " | | | | | | | | |
| 1,1-Dichloroethylene | ND | 500 | " | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 500 | " | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 500 | " | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | 500 | " | | | | | | | | |
| 1,2-Dibromoethane | ND | 500 | " | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,2-Dichloroethane | ND | 500 | " | | | | | | | | |
| 1,2-Dichloropropane | ND | 500 | " | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 500 | " | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 500 | " | | | | | | | | |
| 1,4-Dioxane | ND | 10000 | " | | | | | | | | |
| 2-Butanone | ND | 500 | " | | | | | | | | |
| 2-Hexanone | ND | 500 | " | | | | | | | | |
| 4-Methyl-2-pentanone | ND | 500 | " | | | | | | | | |
| Acetone | ND | 1000 | " | | | | | | | | |
| Acrolein | ND | 1000 | " | | | | | | | | |
| Acrylonitrile | ND | 500 | " | | | | | | | | |
| Benzene | ND | 500 | " | | | | | | | | |
| Bromochloromethane | ND | 500 | " | | | | | | | | |
| Bromodichloromethane | ND | 500 | " | | | | | | | | |
| Bromoform | ND | 500 | " | | | | | | | | |
| Bromomethane | ND | 500 | " | | | | | | | | |
| Carbon disulfide | ND | 500 | " | | | | | | | | |
| Carbon tetrachloride | ND | 500 | " | | | | | | | | |
| Chlorobenzene | ND | 500 | " | | | | | | | | |
| Chloroethane | ND | 500 | " | | | | | | | | |
| Chloroform | ND | 500 | " | | | | | | | | |
| Chloromethane | ND | 500 | " | | | | | | | | |
| cis-1,2-Dichloroethylene | ND | 500 | " | | | | | | | | |
| cis-1,3-Dichloropropylene | ND | 500 | " | | | | | | | | |
| Cyclohexane | ND | 500 | " | | | | | | | | |
| Dibromochloromethane | ND | 500 | " | | | | | | | | |
| Dibromomethane | ND | 500 | " | | | | | | | | |
| Dichlorodifluoromethane | ND | 500 | " | | | | | | | | |
| Ethyl Benzene | ND | 500 | " | | | | | | | | |
| Hexachlorobutadiene | ND | 500 | " | | | | | | | | |
| Isopropylbenzene | ND | 500 | " | | | | | | | | |
| Methyl acetate | ND | 500 | " | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 500 | " | | | | | | | | |
| Methylcyclohexane | ND | 500 | " | | | | | | | | |
| Methylene chloride | ND | 1000 | " | | | | | | | | |
| n-Butylbenzene | ND | 500 | " | | | | | | | | |

Prepared & Analyzed: 06/27/2018

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81466 - EPA 5035A** | | | | | | | | | | | |
| **Blank (BF81466-BLK2)** | | | | | | | | | | | Prepared & Analyzed: 06/27/2018 |
| n-Propylbenzene | ND | 500 | ug/kg wet | | | | | | | | |
| o-Xylene | ND | 500 | " | | | | | | | | |
| p- & m- Xylenes | ND | 1000 | " | | | | | | | | |
| p-Isopropyltoluene | ND | 500 | " | | | | | | | | |
| sec-Butylbenzene | ND | 500 | " | | | | | | | | |
| Styrene | ND | 500 | " | | | | | | | | |
| tert-Butyl alcohol (TBA) | ND | 2500 | " | | | | | | | | |
| tert-Butylbenzene | ND | 500 | " | | | | | | | | |
| Tetrachloroethylene | ND | 500 | " | | | | | | | | |
| Toluene | ND | 500 | " | | | | | | | | |
| trans-1,2-Dichloroethylene | ND | 500 | " | | | | | | | | |
| trans-1,3-Dichloropropylene | ND | 500 | " | | | | | | | | |
| trans-1,4-dichloro-2-butene | ND | 500 | " | | | | | | | | |
| Trichloroethylene | ND | 500 | " | | | | | | | | |
| Trichlorofluoromethane | ND | 500 | " | | | | | | | | |
| Vinyl Chloride | ND | 500 | " | | | | | | | | |
| Xylenes, Total | ND | 1500 | " | | | | | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *46.3* | | *ug/L* | *50.0* | | *92.7* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *49.6* | | *"* | *50.0* | | *99.2* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *51.3* | | *"* | *50.0* | | *103* | *76-130* | | | | |
| **LCS (BF81466-BS1)** | | | | | | | | | | | Prepared & Analyzed: 06/27/2018 |
| 1,1,1,2-Tetrachloroethane | 51 | | ug/L | 50.0 | | 102 | 75-129 | | | | |
| 1,1,1-Trichloroethane | 49 | | " | 50.0 | | 97.2 | 71-137 | | | | |
| 1,1,2,2-Tetrachloroethane | 52 | | " | 50.0 | | 104 | 79-129 | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 49 | | " | 50.0 | | 97.8 | 58-146 | | | | |
| 1,1,2-Trichloroethane | 51 | | " | 50.0 | | 102 | 83-123 | | | | |
| 1,1-Dichloroethane | 49 | | " | 50.0 | | 97.2 | 75-130 | | | | |
| 1,1-Dichloroethylene | 47 | | " | 50.0 | | 94.6 | 64-137 | | | | |
| 1,2,3-Trichlorobenzene | 48 | | " | 50.0 | | 96.1 | 81-140 | | | | |
| 1,2,3-Trichloropropane | 52 | | " | 50.0 | | 103 | 81-126 | | | | |
| 1,2,4-Trichlorobenzene | 46 | | " | 50.0 | | 91.6 | 80-141 | | | | |
| 1,2,4-Trimethylbenzene | 46 | | " | 50.0 | | 92.4 | 84-125 | | | | |
| 1,2-Dibromo-3-chloropropane | 50 | | " | 50.0 | | 99.4 | 74-142 | | | | |
| 1,2-Dibromoethane | 52 | | " | 50.0 | | 104 | 86-123 | | | | |
| 1,2-Dichlorobenzene | 50 | | " | 50.0 | | 101 | 85-122 | | | | |
| 1,2-Dichloroethane | 49 | | " | 50.0 | | 98.6 | 71-133 | | | | |
| 1,2-Dichloropropane | 49 | | " | 50.0 | | 97.1 | 81-122 | | | | |
| 1,3,5-Trimethylbenzene | 48 | | " | 50.0 | | 95.0 | 82-126 | | | | |
| 1,3-Dichlorobenzene | 48 | | " | 50.0 | | 95.3 | 84-124 | | | | |
| 1,4-Dichlorobenzene | 48 | | " | 50.0 | | 96.6 | 84-124 | | | | |
| 1,4-Dioxane | 1100 | | " | 1050 | | 102 | 10-228 | | | | |
| 2-Butanone | 51 | | " | 50.0 | | 102 | 58-147 | | | | |
| 2-Hexanone | 50 | | " | 50.0 | | 99.5 | 70-139 | | | | |
| 4-Methyl-2-pentanone | 54 | | " | 50.0 | | 108 | 72-132 | | | | |
| Acetone | 41 | | " | 50.0 | | 81.9 | 36-155 | | | | |
| Acrolein | 35 | | " | 50.0 | | 71.0 | 10-238 | | | | |
| Acrylonitrile | 50 | | " | 50.0 | | 100 | 66-141 | | | | |
| Benzene | 49 | | " | 50.0 | | 98.4 | 77-127 | | | | |
| Bromochloromethane | 50 | | " | 50.0 | | 101 | 74-129 | | | | |
| Bromodichloromethane | 51 | | " | 50.0 | | 102 | 81-124 | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81466 - EPA 5035A** | | | | | | | | | | | |
| **LCS (BF81466-BS1)** | | | | | | | | Prepared & Analyzed: 06/27/2018 | | | |
| Bromoform | 56 | | ug/L | 50.0 | | 111 | 80-136 | | | | |
| Bromomethane | 46 | | " | 50.0 | | 91.5 | 32-177 | | | | |
| Carbon disulfide | 55 | | " | 50.0 | | 110 | 10-136 | | | | |
| Carbon tetrachloride | 49 | | " | 50.0 | | 97.5 | 66-143 | | | | |
| Chlorobenzene | 50 | | " | 50.0 | | 99.9 | 86-120 | | | | |
| Chloroethane | 52 | | " | 50.0 | | 104 | 51-142 | | | | |
| Chloroform | 50 | | " | 50.0 | | 100 | 76-131 | | | | |
| Chloromethane | 52 | | " | 50.0 | | 105 | 49-132 | | | | |
| cis-1,2-Dichloroethylene | 49 | | " | 50.0 | | 97.8 | 74-132 | | | | |
| cis-1,3-Dichloropropylene | 49 | | " | 50.0 | | 98.2 | 81-129 | | | | |
| Cyclohexane | 48 | | " | 50.0 | | 96.2 | 70-130 | | | | |
| Dibromochloromethane | 56 | | " | 50.0 | | 112 | 10-200 | | | | |
| Dibromomethane | 50 | | " | 50.0 | | 100 | 83-124 | | | | |
| Dichlorodifluoromethane | 48 | | " | 50.0 | | 96.5 | 28-158 | | | | |
| Ethyl Benzene | 48 | | " | 50.0 | | 96.0 | 84-125 | | | | |
| Hexachlorobutadiene | 48 | | " | 50.0 | | 96.0 | 83-133 | | | | |
| Isopropylbenzene | 48 | | " | 50.0 | | 96.6 | 81-127 | | | | |
| Methyl acetate | 42 | | " | 50.0 | | 84.5 | 41-143 | | | | |
| Methyl tert-butyl ether (MTBE) | 51 | | " | 50.0 | | 102 | 74-131 | | | | |
| Methylcyclohexane | 48 | | " | 50.0 | | 96.6 | 70-130 | | | | |
| Methylene chloride | 47 | | " | 50.0 | | 94.7 | 57-141 | | | | |
| n-Butylbenzene | 48 | | " | 50.0 | | 95.2 | 80-130 | | | | |
| n-Propylbenzene | 48 | | " | 50.0 | | 95.6 | 74-136 | | | | |
| o-Xylene | 49 | | " | 50.0 | | 98.8 | 83-123 | | | | |
| p- & m- Xylenes | 94 | | " | 100 | | 94.5 | 82-128 | | | | |
| p-Isopropyltoluene | 48 | | " | 50.0 | | 96.3 | 85-125 | | | | |
| sec-Butylbenzene | 51 | | " | 50.0 | | 102 | 83-125 | | | | |
| Styrene | 48 | | " | 50.0 | | 96.7 | 86-126 | | | | |
| tert-Butyl alcohol (TBA) | 260 | | " | 250 | | 105 | 70-130 | | | | |
| tert-Butylbenzene | 48 | | " | 50.0 | | 96.9 | 80-127 | | | | |
| Tetrachloroethylene | 46 | | " | 50.0 | | 91.4 | 80-129 | | | | |
| Toluene | 49 | | " | 50.0 | | 97.5 | 85-121 | | | | |
| trans-1,2-Dichloroethylene | 48 | | " | 50.0 | | 96.1 | 72-132 | | | | |
| trans-1,3-Dichloropropylene | 49 | | " | 50.0 | | 98.2 | 78-132 | | | | |
| trans-1,4-dichloro-2-butene | 49 | | " | 50.0 | | 98.8 | 75-135 | | | | |
| Trichloroethylene | 51 | | " | 50.0 | | 101 | 84-123 | | | | |
| Trichlorofluoromethane | 49 | | " | 50.0 | | 98.5 | 62-140 | | | | |
| Vinyl Chloride | 50 | | " | 50.0 | | 99.6 | 52-130 | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *48.8* | | *"* | *50.0* | | *97.6* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *49.5* | | *"* | *50.0* | | *99.0* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *50.2* | | *"* | *50.0* | | *100* | *76-130* | | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81466 - EPA 5035A** | | | | | | | | | | | |
| **LCS Dup (BF81466-BSD1)** | | | | | | | | Prepared & Analyzed: 06/27/2018 | | | |
| 1,1,1,2-Tetrachloroethane | 49 | | ug/L | 50.0 | | 98.9 | 75-129 | | 3.01 | 30 | |
| 1,1,1-Trichloroethane | 47 | | " | 50.0 | | 94.5 | 71-137 | | 2.84 | 30 | |
| 1,1,2,2-Tetrachloroethane | 51 | | " | 50.0 | | 102 | 79-129 | | 1.34 | 30 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 49 | | " | 50.0 | | 97.5 | 58-146 | | 0.348 | 30 | |
| 1,1,2-Trichloroethane | 49 | | " | 50.0 | | 98.7 | 83-123 | | 3.64 | 30 | |
| 1,1-Dichloroethane | 47 | | " | 50.0 | | 94.8 | 75-130 | | 2.50 | 30 | |
| 1,1-Dichloroethylene | 47 | | " | 50.0 | | 94.1 | 64-137 | | 0.551 | 30 | |
| 1,2,3-Trichlorobenzene | 45 | | " | 50.0 | | 89.3 | 81-140 | | 7.25 | 30 | |
| 1,2,3-Trichloropropane | 50 | | " | 50.0 | | 99.5 | 81-126 | | 3.52 | 30 | |
| 1,2,4-Trichlorobenzene | 42 | | " | 50.0 | | 84.8 | 80-141 | | 7.69 | 30 | |
| 1,2,4-Trimethylbenzene | 44 | | " | 50.0 | | 87.8 | 84-125 | | 5.17 | 30 | |
| 1,2-Dibromo-3-chloropropane | 50 | | " | 50.0 | | 101 | 74-142 | | 1.60 | 30 | |
| 1,2-Dibromoethane | 49 | | " | 50.0 | | 97.0 | 86-123 | | 6.54 | 30 | |
| 1,2-Dichlorobenzene | 48 | | " | 50.0 | | 96.4 | 85-122 | | 4.18 | 30 | |
| 1,2-Dichloroethane | 48 | | " | 50.0 | | 96.1 | 71-133 | | 2.57 | 30 | |
| 1,2-Dichloropropane | 49 | | " | 50.0 | | 97.2 | 81-122 | | 0.123 | 30 | |
| 1,3,5-Trimethylbenzene | 47 | | " | 50.0 | | 93.8 | 82-126 | | 1.27 | 30 | |
| 1,3-Dichlorobenzene | 45 | | " | 50.0 | | 90.8 | 84-124 | | 4.92 | 30 | |
| 1,4-Dichlorobenzene | 46 | | " | 50.0 | | 92.4 | 84-124 | | 4.42 | 30 | |
| 1,4-Dioxane | 970 | | " | 1050 | | 92.8 | 10-228 | | 9.90 | 30 | |
| 2-Butanone | 48 | | " | 50.0 | | 96.6 | 58-147 | | 5.04 | 30 | |
| 2-Hexanone | 48 | | " | 50.0 | | 95.7 | 70-139 | | 3.93 | 30 | |
| 4-Methyl-2-pentanone | 51 | | " | 50.0 | | 102 | 72-132 | | 5.51 | 30 | |
| Acetone | 42 | | " | 50.0 | | 84.7 | 36-155 | | 3.36 | 30 | |
| Acrolein | 34 | | " | 50.0 | | 67.6 | 10-238 | | 4.91 | 30 | |
| Acrylonitrile | 48 | | " | 50.0 | | 96.9 | 66-141 | | 3.49 | 30 | |
| Benzene | 48 | | " | 50.0 | | 95.3 | 77-127 | | 3.18 | 30 | |
| Bromochloromethane | 49 | | " | 50.0 | | 97.8 | 74-129 | | 2.88 | 30 | |
| Bromodichloromethane | 49 | | " | 50.0 | | 98.3 | 81-124 | | 3.81 | 30 | |
| Bromoform | 55 | | " | 50.0 | | 109 | 80-136 | | 1.83 | 30 | |
| Bromomethane | 45 | | " | 50.0 | | 90.9 | 32-177 | | 0.636 | 30 | |
| Carbon disulfide | 55 | | " | 50.0 | | 109 | 10-136 | | 0.366 | 30 | |
| Carbon tetrachloride | 49 | | " | 50.0 | | 97.7 | 66-143 | | 0.184 | 30 | |
| Chlorobenzene | 48 | | " | 50.0 | | 96.3 | 86-120 | | 3.69 | 30 | |
| Chloroethane | 51 | | " | 50.0 | | 102 | 51-142 | | 1.59 | 30 | |
| Chloroform | 48 | | " | 50.0 | | 96.6 | 76-131 | | 3.58 | 30 | |
| Chloromethane | 50 | | " | 50.0 | | 101 | 49-132 | | 3.87 | 30 | |
| cis-1,2-Dichloroethylene | 48 | | " | 50.0 | | 95.6 | 74-132 | | 2.32 | 30 | |
| cis-1,3-Dichloropropylene | 47 | | " | 50.0 | | 93.4 | 81-129 | | 5.05 | 30 | |
| Cyclohexane | 47 | | " | 50.0 | | 93.2 | 70-130 | | 3.10 | 30 | |
| Dibromochloromethane | 54 | | " | 50.0 | | 108 | 10-200 | | 3.35 | 30 | |
| Dibromomethane | 49 | | " | 50.0 | | 98.3 | 83-124 | | 2.13 | 30 | |
| Dichlorodifluoromethane | 46 | | " | 50.0 | | 92.7 | 28-158 | | 3.95 | 30 | |
| Ethyl Benzene | 46 | | " | 50.0 | | 93.0 | 84-125 | | 3.20 | 30 | |
| Hexachlorobutadiene | 45 | | " | 50.0 | | 90.5 | 83-133 | | 5.83 | 30 | |
| Isopropylbenzene | 47 | | " | 50.0 | | 93.9 | 81-127 | | 2.92 | 30 | |
| Methyl acetate | 39 | | " | 50.0 | | 78.9 | 41-143 | | 6.93 | 30 | |
| Methyl tert-butyl ether (MTBE) | 50 | | " | 50.0 | | 99.7 | 74-131 | | 1.85 | 30 | |
| Methylcyclohexane | 47 | | " | 50.0 | | 94.0 | 70-130 | | 2.71 | 30 | |
| Methylene chloride | 48 | | " | 50.0 | | 96.1 | 57-141 | | 1.45 | 30 | |
| n-Butylbenzene | 45 | | " | 50.0 | | 89.7 | 80-130 | | 5.99 | 30 | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BF81466 - EPA 5035A** | | | | | | | | | | | |
| **LCS Dup (BF81466-BSD1)** | | | | | | | | Prepared & Analyzed: 06/27/2018 | | | |
| n-Propylbenzene | 46 | | ug/L | 50.0 | | 92.1 | 74-136 | | 3.69 | 30 | |
| o-Xylene | 48 | | " | 50.0 | | 95.2 | 83-123 | | 3.73 | 30 | |
| p- & m- Xylenes | 90 | | " | 100 | | 90.2 | 82-128 | | 4.62 | 30 | |
| p-Isopropyltoluene | 46 | | " | 50.0 | | 91.4 | 85-125 | | 5.26 | 30 | |
| sec-Butylbenzene | 50 | | " | 50.0 | | 99.4 | 83-125 | | 2.88 | 30 | |
| Styrene | 46 | | " | 50.0 | | 91.1 | 86-126 | | 5.92 | 30 | |
| tert-Butyl alcohol (TBA) | 250 | | " | 250 | | 102 | 70-130 | | 2.56 | 30 | |
| tert-Butylbenzene | 48 | | " | 50.0 | | 95.1 | 80-127 | | 1.90 | 30 | |
| Tetrachloroethylene | 43 | | " | 50.0 | | 85.9 | 80-129 | | 6.18 | 30 | |
| Toluene | 48 | | " | 50.0 | | 95.6 | 85-121 | | 1.99 | 30 | |
| trans-1,2-Dichloroethylene | 46 | | " | 50.0 | | 92.6 | 72-132 | | 3.77 | 30 | |
| trans-1,3-Dichloropropylene | 48 | | " | 50.0 | | 95.9 | 78-132 | | 2.33 | 30 | |
| trans-1,4-dichloro-2-butene | 48 | | " | 50.0 | | 97.0 | 75-135 | | 1.90 | 30 | |
| Trichloroethylene | 48 | | " | 50.0 | | 96.8 | 84-123 | | 4.43 | 30 | |
| Trichlorofluoromethane | 48 | | " | 50.0 | | 96.8 | 62-140 | | 1.72 | 30 | |
| Vinyl Chloride | 49 | | " | 50.0 | | 97.9 | 52-130 | | 1.80 | 30 | |
| *Surrogate: 1,2-Dichloroethane-d4* | *49.1* | | *"* | *50.0* | | *98.1* | *77-125* | | | | |
| *Surrogate: Toluene-d8* | *50.0* | | *"* | *50.0* | | *100* | *85-120* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *50.9* | | *"* | *50.0* | | *102* | *76-130* | | | | |

## Volatile Analysis Sample Containers

| Lab ID | Client Sample ID | Volatile Sample Container |
|---|---|---|
| 18F0837-01 | SB17(26-27) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-02 | SB17(29-31) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-03 | SB17(31-32) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-04 | SB18(26-28) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-05 | SB18(29-31) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-06 | SB19(27-29) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-07 | SB19(31-33) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-08 | SB13(22-23) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-09 | SB13(23-24) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-10 | SB15(26-28) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-11 | SB15(31-32) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-12 | SB14(23-24) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-13 | SB14(26-28) | 40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C |
| 18F0837-14 | SB14(31-32) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-15 | SB16(29-30) | 40mL Vial with Stir Bar-Cool 4° C |
| 18F0837-16 | SB16(30-32) | 40mL Vial with Stir Bar-Cool 4° C |

## Sample and Data Qualifiers Relating to This Work Order

| | |
|---|---|
| SCAL-E | The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%). |
| S-09 | The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect confirmed by re-extraction and re-analysis of the sample. |
| Rep-04 | The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits. |
| QL-02 | This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature. |
| 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. |
| IS-LO | The internal std associated with this target compound did not meet acceptance criteria (area <50% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects. |
| CCV-E | The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit). |

## Definitions and Other Explanations

| | |
|---|---|
| * | Analyte is not certified or the state of the samples origination does not offer certification for the Analyte. |
| ND | NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL) |
| RL | REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve. |
| LOQ | LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses. |
| LOD | LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846. |
| MDL | METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods. |
| Reported to | This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only. |
| NR | Not reported |
| RPD | Relative Percent Difference |
| Wet | The data has been reported on an as-received (wet weight) basis |
| Low Bias | Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias. |
| High Bias | High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias. |
| Non-Dir. | Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons. |

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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Revision Description: This report has been revised for VOA methylcyclohexane.

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615 | 132-02 89th Ave, Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

# Field Chain-of-Custody Record

**NOTE:** YORK's Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 18F0837



| YOUR Information | Report To: | Invoice To: | YOUR Project Number | Turn-Around Time |
|---|---|---|---|---|
| Company: WSP | Company: Same | Company: Same | 31401451.000 | RUSH - Next Day |
| Address: 4 Research Dr. Ste 204 Shelton CT 06484 | Address: | Address: | YOUR Project Name: Rowe Industries | RUSH - Two Day |
| Phone.: 203-929-8555 | Phone.: | Phone.: | | RUSH - Three Day |
| Contact: Mark Goldberg | Contact: | Contact: | | RUSH - Four Day |
| E-mail: Mark.goldberg@wsp.com | E-mail: | E-mail: | YOUR PO#: | Standard (5-7 Day) X |

*Please 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.*

Sierra K Anseeuw

Samples Collected by: (print your name above and sign below)

**Matrix Codes**
S - soil / solid
GW - groundwater
DW - drinking water
WW - wastewater
O - Oil | Other

**Samples From**
New York X
New Jersey
Connecticut
Pennsylvania
Other

**Report / EDD Type** (circle selections)
Summary Report | CT RCP | Standard Excel EDD
QA Report | CT RCP DQA/DUE | EQuIS (Standard)
NY ASP A Package | NJDEP Reduced Deliverables | NYSDEC EQuIS
NY ASP B Package | NJDEP SRP HazSite
NJDKQP | Other:

**YORK Reg. Comp.**
Compared to the following Regulation(s): (please fill in)

| Sample Identification | Sample Matrix | Date/Time Sampled | Analysis Requested | Container Description |
|---|---|---|---|---|
| SB17(26-27) | S | 6/18/18 1020 | VOCs, TOC | (4)VOA + (1) 2-oz |
| SB17(29-31) | | 1030 | VOCs | |
| SB17(31-32) | | 1035 | VOCs | |
| SB18(26-28) | | 1120 | VOCs, TOC | + (1) 2-oz |
| SB18(29-31) | | 1130 | VOCs | |
| SB19(27-29) | | 1240 | VOCs, TOC | + (1) 2oz |
| SB19(31-33) | | 1250 | VOCs | |
| SB13(22-23) | | 1425 | VOCs | |
| SB13(23-24) | | 1430 | VOCs, TOC | + (1) 2oz |
| SB15(26-28) | | 1550 | VOCs, TOC | + (1) 2oz |

**Comments:**

**Preservation:** (check all that apply)
HCl ___ MeOH X HNO3 ___ H2SO4 ___ NaOH ___ ZnAc ___
Ascorbic Acid ___ Other: DI

**Special Instruction**
Field Filtered ___
Lab to Filter ___

| Samples Relinquished by / Company | Date/Time | Samples Received by / Company | Date/Time | Samples Relinquished by / Company | Date/Time |
|---|---|---|---|---|---|
| | 6/19/18 840 | | 6/19/18 840 | | |
| Samples Received by / Company | Date/Time | Samples Relinquished by / Company | Date/Time | Samples Received by / Company | Date/Time |
| | | | | | |
| Samples Relinquished by / Company | Date/Time | Samples Received by / Company | Date/Time | Samples Received in LAB by / Date/Time | Temp. Received at Lab |
| | | | | 6-20-18 0835 | @2.5 Degrees C |

York Analytical Laboratories, Inc.
120 Research Drive Stratford, CT 06615
132-02 89th Ave Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

# Field Chain-of-Custody Record

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 18F0837



| YOUR Information | Report To: | Invoice To: | YOUR Project Number | Turn-Around Time |
|---|---|---|---|---|
| Company: WSP | Company: Same | Company: Same | 31401451.000 | RUSH - Next Day |
| Address: 4 Research Dr Ste 204 Shelton CT 06484 | Address: | Address: | YOUR Project Name: Rowe Industries | RUSH - Two Day |
| Phone.: 203-929-8555 | Phone.: | Phone.: | | RUSH - Three Day |
| Contact: Mark Goldberg | Contact: | Contact: | | RUSH - Four Day |
| E-mail: markgoldberg@wsp.com | E-mail: | E-mail: | YOUR PO#: | Standard (5-7 Day) X |

*Please 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.*

Sierra k Anseewu
Samples Collected by: (print your name above and sign below)

| Matrix Codes | Samples From | Report / EDD Type (circle selections) | | | YORK Reg. Comp. |
|---|---|---|---|---|---|
| S - soil / solid | New York X | Summary Report | CT RCP | Standard Excel EDD | Compared to the following Regulation(s): (please fill in) |
| GW - groundwater | New Jersey | QA Report | CT RCP DQA/DUE | EQuIS (Standard) | |
| DW - drinking water | Connecticut | NY ASP A Package | NJDEP Reduced Deliverables | NYSDEC EQuIS | |
| WW - wastewater | Pennsylvania | NY ASP B Package | | NJDEP SRP HazSite | |
| O - Oil ; Other | Other | | NJDKQP | Other: | |

| Sample Identification | Sample Matrix | Date/Time Sampled | Analysis Requested | Container Description |
|---|---|---|---|---|
| SB15 (31-32) | S | 6/18/18 1600 | VOCs | (4) VOA (1) 8-oz |
| SB14 (23-24) | | 1645 | VOCs, ~~TOC~~ | (4) VOA |
| SB14 (26-28) | | 1650 | VOCs, TOC | (4) VOA, (1) 8-oz |
| SB14 (31-32) | | 1700 | VOCs | (4) VOA |
| SB16 (29-30) | | 1750 | VOCs, TOC | (4) VOA, (1) 2-oz |
| SB16 (30-32) | | 1800 | VOCs | (4) VOA |

**Comments:**

**Preservation:** (check all that apply)
HCl ___ MeOH ✓ HNO3 ___ H2SO4 ___ NaOH ___ ZnAc ___
Ascorbic Acid ___ Other: DI

**Special Instruction**
Field Filtered ___
Lab to Filter ___

| Samples Relinquished by / Company | Date/Time | Samples Received by / Company | Date/Time | Samples Relinquished by / Company | Date/Time |
|---|---|---|---|---|---|
| | 6/19/18 840 | | 6/19/18 840 | | |
| Samples Received by / Company | Date/Time | Samples Relinquished by / Company | Date/Time | Samples Received by / Company | Date/Time |
| | | | | | |
| Samples Relinquished by / Company | Date/Time | Samples Received by / Company | Date/Time | Samples Received in LAB by | Date/Time / Temp. Received at Lab |
| | | | | | 6-20-18 0835 2.5 Degrees C |

Terra Systems
INCORPORATED

July 19, 2018

Mark Goldberg
Sr. Environmental Engineer, P.E.

WSP

WSP USA
4 Research Drive, Suite 204
Shelton, CT 06484

**RE: Former Rowe Industries Superfund Site, Kraft FDSA Characterization, 1668 Sag Harbor Turnpike, Sag Harbor, NY Potassium Permanganate Soil Oxidation Demand Study Draft Report**

Terra Systems, Inc. (TSI) is pleased to submit this draft report for the potassium permanganate soil oxidant demand (SOD) tests for the Former Rowe Industries Superfund Site, Kraft FDSA Characterization, 1668 Sag Harbor Turnpike, Sag Harbor, NY. To date, TSI has conducted treatability studies at over 100 sites in support of in situ chemical oxidation using potassium and sodium permanganate, activated persulfate, catalyzed hydrogen peroxide, or ozone or in situ chemical reduction of volatile organics, semivolatiles organics, and metals. TSI does not perform in situ chemical oxidation or in situ reduction field projects, but works with a number of environmental engineering consultants including ERM, AMEC, TRC, Moraine Environmental, AECOM, WSP, GZA, and others to evaluate chemical oxidant demand and effectiveness in the laboratory before the consultants go to pilot or full-scale implementation. The treatability work was directed by Michael D. Lee, Ph.D. He has over 30 years of experience in conducting treatability studies and in situ bioremediation of chlorinated solvents and hydrocarbons. He has published over 100 papers.

The study was designed to evaluate the soil oxidant demand (SOD) of up fourteen soil samples for potassium permanganate. Representative soil samples were collected from the site on June 18, 2018 by WSP for use in the study. Approximately 0.4 kilograms of each soil in 8-ounce jars were shipped via UPS on ice using standard Chain-of-Custody procedures on July 9, 2018 to:

Dr. Michael Lee
Terra Systems, Inc.
130 Hickman Road
Claymont DE 19703
Phone: 302-798-9553

The Chain-of-Custody form is attached as Exhibit A. The samples were received on July 10, 2018.

## PERMANGANATE SOIL OXIDATION DEMAND STUDY

### *Permanganate Oxidant Demand Test*

Each soil sample was mixed as thoroughly as possible. The soil density was measured by filling a tared 25 mL graduated cylinder to 15 mL, tamping down with spatula, and weighing the soil. The testing was conducted by reacting a known mass of soil with sodium or potassium permanganate concentrations according to the ASTM Protocol D 7262 – 07 Standard Test Method for Estimating the Permanganate Natural Oxidant Demand of Soil and Aquifer Solids. This test method covers the estimation of the permanganate natural oxidant demand (PNOD) through the determination of the quantity of potassium permanganate (KMnO4) that organic matter and other naturally occurring oxidizable species present in soil or aquifer solids will consume under specified conditions as a function of time. Two hundred g of the soils were dried overnight at 103 $^{o}$C. Then 50 g aliquots of the dry soil were added to three 120 mL jars for each sample. The weight of jar, soil and jar, and dry weight of soil and jar were recorded. A 20,000 mg/L solution of potassium permanganate (65 g in 3.25 L of distilled water) was prepared and stirred for 3 to 16 hours. A calibration curve from 1 to 100 mg/L was prepared with the 20,000 mg/L solution. Three jars of the dry soil received 100 g of the 20,000 mg/L potassium permanganate solution. The permanganate concentrations of the test solutions and the concentrations in each jar were determined by color spectrometry using a Hach 890 colorimeter after 48 hours.

The actual total soil permanganate demand concentrations were calculated from the amount added to the bottle less the remaining concentration. Results from this test were reported as grams of permanganate consumed per kilogram of dry-weight soil.

**Results**

Fourteen soil samples were collected. Four samples were evaluated initially – SB13 23-24', SB15 26-28, SB18 26-28', and SB19 31-33'. Approval was given on July 11, 2018 to evaluate another six samples: SB13 22-23', SB14 26-28', SB 14 31-32', SB17 26-27', SB18 29-31', and SB19 27-29'.

Table 1 presents a description of the soil samples, the percent moisture, wet soil density in g/cm$^3$, and pounds/foot$^3$, the measured permanganate concentrations, and the results of the potassium permanganate soil oxidant demands on a dry weight basis (mg/kg) and soil oxidant demands on a wet weight basis (mg/kg and pounds/cubic feet). The average soil oxidant demand on a dry weight basis ranged from an average of 0 mg/kg (SB14 26-28', SB15 26-28', and SB19 27-29') to 17,199 mg/kg (SB18 29-31'). The coarse sand and medium sand and gravel samples from SB14 26-28', SB15 26-28', SB17 at 26-27', and SB19 27-29' had potassium permanganate concentrations which were slightly higher than the initial potassium permanganate solution in some replicates indicating that the permanganate solution continued to dissolve over the 48 hour incubation period and that there was no oxidant demand. On a wet basis, the permanganate soil

oxidant demands ranged between 0 and 7.7 pounds per cubic foot of aquifer based upon the soil density and moisture content.

**Conclusions**

These permanganate soil oxidant demands other than SB18 29-31' are low in comparison to other sites. Potassium permanganate should effectively treat the chlorinated ethene contamination at this site. The intervals with more clay in samples SB13 23-24', SB14 31-32', SB18 29-31', and SB19 31-33' typically had higher soil oxidant demands and would require more potassium permanganate to treat.

Sincerely,
**TERRA SYSTEMS, INC.**

Michael D Lee, PhD.

Michael D. Lee, Ph.D.
Vice-President
Research and Development

## Table 1. Potassium Permanganate Soil Oxidant Testing Results

| Sample | Depth | | Description | Weight Soil | Weight Dry | Moisture | Wet Soil Density | Wet Soil Density | KMnO4 | KMnO4 SOD | KMnO4 SOD | KMnO4 SOD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | g | g | % | g/cm$^3$ | pounds/ft$^3$ | mg/L | mg/kg Dry | mg/kg Wet | pounds/ft$^3$ Wet |
| SB13 | 22-23' | A | Gravel and sand, standing water | 200.0 | 178.0 | 11.0 | 2.26 | 141 | 20188 | 0 | 0 | |
| | | B | | | | | | | 17541 | 4918 | 4431 | |
| | | C | | | | | | | 18600 | 2800 | 2523 | |
| | | Avg | | | | | | | | 2573 | 2318 | 1.6 |
| SB13 | 23-24' | A | Sandy clay | 200.0 | 164.3 | 17.9 | 1..88 | 117 | 17759 | 4482 | 3798 | |
| | | B | | | | | | | 18998 | 2004 | 1698 | |
| | | C | | | | | | | 18644 | 2712 | 2298 | |
| | | Avg | | | | | | | | 3066 | 2598 | 1.5 |
| SB14 | 26-28' | A | Medium sand, gravel | 200.0 | 176.4 | 11.8 | 1.90 | 119 | 20252 | 0 | 0 | |
| | | B | | | | | | | 19955 | 90 | 81 | |
| | | C | | | | | | | 19968 | 64 | 57 | |
| | | Avg | | | | | | | | 51 | 46 | 0.0 |
| SB14 | 31-32' | A | Fine sand, clay | 200.0 | 154.4 | 22.8 | 1.90 | 108 | 18342 | 3316 | 2700 | |
| | | B | | | | | | | 18019 | 3962 | 3226 | |
| | | C | | | | | | | 19168 | 1664 | 1355 | |
| | | Avg | | | | | | | | 2981 | 2427 | 1.3 |
| SB15 | 26-28' | A | Coarse sand | 200.0 | 165.5 | 17.3 | 1.82 | 114 | 21314 | 0 | | |
| | | B | | | | | | | 20931 | 0 | | |
| | | C | | | | | | | 21358 | 0 | | |
| | | Avg | | | | | | | | 0 | 0 | 0 |
| SB17 | 26-27' | A | Medium sand | 200.0 | 165.4 | 17.3 | 1.75 | 109 | 20265 | 0 | 0 | |
| | | B | | | | | | | 20381 | 0 | 0 | |
| | | C | | | | | | | 19826 | 348 | 297 | |
| | | Avg | | | | | | | | 116 | 99 | 0.1 |
| SB18 | 26-28' | A | Medium sand, some black sediment | 200.0 | 160.1 | 20.0 | 1.84 | 115 | 19603 | 794 | 662 | |
| | | B | | | | | | | 19692 | 616 | 513 | |
| | | C | | | | | | | 19898 | 204 | 170 | |
| | | Avg | | | | | | | | 538 | 448 | 0.3 |
| SB18 | 29-31' | A | Fine sand, clay, some dark layer | 200.0 | 160.2 | 19.9 | 1.78 | 111 | 9937 | 20126 | 16772 | |
| | | B | | | | | | | 11745 | 16510 | 13758 | |
| | | C | | | | | | | 12519 | 14962 | 12468 | |
| | | Avg | | | | | | | | 17199 | 14333 | 7.7 |
| SB19 | 27-29' | A | Medium sand, some gravel | 200.0 | 173.6 | 13.2 | 1.74 | 109 | 20110 | 0 | 0 | |
| | | B | | | | | | | 20343 | 0 | 0 | |
| | | C | | | | | | | 20330 | 0 | 0 | |
| | | Avg | | | | | | | | 0 | 0 | 0.0 |
| SB19 | 31-33' | A | Clayey | 200.0 | 154.2 | 22.9 | 1.78 | 111 | 18364 | 3272 | 2664 | |
| | | B | | | | | | | 19043 | 1914 | 1559 | |
| | | C | | | | | | | 19249 | 1502 | 1223 | |
| | | Avg | | | | | | | | 2229 | 1815 | 1.0 |

# ATTACHMENT A CHAIN-OF-CUSTODY

# TERRA SYSTEMS, INC.

130 Hickory Road, Suite 1, Claymont, DE 19703 phone 302-798-9553 fax 302-798-9554

## Chain of Custody

Client: WSP USA | Project Name: Former Rowa Industries Superfund Site | Parameters for Analysis

Project Description: Addl. PDSA Characterization | Project Manager/Contact: Mark Goldberg | Lot:

Location: 1668 Rte 9 Harbor Type, Sag Harbor, NY | Phone: 203-929-8555

Sampler: Brian Anderson

Date: July 11, 2018
Removal of the holds from 6 samples was authorized by the client so please analyze a total of 10 samples while 4 samples remain on hold.
Thanks, Mark M. Goldberg

| Date | Time | Sample Identification (and sample depth) | Sample Technique | Matrix | Preservative | Container Type | Number of Containers | Perchlorate Neural Ordant Demand ASTM D853-07 | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/18/2018 | 14:25 | SB 13 (22-23) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 14:30 | SB 13 (23-24) | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | |
| 6/18/2018 | 16:50 | SB 14 (26-28) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 17:00 | SB 14 (31-32) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 15:50 | SB 15 (28-28) | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | |
| 6/18/2018 | 16:00 | SB 15 (31-32) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 17:50 | SB 16 (29-30) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 18:00 | SB 16 (30-32) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 10:20 | SB 17 (26-27) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 10:35 | SB 17 (31-32) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 11:20 | SB 18 (28-28) | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | |
| 6/18/2018 | 11:30 | SB 18 (29-3") HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 12:40 | SB 19 (27-29) HOLD | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | HOLD UNLESS DIRECTED OTHERWISE |
| 6/18/2018 | 12:50 | SB 19 (31-33) | grab | soil | none | 8 oz glass | 1 | X | | | | | | | | |

| Relinquished by (signature) | Date/time | Received by (signature) | Date/time |
|---|---|---|---|
| [signature] | 6/19/18 9:30 | WSP Fridge | 6/20/18 8:30 |
| Fridge | 7/9/18 10:00 | Mark M. Goldberg | 7/9/18 10:05 |
| Mark M. Goldberg | 7/9/18 10:10 | [signature] | 7.10.18 8:00 |

Shipped From: WSP USA
4 Research Drive, Suite 204
Shelton, CT 06484
Attn: Mark Goldberg

Date/time:

Carrier/Airbill number:

Cooler Temperature: °C | pH | Comments: email results and invoice to Mark.Goldberg@wsp.com

eurofins | Spectrum Analytical

☐ Final Report
☑ Revised Report

Report Date:
11-Jul-18 14:54

# *Laboratory Report*
# SC47887

WSP USA- Shelton, CT
4 Research Drive Suite 204
Shelton, CT 06484
Attn: Mark Goldberg

Project: Rowe Industries - Sag Harbor, NY
Project #: 31401451.000

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393

Authorized by:

Christina White
Technical Director

Christina A. White

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 30 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

*Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).*

*Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.*

## Sample Summary

**Work Order:** SC47887

**Project:** Rowe Industries - Sag Harbor, NY

**Project Number:** 31401451.000

| Laboratory ID | Client Sample ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| SC47887-01 | MW-98-01A | Ground Water | 19-Jun-18 13:55 | 21-Jun-18 17:00 |
| SC47887-02 | MW-98-04 | Ground Water | 19-Jun-18 15:15 | 21-Jun-18 17:00 |
| SC47887-03 | MW-98-05BR | Ground Water | 19-Jun-18 12:05 | 21-Jun-18 17:00 |
| SC47887-04 | Equipment Blank | Aqueous | 19-Jun-18 11:00 | 21-Jun-18 17:00 |
| SC47887-05 | Trip Blank | Aqueous | 19-Jun-18 00:00 | 21-Jun-18 17:00 |

**CASE NARRATIVE:**

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 1.2 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

**July 11, 2018 Report Revision Case Narrative:**

This report has been revised to change the matrix from surface water to groundwater per client request.

**July 11, 2018 Report Revision Case Narrative:**

This report has been revised to correct the sample ID for SC47887-03 from MW-98-05AR to MW-98-05BR and to change the matrix from surface water to groundwater for samples SC47887-01, -02 and -03 per client request.

**See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.**

## SW846 8260C

**Calibration:**

1806025

Analyte quantified by quadratic equation type calibration.

1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,3,5-Trimethylbenzene
2-Chlorotoluene
2-Hexanone (MBK)
4-Chlorotoluene
4-Isopropyltoluene
4-Methyl-2-pentanone (MIBK)
Bromodichloromethane
Bromoform
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
m,p-Xylene
Naphthalene
n-Butylbenzene
n-Propylbenzene
o-Xylene
sec-Butylbenzene
Styrene
tert-Butylbenzene
trans-1,3-Dichloropropene

## SW846 8260C

**Calibration:**

1806025

This affected the following samples:

1808754-BLK1
1808754-BS1
1808754-BSD1
Equipment Blank
MW-98-01A
MW-98-04
MW-98-05BR
S820051-ICV1
S820339-CCV1
Trip Blank

**Samples:**

S820339-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2,2-Dichloropropane (-20.8%)
Chloromethane (-24.3%)

This affected the following samples:

1808754-BLK1
1808754-BS1
1808754-BSD1
Equipment Blank
MW-98-01A
MW-98-04
MW-98-05BR
Trip Blank

## Sample Acceptance Check Form

| | |
|---|---|
| Client: | WSP USA- Shelton, CT |
| Project: | Rowe Industries - Sag Harbor, NY / 31401451.000 |
| Work Order: | SC47887 |
| Sample(s) received on: | 6/21/2018 |

***The following outlines the condition of samples for the attached Chain of Custody upon receipt.***

| | Yes | No | N/A |
|---|---|---|---|
| Were custody seals present? | ☐ | ☑ | ☐ |
| Were custody seals intact? | ☐ | ☐ | ☑ |
| Were samples received at a temperature of ≤ 6°C? | ☑ | ☐ | ☐ |
| Were samples refrigerated upon transfer to laboratory representative? | ☑ | ☐ | ☐ |
| Were sample containers received intact? | ☑ | ☐ | ☐ |
| Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)? | ☑ | ☐ | ☐ |
| Were samples accompanied by a Chain of Custody document? | ☑ | ☐ | ☐ |
| Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample? | ☑ | ☐ | ☐ |
| Did sample container labels agree with Chain of Custody document? | ☑ | ☐ | ☐ |
| Were samples received within method-specific holding times? | ☑ | ☐ | ☐ |

## Summary of Hits

**Lab ID:** SC47887-01 **Client ID:** MW-98-01A

| Parameter | Result | Flag | Reporting Limit | Units | Analytical Method |
|---|---|---|---|---|---|
| Sulfate as SO4 | 9.15 | | 1.00 | mg/l | EPA 300.0 |
| Sulfide | 0.53 | | 0.13 | mg/l | SM4500S-D-11 |
| Total Organic Carbon | 0.962 | J | 1.00 | mg/l | SM5310B (00, 11) |
| Iron | 2.98 | | 0.125 | mg/l | SW846 6010C |
| Iron (dissolved) | 3.05 | | 0.250 | mg/l | SW846 6010C |
| Tetrachloroethene | 0.77 | J | 1.00 | µg/l | SW846 8260C |

**Lab ID:** SC47887-02 **Client ID:** MW-98-04

| Parameter | Result | Flag | Reporting Limit | Units | Analytical Method |
|---|---|---|---|---|---|
| Sulfate as SO4 | 12.2 | | 1.00 | mg/l | EPA 300.0 |
| Total Organic Carbon | 0.942 | J | 1.00 | mg/l | SM5310B (00, 11) |
| Iron | 8.70 | | 0.125 | mg/l | SW846 6010C |
| Iron (dissolved) | 0.687 | | 0.250 | mg/l | SW846 6010C |
| Tetrachloroethene | 2.17 | | 1.00 | µg/l | SW846 8260C |

**Lab ID:** SC47887-03 **Client ID:** MW-98-05BR

| Parameter | Result | Flag | Reporting Limit | Units | Analytical Method |
|---|---|---|---|---|---|
| Sulfate as SO4 | 16.0 | | 1.00 | mg/l | EPA 300.0 |
| Total Organic Carbon | 1.74 | | 1.00 | mg/l | SM5310B (00, 11) |
| Iron | 0.608 | | 0.125 | mg/l | SW846 6010C |
| Iron (dissolved) | 0.120 | J | 0.250 | mg/l | SW846 6010C |

**Lab ID:** SC47887-04 **Client ID:** Equipment Blank

| Parameter | Result | Flag | Reporting Limit | Units | Analytical Method |
|---|---|---|---|---|---|
| Acetone | 9.39 | J | 10.0 | µg/l | SW846 8260C |
| Chloromethane | 1.35 | J | 2.00 | µg/l | SW846 8260C |
| Methylene chloride | 0.52 | J | 2.00 | µg/l | SW846 8260C |

*Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.*

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-01A** | 31401451.000 | Ground Water | 19-Jun-18 13:55 | 21-Jun-18 |
| SC47887-01 | | | | |

| *CAS No.* | *Analyte(s)* | *Result* | *Flag* | *Units* | **RDL* | *MDL* | *Dilution* | *Method Ref.* | *Prepared* | *Analyzed* | *Analyst* | *Batch* | *Cert.* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS | | | | | | | | | | | | | |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | Ua | µg/l | 1.00 | 0.58 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 67-64-1 | Acetone | < 10.0 | Ua | µg/l | 10.0 | 3.76 | 1 | " | " | " | " | " | X |
| 107-13-1 | Acrylonitrile | < 0.50 | Ua | µg/l | 0.50 | 0.48 | 1 | " | " | " | " | " | X |
| 71-43-2 | Benzene | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 108-86-1 | Bromobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 74-97-5 | Bromochloromethane | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-27-4 | Bromodichloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 75-25-2 | Bromoform | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 74-83-9 | Bromomethane | < 2.00 | Ua | µg/l | 2.00 | 0.45 | 1 | " | " | " | " | " | X |
| 78-93-3 | 2-Butanone (MEK) | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 104-51-8 | n-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.47 | 1 | " | " | " | " | " | X |
| 135-98-8 | sec-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 98-06-6 | tert-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-15-0 | Carbon disulfide | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 56-23-5 | Carbon tetrachloride | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | X |
| 108-90-7 | Chlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-00-3 | Chloroethane | < 2.00 | Ua | µg/l | 2.00 | 0.40 | 1 | " | " | " | " | " | X |
| 67-66-3 | Chloroform | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 74-87-3 | Chloromethane | < 2.00 | Ua | µg/l | 2.00 | 0.36 | 1 | " | " | " | " | " | X |
| 95-49-8 | 2-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 106-43-4 | 4-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 124-48-1 | Dibromochloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 106-93-4 | 1,2-Dibromoethane (EDB) | < 0.50 | Ua | µg/l | 0.50 | 0.30 | 1 | " | " | " | " | " | X |
| 74-95-3 | Dibromomethane | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 95-50-1 | 1,2-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 541-73-1 | 1,3-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 106-46-7 | 1,4-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 75-71-8 | Dichlorodifluoromethane (Freon12) | < 2.00 | Ua | µg/l | 2.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-34-3 | 1,1-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 107-06-2 | 1,2-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.18 | 1 | " | " | " | " | " | X |
| 75-35-4 | 1,1-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 156-59-2 | cis-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 156-60-5 | trans-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 78-87-5 | 1,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 142-28-9 | 1,3-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 594-20-7 | 2,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.44 | 1 | " | " | " | " | " | X |
| 563-58-6 | 1,1-Dichloropropene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-01-5 | cis-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-02-6 | trans-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.31 | 1 | " | " | " | " | " | X |
| 100-41-4 | Ethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 87-68-3 | Hexachlorobutadiene | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 591-78-6 | 2-Hexanone (MBK) | < 2.00 | Ua | µg/l | 2.00 | 0.63 | 1 | " | " | " | " | " | X |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-01A** | 31401451.000 | Ground Water | 19-Jun-18 13:55 | 21-Jun-18 |
| SC47887-01 | | | | |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 | | | | | | | | | | | | | |
| 98-82-8 | Isopropylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 99-87-6 | 4-Isopropyltoluene | < 1.00 | Ua | µg/l | 1.00 | 0.42 | 1 | " | " | " | " | " | X |
| 1634-04-4 | Methyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | < 2.00 | Ua | µg/l | 2.00 | 0.35 | 1 | " | " | " | " | " | X |
| 75-09-2 | Methylene chloride | < 2.00 | Ua | µg/l | 2.00 | 0.38 | 1 | " | " | " | " | " | X |
| 91-20-3 | Naphthalene | < 2.00 | Ua | µg/l | 2.00 | 1.39 | 1 | " | " | " | " | " | X |
| 103-65-1 | n-Propylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 100-42-5 | Styrene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 127-18-4 | Tetrachloroethene | **0.77** | J | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 108-88-3 | Toluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 87-61-6 | 1,2,3-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 120-82-1 | 1,2,4-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 108-70-3 | 1,3,5-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | |
| 71-55-6 | 1,1,1-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 79-00-5 | 1,1,2-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 79-01-6 | Trichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.36 | 1 | " | " | " | " | " | X |
| 75-69-4 | Trichlorofluoromethane (Freon 11) | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 96-18-4 | 1,2,3-Trichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.26 | 1 | " | " | " | " | " | X |
| 95-63-6 | 1,2,4-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.62 | 1 | " | " | " | " | " | X |
| 108-67-8 | 1,3,5-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.54 | 1 | " | " | " | " | " | X |
| 75-01-4 | Vinyl chloride | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 179601-23-1 | m,p-Xylene | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 95-47-6 | o-Xylene | < 1.00 | Ua | µg/l | 1.00 | 0.41 | 1 | " | " | " | " | " | X |
| 109-99-9 | Tetrahydrofuran | < 2.00 | Ua | µg/l | 2.00 | 0.50 | 1 | " | " | " | " | " | |
| 60-29-7 | Ethyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 994-05-8 | Tert-amyl methyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 637-92-3 | Ethyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 108-20-3 | Di-isopropyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 75-65-0 | Tert-Butanol / butyl alcohol | < 10.0 | Ua | µg/l | 10.0 | 3.13 | 1 | " | " | " | " | " | X |
| 123-91-1 | 1,4-Dioxane | < 20.0 | Ua | µg/l | 20.0 | 5.81 | 1 | " | " | " | " | " | X |
| 110-57-6 | trans-1,4-Dichloro-2-butene | < 5.00 | Ua | µg/l | 5.00 | 0.61 | 1 | " | " | " | " | " | X |
| 64-17-5 | Ethanol | < 200 | Ua | µg/l | 200 | 13.2 | 1 | " | " | " | " | " | X |
| *Surrogate recoveries:* | | | | | | | | | | | | | |
| *460-00-4* | *4-Bromofluorobenzene* | *94* | | | *70-130 %* | | | " | " | " | " | " | |
| *2037-26-5* | *Toluene-d8* | *93* | | | *70-130 %* | | | " | " | " | " | " | |
| *17060-07-0* | *1,2-Dichloroethane-d4* | *97* | | | *70-130 %* | | | " | " | " | " | " | |
| *1868-53-7* | *Dibromofluoromethane* | *99* | | | *70-130 %* | | | " | " | " | " | " | |
| **Total Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-01A**<br>SC47887-01 | 31401451.000 | Ground Water | 19-Jun-18 13:55 | 21-Jun-18 |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |
| | Preservation | **Field Preserved; pH<2 confirmed** | | N/A | | | 1 | EPA 200/6000 methods | 22-Jun-18 | | KP1 | 1808718 | |
| **Total Metals by EPA 6000/7000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method SW846 3005A | | | | | | | | | | | | | |
| 7439-89-6 | Iron | **2.98** | | mg/l | 0.125 | 0.0045 | 1 | SW846 6010C | 28-Jun-18 | 30-Jun-18 | SJR/T | 1809004 | X |
| **Soluble Metals by EPA 6000/7000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method SW846 3005A | | | | | | | | | | | | | |
| 7439-89-6 | Iron | **3.05** | | mg/l | 0.250 | 0.0089 | 1 | SW846 6010C | 27-Jun-18 | 29-Jun-18 | SJR/T | 1808906 | X |
| **General Chemistry Parameters** | | | | | | | | | | | | | |
| 14808-79-8 | Sulfate as SO4 | **9.15** | | mg/l | 1.00 | 0.798 | 1 | EPA 300.0 | 21-Jun-18 | 21-Jun-18 | TN | 1808650 | X |
| | Total Organic Carbon | **0.962** | J | mg/l | 1.00 | 0.238 | 1 | SM5310B (00, 11) | 29-Jun-18 | 29-Jun-18 | RLT | 1809105 | X |
| **Dissolved Gas Analysis** | | | | | | | | | | | | | |
| Dissolved Gases | | | | | | | | | | | | | |
| Prepared by method General Air Prep | | | | | | | | | | | | | |
| 74-82-8 | Methane | < 2.20 | Ua | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 27-Jun-18 | 27-Jun-18 | SAD | 1808994 | |
| 74-84-0 | Ethane | < 5.00 | Ua | µg/l | 5.00 | 3.48 | 1 | " | " | " | " | " | |
| 74-85-1 | Ethene | < 5.00 | Ua | µg/l | 5.00 | 4.58 | 1 | " | " | " | " | " | |
| **Subcontracted Analyses** | | | | | | | | | | | | | |
| Prepared by method 436179-SM450 | | | | | | | | | | | | | |
| *Analysis performed by Phoenix Environmental Labs, Inc. * - CT007* | | | | | | | | | | | | | |
| 18496-25-8 | Sulfide | **0.53** | | mg/l | 0.13 | 0.13 | 2.5 | SM4500S-D-11 | 26-Jun-18 | 26-Jun-18 11:11 | 11301 | 436179A | |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-04** | 31401451.000 | Ground Water | 19-Jun-18 15:15 | 21-Jun-18 |
| SC47887-02 | | | | |

| *CAS No.* | *Analyte(s)* | *Result* | *Flag* | *Units* | **RDL* | *MDL* | *Dilution* | *Method Ref.* | *Prepared* | *Analyzed* | *Analyst* | *Batch* | *Cert.* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS | | | | | | | | | | | | | |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | Ua | µg/l | 1.00 | 0.58 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 67-64-1 | Acetone | < 10.0 | Ua | µg/l | 10.0 | 3.76 | 1 | " | " | " | " | " | X |
| 107-13-1 | Acrylonitrile | < 0.50 | Ua | µg/l | 0.50 | 0.48 | 1 | " | " | " | " | " | X |
| 71-43-2 | Benzene | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 108-86-1 | Bromobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 74-97-5 | Bromochloromethane | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-27-4 | Bromodichloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 75-25-2 | Bromoform | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 74-83-9 | Bromomethane | < 2.00 | Ua | µg/l | 2.00 | 0.45 | 1 | " | " | " | " | " | X |
| 78-93-3 | 2-Butanone (MEK) | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 104-51-8 | n-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.47 | 1 | " | " | " | " | " | X |
| 135-98-8 | sec-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 98-06-6 | tert-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-15-0 | Carbon disulfide | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 56-23-5 | Carbon tetrachloride | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | X |
| 108-90-7 | Chlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-00-3 | Chloroethane | < 2.00 | Ua | µg/l | 2.00 | 0.40 | 1 | " | " | " | " | " | X |
| 67-66-3 | Chloroform | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 74-87-3 | Chloromethane | < 2.00 | Ua | µg/l | 2.00 | 0.36 | 1 | " | " | " | " | " | X |
| 95-49-8 | 2-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 106-43-4 | 4-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 124-48-1 | Dibromochloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 106-93-4 | 1,2-Dibromoethane (EDB) | < 0.50 | Ua | µg/l | 0.50 | 0.30 | 1 | " | " | " | " | " | X |
| 74-95-3 | Dibromomethane | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 95-50-1 | 1,2-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 541-73-1 | 1,3-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 106-46-7 | 1,4-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 75-71-8 | Dichlorodifluoromethane (Freon12) | < 2.00 | Ua | µg/l | 2.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-34-3 | 1,1-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 107-06-2 | 1,2-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.18 | 1 | " | " | " | " | " | X |
| 75-35-4 | 1,1-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 156-59-2 | cis-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 156-60-5 | trans-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 78-87-5 | 1,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 142-28-9 | 1,3-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 594-20-7 | 2,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.44 | 1 | " | " | " | " | " | X |
| 563-58-6 | 1,1-Dichloropropene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-01-5 | cis-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-02-6 | trans-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.31 | 1 | " | " | " | " | " | X |
| 100-41-4 | Ethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 87-68-3 | Hexachlorobutadiene | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 591-78-6 | 2-Hexanone (MBK) | < 2.00 | Ua | µg/l | 2.00 | 0.63 | 1 | " | " | " | " | " | X |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-04** | 31401451.000 | Ground Water | 19-Jun-18 15:15 | 21-Jun-18 |
| SC47887-02 | | | | |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 | | | | | | | | | | | | | |
| 98-82-8 | Isopropylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 99-87-6 | 4-Isopropyltoluene | < 1.00 | Ua | µg/l | 1.00 | 0.42 | 1 | " | " | " | " | " | X |
| 1634-04-4 | Methyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | < 2.00 | Ua | µg/l | 2.00 | 0.35 | 1 | " | " | " | " | " | X |
| 75-09-2 | Methylene chloride | < 2.00 | Ua | µg/l | 2.00 | 0.38 | 1 | " | " | " | " | " | X |
| 91-20-3 | Naphthalene | < 2.00 | Ua | µg/l | 2.00 | 1.39 | 1 | " | " | " | " | " | X |
| 103-65-1 | n-Propylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 100-42-5 | Styrene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 127-18-4 | Tetrachloroethene | **2.17** | | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 108-88-3 | Toluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 87-61-6 | 1,2,3-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 120-82-1 | 1,2,4-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 108-70-3 | 1,3,5-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | |
| 71-55-6 | 1,1,1-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 79-00-5 | 1,1,2-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 79-01-6 | Trichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.36 | 1 | " | " | " | " | " | X |
| 75-69-4 | Trichlorofluoromethane (Freon 11) | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 96-18-4 | 1,2,3-Trichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.26 | 1 | " | " | " | " | " | X |
| 95-63-6 | 1,2,4-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.62 | 1 | " | " | " | " | " | X |
| 108-67-8 | 1,3,5-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.54 | 1 | " | " | " | " | " | X |
| 75-01-4 | Vinyl chloride | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 179601-23-1 | m,p-Xylene | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 95-47-6 | o-Xylene | < 1.00 | Ua | µg/l | 1.00 | 0.41 | 1 | " | " | " | " | " | X |
| 109-99-9 | Tetrahydrofuran | < 2.00 | Ua | µg/l | 2.00 | 0.50 | 1 | " | " | " | " | " | |
| 60-29-7 | Ethyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 994-05-8 | Tert-amyl methyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 637-92-3 | Ethyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 108-20-3 | Di-isopropyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 75-65-0 | Tert-Butanol / butyl alcohol | < 10.0 | Ua | µg/l | 10.0 | 3.13 | 1 | " | " | " | " | " | X |
| 123-91-1 | 1,4-Dioxane | < 20.0 | Ua | µg/l | 20.0 | 5.81 | 1 | " | " | " | " | " | X |
| 110-57-6 | trans-1,4-Dichloro-2-butene | < 5.00 | Ua | µg/l | 5.00 | 0.61 | 1 | " | " | " | " | " | X |
| 64-17-5 | Ethanol | < 200 | Ua | µg/l | 200 | 13.2 | 1 | " | " | " | " | " | X |
| *Surrogate recoveries:* | | | | | | | | | | | | | |
| *460-00-4* | *4-Bromofluorobenzene* | *95* | | | *70-130 %* | | | " | " | " | " | " | |
| *2037-26-5* | *Toluene-d8* | *95* | | | *70-130 %* | | | " | " | " | " | " | |
| *17060-07-0* | *1,2-Dichloroethane-d4* | *100* | | | *70-130 %* | | | " | " | " | " | " | |
| *1868-53-7* | *Dibromofluoromethane* | *103* | | | *70-130 %* | | | " | " | " | " | " | |
| **Total Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-04**<br>SC47887-02 | 31401451.000 | Ground Water | 19-Jun-18 15:15 | 21-Jun-18 |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |
| | Preservation | **Field Preserved; pH<2 confirmed** | | N/A | | | 1 | EPA 200/6000 methods | 22-Jun-18 | | KP1 | 1808718 | |
| **Total Metals by EPA 6000/7000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method SW846 3005A | | | | | | | | | | | | | |
| 7439-89-6 | Iron | **8.70** | | mg/l | 0.125 | 0.0045 | 1 | SW846 6010C | 28-Jun-18 | 30-Jun-18 | SJR/T | 1809004 | X |
| **Soluble Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |
| | Filtration | **Field Filtered** | | N/A | | | 1 | EPA 200.7/3005A/6010 | | | KP1 | 1808659 | |
| **Soluble Metals by EPA 6000/7000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method SW846 3005A | | | | | | | | | | | | | |
| 7439-89-6 | Iron | **0.687** | | mg/l | 0.250 | 0.0089 | 1 | SW846 6010C | 27-Jun-18 | 29-Jun-18 | SJR/T | 1808906 | X |
| **General Chemistry Parameters** | | | | | | | | | | | | | |
| 14808-79-8 | Sulfate as SO4 | **12.2** | | mg/l | 1.00 | 0.798 | 1 | EPA 300.0 | 21-Jun-18 | 21-Jun-18 | TN | 1808650 | X |
| | Total Organic Carbon | **0.942** | J | mg/l | 1.00 | 0.238 | 1 | SM5310B (00, 11) | 29-Jun-18 | 29-Jun-18 | RLT | 1809105 | X |
| **Dissolved Gas Analysis** | | | | | | | | | | | | | |
| Dissolved Gases | | | | | | | | | | | | | |
| Prepared by method General Air Prep | | | | | | | | | | | | | |
| 74-82-8 | Methane | < 2.20 | Ua | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 27-Jun-18 | 27-Jun-18 | SAD | 1808994 | |
| 74-84-0 | Ethane | < 5.00 | Ua | µg/l | 5.00 | 3.48 | 1 | " | " | " | " | " | |
| 74-85-1 | Ethene | < 5.00 | Ua | µg/l | 5.00 | 4.58 | 1 | " | " | " | " | " | |
| **Subcontracted Analyses** | | | | | | | | | | | | | |
| Prepared by method 436179-SM450 | | | | | | | | | | | | | |
| *Analysis performed by Phoenix Environmental Labs, Inc. * - CT007* | | | | | | | | | | | | | |
| 18496-25-8 | Sulfide | < 0.05 | | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-11 | 26-Jun-18 | 26-Jun-18 11:11 | 11301 | 436179A | |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-05BR** | 31401451.000 | Ground Water | 19-Jun-18 12:05 | 21-Jun-18 |
| SC47887-03 | | | | |

| *CAS No.* | *Analyte(s)* | *Result* | *Flag* | *Units* | **RDL* | *MDL* | *Dilution* | *Method Ref.* | *Prepared* | *Analyzed* | *Analyst* | *Batch* | *Cert.* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS | | | | | | | | | | | | | |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | Ua | µg/l | 1.00 | 0.58 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 67-64-1 | Acetone | < 10.0 | Ua | µg/l | 10.0 | 3.76 | 1 | " | " | " | " | " | X |
| 107-13-1 | Acrylonitrile | < 0.50 | Ua | µg/l | 0.50 | 0.48 | 1 | " | " | " | " | " | X |
| 71-43-2 | Benzene | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 108-86-1 | Bromobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 74-97-5 | Bromochloromethane | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-27-4 | Bromodichloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 75-25-2 | Bromoform | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 74-83-9 | Bromomethane | < 2.00 | Ua | µg/l | 2.00 | 0.45 | 1 | " | " | " | " | " | X |
| 78-93-3 | 2-Butanone (MEK) | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 104-51-8 | n-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.47 | 1 | " | " | " | " | " | X |
| 135-98-8 | sec-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 98-06-6 | tert-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-15-0 | Carbon disulfide | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 56-23-5 | Carbon tetrachloride | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | X |
| 108-90-7 | Chlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-00-3 | Chloroethane | < 2.00 | Ua | µg/l | 2.00 | 0.40 | 1 | " | " | " | " | " | X |
| 67-66-3 | Chloroform | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 74-87-3 | Chloromethane | < 2.00 | Ua | µg/l | 2.00 | 0.36 | 1 | " | " | " | " | " | X |
| 95-49-8 | 2-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 106-43-4 | 4-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 124-48-1 | Dibromochloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 106-93-4 | 1,2-Dibromoethane (EDB) | < 0.50 | Ua | µg/l | 0.50 | 0.30 | 1 | " | " | " | " | " | X |
| 74-95-3 | Dibromomethane | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 95-50-1 | 1,2-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 541-73-1 | 1,3-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 106-46-7 | 1,4-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 75-71-8 | Dichlorodifluoromethane (Freon12) | < 2.00 | Ua | µg/l | 2.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-34-3 | 1,1-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 107-06-2 | 1,2-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.18 | 1 | " | " | " | " | " | X |
| 75-35-4 | 1,1-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 156-59-2 | cis-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 156-60-5 | trans-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 78-87-5 | 1,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 142-28-9 | 1,3-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 594-20-7 | 2,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.44 | 1 | " | " | " | " | " | X |
| 563-58-6 | 1,1-Dichloropropene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-01-5 | cis-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-02-6 | trans-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.31 | 1 | " | " | " | " | " | X |
| 100-41-4 | Ethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 87-68-3 | Hexachlorobutadiene | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 591-78-6 | 2-Hexanone (MBK) | < 2.00 | Ua | µg/l | 2.00 | 0.63 | 1 | " | " | " | " | " | X |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-05BR** | 31401451.000 | Ground Water | 19-Jun-18 12:05 | 21-Jun-18 |
| SC47887-03 | | | | |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 | | | | | | | | | | | | | |
| 98-82-8 | Isopropylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 99-87-6 | 4-Isopropyltoluene | < 1.00 | Ua | µg/l | 1.00 | 0.42 | 1 | " | " | " | " | " | X |
| 1634-04-4 | Methyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | < 2.00 | Ua | µg/l | 2.00 | 0.35 | 1 | " | " | " | " | " | X |
| 75-09-2 | Methylene chloride | < 2.00 | Ua | µg/l | 2.00 | 0.38 | 1 | " | " | " | " | " | X |
| 91-20-3 | Naphthalene | < 2.00 | Ua | µg/l | 2.00 | 1.39 | 1 | " | " | " | " | " | X |
| 103-65-1 | n-Propylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 100-42-5 | Styrene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 127-18-4 | Tetrachloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 108-88-3 | Toluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 87-61-6 | 1,2,3-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 120-82-1 | 1,2,4-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 108-70-3 | 1,3,5-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | |
| 71-55-6 | 1,1,1-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 79-00-5 | 1,1,2-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 79-01-6 | Trichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.36 | 1 | " | " | " | " | " | X |
| 75-69-4 | Trichlorofluoromethane (Freon 11) | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 96-18-4 | 1,2,3-Trichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.26 | 1 | " | " | " | " | " | X |
| 95-63-6 | 1,2,4-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.62 | 1 | " | " | " | " | " | X |
| 108-67-8 | 1,3,5-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.54 | 1 | " | " | " | " | " | X |
| 75-01-4 | Vinyl chloride | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 179601-23-1 | m,p-Xylene | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 95-47-6 | o-Xylene | < 1.00 | Ua | µg/l | 1.00 | 0.41 | 1 | " | " | " | " | " | X |
| 109-99-9 | Tetrahydrofuran | < 2.00 | Ua | µg/l | 2.00 | 0.50 | 1 | " | " | " | " | " | |
| 60-29-7 | Ethyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 994-05-8 | Tert-amyl methyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 637-92-3 | Ethyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 108-20-3 | Di-isopropyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 75-65-0 | Tert-Butanol / butyl alcohol | < 10.0 | Ua | µg/l | 10.0 | 3.13 | 1 | " | " | " | " | " | X |
| 123-91-1 | 1,4-Dioxane | < 20.0 | Ua | µg/l | 20.0 | 5.81 | 1 | " | " | " | " | " | X |
| 110-57-6 | trans-1,4-Dichloro-2-butene | < 5.00 | Ua | µg/l | 5.00 | 0.61 | 1 | " | " | " | " | " | X |
| 64-17-5 | Ethanol | < 200 | Ua | µg/l | 200 | 13.2 | 1 | " | " | " | " | " | X |
| *Surrogate recoveries:* | | | | | | | | | | | | | |
| *460-00-4* | *4-Bromofluorobenzene* | *94* | | | *70-130 %* | | | " | " | " | " | " | |
| *2037-26-5* | *Toluene-d8* | *93* | | | *70-130 %* | | | " | " | " | " | " | |
| *17060-07-0* | *1,2-Dichloroethane-d4* | *99* | | | *70-130 %* | | | " | " | " | " | " | |
| *1868-53-7* | *Dibromofluoromethane* | *101* | | | *70-130 %* | | | " | " | " | " | " | |
| **Total Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **MW-98-05BR**<br>SC47887-03 | 31401451.000 | Ground Water | 19-Jun-18 12:05 | 21-Jun-18 |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |
| | Preservation | **Field Preserved; pH<2 confirmed** | | N/A | | | 1 | EPA 200/6000 methods | 22-Jun-18 | | KP1 | 1808718 | |
| **Total Metals by EPA 6000/7000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method SW846 3005A | | | | | | | | | | | | | |
| 7439-89-6 | Iron | **0.608** | | mg/l | 0.125 | 0.0045 | 1 | SW846 6010C | 28-Jun-18 | 30-Jun-18 | SJR/T | 1809004 | X |
| **Soluble Metals by EPA 200/6000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method General Prep-Metal | | | | | | | | | | | | | |
| | Filtration | **Field Filtered** | | N/A | | | 1 | EPA 200.7/3005A/6010 | | | KP1 | 1808659 | |
| **Soluble Metals by EPA 6000/7000 Series Methods** | | | | | | | | | | | | | |
| Prepared by method SW846 3005A | | | | | | | | | | | | | |
| 7439-89-6 | Iron | **0.120** | J | mg/l | 0.250 | 0.0089 | 1 | SW846 6010C | 27-Jun-18 | 29-Jun-18 | SJR/T | 1808906 | X |
| **General Chemistry Parameters** | | | | | | | | | | | | | |
| 14808-79-8 | Sulfate as SO4 | **16.0** | | mg/l | 1.00 | 0.798 | 1 | EPA 300.0 | 21-Jun-18 | 21-Jun-18 | TN | 1808650 | X |
| | Total Organic Carbon | **1.74** | | mg/l | 1.00 | 0.238 | 1 | SM5310B (00, 11) | 29-Jun-18 | 29-Jun-18 | RLT | 1809105 | X |
| **Dissolved Gas Analysis** | | | | | | | | | | | | | |
| Dissolved Gases | | | | | | | | | | | | | |
| Prepared by method General Air Prep | | | | | | | | | | | | | |
| 74-82-8 | Methane | < 2.20 | Ua | µg/l | 2.20 | 2.16 | 1 | RSK-175 | 27-Jun-18 | 27-Jun-18 | SAD | 1808994 | |
| 74-84-0 | Ethane | < 5.00 | Ua | µg/l | 5.00 | 3.48 | 1 | " | " | " | " | " | |
| 74-85-1 | Ethene | < 5.00 | Ua | µg/l | 5.00 | 4.58 | 1 | " | " | " | " | " | |
| **Subcontracted Analyses** | | | | | | | | | | | | | |
| Prepared by method 436179-SM450 | | | | | | | | | | | | | |
| *Analysis performed by Phoenix Environmental Labs, Inc. * - CT007* | | | | | | | | | | | | | |
| 18496-25-8 | Sulfide | < 0.05 | | mg/l | 0.05 | 0.05 | 1 | SM4500S-D-11 | 26-Jun-18 | 26-Jun-18 11:12 | 11301 | 436179A | |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **Equipment Blank** | 31401451.000 | Aqueous | 19-Jun-18 11:00 | 21-Jun-18 |
| SC47887-04 | | | | |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS | | | | | | | | | | | | | |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | Ua | µg/l | 1.00 | 0.58 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 67-64-1 | Acetone | **9.39** | J | µg/l | 10.0 | 3.76 | 1 | " | " | " | " | " | X |
| 107-13-1 | Acrylonitrile | < 0.50 | Ua | µg/l | 0.50 | 0.48 | 1 | " | " | " | " | " | X |
| 71-43-2 | Benzene | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 108-86-1 | Bromobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 74-97-5 | Bromochloromethane | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-27-4 | Bromodichloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 75-25-2 | Bromoform | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 74-83-9 | Bromomethane | < 2.00 | Ua | µg/l | 2.00 | 0.45 | 1 | " | " | " | " | " | X |
| 78-93-3 | 2-Butanone (MEK) | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 104-51-8 | n-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.47 | 1 | " | " | " | " | " | X |
| 135-98-8 | sec-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 98-06-6 | tert-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-15-0 | Carbon disulfide | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 56-23-5 | Carbon tetrachloride | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | X |
| 108-90-7 | Chlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-00-3 | Chloroethane | < 2.00 | Ua | µg/l | 2.00 | 0.40 | 1 | " | " | " | " | " | X |
| 67-66-3 | Chloroform | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 74-87-3 | Chloromethane | **1.35** | J | µg/l | 2.00 | 0.36 | 1 | " | " | " | " | " | X |
| 95-49-8 | 2-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 106-43-4 | 4-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 124-48-1 | Dibromochloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 106-93-4 | 1,2-Dibromoethane (EDB) | < 0.50 | Ua | µg/l | 0.50 | 0.30 | 1 | " | " | " | " | " | X |
| 74-95-3 | Dibromomethane | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 95-50-1 | 1,2-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 541-73-1 | 1,3-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 106-46-7 | 1,4-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 75-71-8 | Dichlorodifluoromethane (Freon12) | < 2.00 | Ua | µg/l | 2.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-34-3 | 1,1-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 107-06-2 | 1,2-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.18 | 1 | " | " | " | " | " | X |
| 75-35-4 | 1,1-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 156-59-2 | cis-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 156-60-5 | trans-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 78-87-5 | 1,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 142-28-9 | 1,3-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 594-20-7 | 2,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.44 | 1 | " | " | " | " | " | X |
| 563-58-6 | 1,1-Dichloropropene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-01-5 | cis-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-02-6 | trans-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.31 | 1 | " | " | " | " | " | X |
| 100-41-4 | Ethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 87-68-3 | Hexachlorobutadiene | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 591-78-6 | 2-Hexanone (MBK) | < 2.00 | Ua | µg/l | 2.00 | 0.63 | 1 | " | " | " | " | " | X |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **Equipment Blank** | 31401451.000 | Aqueous | 19-Jun-18 11:00 | 21-Jun-18 |
| SC47887-04 | | | | |

| CAS No. | Analyte(s) | Result | Flag | Units | *RDL | MDL | Dilution | Method Ref. | Prepared | Analyzed | Analyst | Batch | Cert. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 | | | | | | | | | | | | | |
| 98-82-8 | Isopropylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 99-87-6 | 4-Isopropyltoluene | < 1.00 | Ua | µg/l | 1.00 | 0.42 | 1 | " | " | " | " | " | X |
| 1634-04-4 | Methyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | < 2.00 | Ua | µg/l | 2.00 | 0.35 | 1 | " | " | " | " | " | X |
| 75-09-2 | Methylene chloride | **0.52** | J | µg/l | 2.00 | 0.38 | 1 | " | " | " | " | " | X |
| 91-20-3 | Naphthalene | < 2.00 | Ua | µg/l | 2.00 | 1.39 | 1 | " | " | " | " | " | X |
| 103-65-1 | n-Propylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 100-42-5 | Styrene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 127-18-4 | Tetrachloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 108-88-3 | Toluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 87-61-6 | 1,2,3-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 120-82-1 | 1,2,4-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 108-70-3 | 1,3,5-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | |
| 71-55-6 | 1,1,1-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 79-00-5 | 1,1,2-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 79-01-6 | Trichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.36 | 1 | " | " | " | " | " | X |
| 75-69-4 | Trichlorofluoromethane (Freon 11) | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 96-18-4 | 1,2,3-Trichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.26 | 1 | " | " | " | " | " | X |
| 95-63-6 | 1,2,4-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.62 | 1 | " | " | " | " | " | X |
| 108-67-8 | 1,3,5-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.54 | 1 | " | " | " | " | " | X |
| 75-01-4 | Vinyl chloride | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 179601-23-1 | m,p-Xylene | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 95-47-6 | o-Xylene | < 1.00 | Ua | µg/l | 1.00 | 0.41 | 1 | " | " | " | " | " | X |
| 109-99-9 | Tetrahydrofuran | < 2.00 | Ua | µg/l | 2.00 | 0.50 | 1 | " | " | " | " | " | |
| 60-29-7 | Ethyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 994-05-8 | Tert-amyl methyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 637-92-3 | Ethyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 108-20-3 | Di-isopropyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 75-65-0 | Tert-Butanol / butyl alcohol | < 10.0 | Ua | µg/l | 10.0 | 3.13 | 1 | " | " | " | " | " | X |
| 123-91-1 | 1,4-Dioxane | < 20.0 | Ua | µg/l | 20.0 | 5.81 | 1 | " | " | " | " | " | X |
| 110-57-6 | trans-1,4-Dichloro-2-butene | < 5.00 | Ua | µg/l | 5.00 | 0.61 | 1 | " | " | " | " | " | X |
| 64-17-5 | Ethanol | < 200 | Ua | µg/l | 200 | 13.2 | 1 | " | " | " | " | " | X |
| *Surrogate recoveries:* | | | | | | | | | | | | | |
| *460-00-4* | *4-Bromofluorobenzene* | *96* | | | *70-130 %* | | | " | " | " | " | " | |
| *2037-26-5* | *Toluene-d8* | *95* | | | *70-130 %* | | | " | " | " | " | " | |
| *17060-07-0* | *1,2-Dichloroethane-d4* | *102* | | | *70-130 %* | | | " | " | " | " | " | |
| *1868-53-7* | *Dibromofluoromethane* | *105* | | | *70-130 %* | | | " | " | " | " | " | |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **Trip Blank** | 31401451.000 | Aqueous | 19-Jun-18 00:00 | 21-Jun-18 |
| SC47887-05 | | | | |

| *CAS No.* | *Analyte(s)* | *Result* | *Flag* | *Units* | **RDL* | *MDL* | *Dilution* | *Method Ref.* | *Prepared* | *Analyzed* | *Analyst* | *Batch* | *Cert.* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 Prepared by method SW846 5030 Water MS | | | | | | | | | | | | | |
| 76-13-1 | 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | Ua | µg/l | 1.00 | 0.58 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 67-64-1 | Acetone | < 10.0 | Ua | µg/l | 10.0 | 3.76 | 1 | " | " | " | " | " | X |
| 107-13-1 | Acrylonitrile | < 0.50 | Ua | µg/l | 0.50 | 0.48 | 1 | " | " | " | " | " | X |
| 71-43-2 | Benzene | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 108-86-1 | Bromobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 74-97-5 | Bromochloromethane | < 1.00 | Ua | µg/l | 1.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-27-4 | Bromodichloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 75-25-2 | Bromoform | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 74-83-9 | Bromomethane | < 2.00 | Ua | µg/l | 2.00 | 0.45 | 1 | " | " | " | " | " | X |
| 78-93-3 | 2-Butanone (MEK) | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 104-51-8 | n-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.47 | 1 | " | " | " | " | " | X |
| 135-98-8 | sec-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 98-06-6 | tert-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-15-0 | Carbon disulfide | < 2.00 | Ua | µg/l | 2.00 | 0.70 | 1 | " | " | " | " | " | X |
| 56-23-5 | Carbon tetrachloride | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | X |
| 108-90-7 | Chlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 75-00-3 | Chloroethane | < 2.00 | Ua | µg/l | 2.00 | 0.40 | 1 | " | " | " | " | " | X |
| 67-66-3 | Chloroform | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 74-87-3 | Chloromethane | < 2.00 | Ua | µg/l | 2.00 | 0.36 | 1 | " | " | " | " | " | X |
| 95-49-8 | 2-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 106-43-4 | 4-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 124-48-1 | Dibromochloromethane | < 0.50 | Ua | µg/l | 0.50 | 0.29 | 1 | " | " | " | " | " | X |
| 106-93-4 | 1,2-Dibromoethane (EDB) | < 0.50 | Ua | µg/l | 0.50 | 0.30 | 1 | " | " | " | " | " | X |
| 74-95-3 | Dibromomethane | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 95-50-1 | 1,2-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 541-73-1 | 1,3-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 106-46-7 | 1,4-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.27 | 1 | " | " | " | " | " | X |
| 75-71-8 | Dichlorodifluoromethane (Freon12) | < 2.00 | Ua | µg/l | 2.00 | 0.34 | 1 | " | " | " | " | " | X |
| 75-34-3 | 1,1-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 107-06-2 | 1,2-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.18 | 1 | " | " | " | " | " | X |
| 75-35-4 | 1,1-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 156-59-2 | cis-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 156-60-5 | trans-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 78-87-5 | 1,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 142-28-9 | 1,3-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 594-20-7 | 2,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.44 | 1 | " | " | " | " | " | X |
| 563-58-6 | 1,1-Dichloropropene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-01-5 | cis-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.33 | 1 | " | " | " | " | " | X |
| 10061-02-6 | trans-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | 0.31 | 1 | " | " | " | " | " | X |
| 100-41-4 | Ethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 87-68-3 | Hexachlorobutadiene | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 591-78-6 | 2-Hexanone (MBK) | < 2.00 | Ua | µg/l | 2.00 | 0.63 | 1 | " | " | " | " | " | X |

| Sample Identification | Client Project # | Matrix | Collection Date/Time | Received |
|---|---|---|---|---|
| **Trip Blank** | 31401451.000 | Aqueous | 19-Jun-18 00:00 | 21-Jun-18 |
| SC47887-05 | | | | |

| *CAS No.* | *Analyte(s)* | *Result* | *Flag* | *Units* | **RDL* | *MDL* | *Dilution* | *Method Ref.* | *Prepared* | *Analyzed* | *Analyst* | *Batch* | *Cert.* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | | | | | | | | |
| Volatile Organic Compounds by SW846 8260 | | | | | | | | | | | | | |
| 98-82-8 | Isopropylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | SW846 8260C | 25-Jun-18 | 26-Jun-18 | GMA | 1808754 | X |
| 99-87-6 | 4-Isopropyltoluene | < 1.00 | Ua | µg/l | 1.00 | 0.42 | 1 | " | " | " | " | " | X |
| 1634-04-4 | Methyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | < 2.00 | Ua | µg/l | 2.00 | 0.35 | 1 | " | " | " | " | " | X |
| 75-09-2 | Methylene chloride | < 2.00 | Ua | µg/l | 2.00 | 0.38 | 1 | " | " | " | " | " | X |
| 91-20-3 | Naphthalene | < 2.00 | Ua | µg/l | 2.00 | 1.39 | 1 | " | " | " | " | " | X |
| 103-65-1 | n-Propylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 100-42-5 | Styrene | < 1.00 | Ua | µg/l | 1.00 | 0.33 | 1 | " | " | " | " | " | X |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | < 0.50 | Ua | µg/l | 0.50 | 0.26 | 1 | " | " | " | " | " | X |
| 127-18-4 | Tetrachloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 108-88-3 | Toluene | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 87-61-6 | 1,2,3-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.38 | 1 | " | " | " | " | " | X |
| 120-82-1 | 1,2,4-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.32 | 1 | " | " | " | " | " | X |
| 108-70-3 | 1,3,5-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | 0.39 | 1 | " | " | " | " | " | |
| 71-55-6 | 1,1,1-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.24 | 1 | " | " | " | " | " | X |
| 79-00-5 | 1,1,2-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | 0.31 | 1 | " | " | " | " | " | X |
| 79-01-6 | Trichloroethene | < 1.00 | Ua | µg/l | 1.00 | 0.36 | 1 | " | " | " | " | " | X |
| 75-69-4 | Trichlorofluoromethane (Freon 11) | < 1.00 | Ua | µg/l | 1.00 | 0.28 | 1 | " | " | " | " | " | X |
| 96-18-4 | 1,2,3-Trichloropropane | < 1.00 | Ua | µg/l | 1.00 | 0.26 | 1 | " | " | " | " | " | X |
| 95-63-6 | 1,2,4-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.62 | 1 | " | " | " | " | " | X |
| 108-67-8 | 1,3,5-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | 0.54 | 1 | " | " | " | " | " | X |
| 75-01-4 | Vinyl chloride | < 1.00 | Ua | µg/l | 1.00 | 0.40 | 1 | " | " | " | " | " | X |
| 179601-23-1 | m,p-Xylene | < 2.00 | Ua | µg/l | 2.00 | 0.47 | 1 | " | " | " | " | " | X |
| 95-47-6 | o-Xylene | < 1.00 | Ua | µg/l | 1.00 | 0.41 | 1 | " | " | " | " | " | X |
| 109-99-9 | Tetrahydrofuran | < 2.00 | Ua | µg/l | 2.00 | 0.50 | 1 | " | " | " | " | " | |
| 60-29-7 | Ethyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 994-05-8 | Tert-amyl methyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.30 | 1 | " | " | " | " | " | X |
| 637-92-3 | Ethyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 108-20-3 | Di-isopropyl ether | < 1.00 | Ua | µg/l | 1.00 | 0.29 | 1 | " | " | " | " | " | X |
| 75-65-0 | Tert-Butanol / butyl alcohol | < 10.0 | Ua | µg/l | 10.0 | 3.13 | 1 | " | " | " | " | " | X |
| 123-91-1 | 1,4-Dioxane | < 20.0 | Ua | µg/l | 20.0 | 5.81 | 1 | " | " | " | " | " | X |
| 110-57-6 | trans-1,4-Dichloro-2-buten e | < 5.00 | Ua | µg/l | 5.00 | 0.61 | 1 | " | " | " | " | " | X |
| 64-17-5 | Ethanol | < 200 | Ua | µg/l | 200 | 13.2 | 1 | " | " | " | " | " | X |
| *Surrogate recoveries:* | | | | | | | | | | | | | |
| *460-00-4* | *4-Bromofluorobenzene* | *96* | | | *70-130 %* | | | " | " | " | " | " | |
| *2037-26-5* | *Toluene-d8* | *97* | | | *70-130 %* | | | " | " | " | " | " | |
| *17060-07-0* | *1,2-Dichloroethane-d4* | *104* | | | *70-130 %* | | | " | " | " | " | " | |
| *1868-53-7* | *Dibromofluoromethane* | *103* | | | *70-130 %* | | | " | " | " | " | " | |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SW846 8260C** | | | | | | | | | | |
| **Batch 1808754 - SW846 5030 Water MS** | | | | | | | | | | |
| **Blank (1808754-BLK1)** | | | | | Prepared & Analyzed: 25-Jun-18 | | | | | |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Acetone | < 10.0 | Ua | µg/l | 10.0 | | | | | | |
| Acrylonitrile | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| Benzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Bromobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Bromochloromethane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Bromodichloromethane | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| Bromoform | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Bromomethane | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| 2-Butanone (MEK) | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| n-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| sec-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| tert-Butylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Carbon disulfide | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| Carbon tetrachloride | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Chlorobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Chloroethane | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| Chloroform | **0.31** | J | µg/l | 1.00 | | | | | | |
| Chloromethane | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| 2-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 4-Chlorotoluene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2-Dibromo-3-chloropropane | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| Dibromochloromethane | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| 1,2-Dibromoethane (EDB) | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| Dibromomethane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,3-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,4-Dichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Dichlorodifluoromethane (Freon12) | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| 1,1-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2-Dichloroethane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,1-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| cis-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| trans-1,2-Dichloroethene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,3-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 2,2-Dichloropropane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,1-Dichloropropene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| cis-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| trans-1,3-Dichloropropene | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| Ethylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Hexachlorobutadiene | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| 2-Hexanone (MBK) | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| Isopropylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 4-Isopropyltoluene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Methyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 4-Methyl-2-pentanone (MIBK) | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| Methylene chloride | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| Naphthalene | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| n-Propylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SW846 8260C** | | | | | | | | | | |
| **Batch 1808754 - SW846 5030 Water MS** | | | | | | | | | | |
| **Blank (1808754-BLK1)** | | | | | Prepared & Analyzed: 25-Jun-18 | | | | | |
| Styrene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,1,1,2-Tetrachloroethane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,1,2,2-Tetrachloroethane | < 0.50 | Ua | µg/l | 0.50 | | | | | | |
| Tetrachloroethene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Toluene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2,3-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2,4-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,3,5-Trichlorobenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,1,1-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,1,2-Trichloroethane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Trichloroethene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Trichlorofluoromethane (Freon 11) | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2,3-Trichloropropane | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,2,4-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| 1,3,5-Trimethylbenzene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Vinyl chloride | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| m,p-Xylene | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| o-Xylene | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Tetrahydrofuran | < 2.00 | Ua | µg/l | 2.00 | | | | | | |
| Ethyl ether | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Tert-amyl methyl ether | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Ethyl tert-butyl ether | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Di-isopropyl ether | < 1.00 | Ua | µg/l | 1.00 | | | | | | |
| Tert-Butanol / butyl alcohol | < 10.0 | Ua | µg/l | 10.0 | | | | | | |
| 1,4-Dioxane | < 20.0 | Ua | µg/l | 20.0 | | | | | | |
| trans-1,4-Dichloro-2-butene | < 5.00 | Ua | µg/l | 5.00 | | | | | | |
| Ethanol | < 200 | Ua | µg/l | 200 | | | | | | |
| *Surrogate: 4-Bromofluorobenzene* | *48.2* | | µg/l | | *50.0* | | *96* | *70-130* | | |
| *Surrogate: Toluene-d8* | *49.3* | | µg/l | | *50.0* | | *99* | *70-130* | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *49.9* | | µg/l | | *50.0* | | *100* | *70-130* | | |
| *Surrogate: Dibromofluoromethane* | *50.6* | | µg/l | | *50.0* | | *101* | *70-130* | | |
| **LCS (1808754-BS1)** | | | | | Prepared & Analyzed: 25-Jun-18 | | | | | |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | **18.3** | | µg/l | | 20.0 | | 91 | 70-130 | | |
| Acetone | **18.8** | | µg/l | | 20.0 | | 94 | 70-130 | | |
| Acrylonitrile | **16.1** | | µg/l | | 20.0 | | 81 | 70-130 | | |
| Benzene | **18.4** | | µg/l | | 20.0 | | 92 | 70-130 | | |
| Bromobenzene | **22.3** | | µg/l | | 20.0 | | 111 | 70-130 | | |
| Bromochloromethane | **17.2** | | µg/l | | 20.0 | | 86 | 70-130 | | |
| Bromodichloromethane | **17.8** | | µg/l | | 20.0 | | 89 | 70-130 | | |
| Bromoform | **21.0** | | µg/l | | 20.0 | | 105 | 70-130 | | |
| Bromomethane | **17.5** | | µg/l | | 20.0 | | 87 | 70-130 | | |
| 2-Butanone (MEK) | **18.7** | | µg/l | | 20.0 | | 94 | 70-130 | | |
| n-Butylbenzene | **20.2** | | µg/l | | 20.0 | | 101 | 70-130 | | |
| sec-Butylbenzene | **20.9** | | µg/l | | 20.0 | | 105 | 70-130 | | |
| tert-Butylbenzene | **22.0** | | µg/l | | 20.0 | | 110 | 70-130 | | |
| Carbon disulfide | **17.7** | | µg/l | | 20.0 | | 89 | 70-130 | | |
| Carbon tetrachloride | **17.6** | | µg/l | | 20.0 | | 88 | 70-130 | | |
| Chlorobenzene | **20.0** | | µg/l | | 20.0 | | 100 | 70-130 | | |
| Chloroethane | **17.3** | | µg/l | | 20.0 | | 87 | 70-130 | | |
| Chloroform | **17.4** | | µg/l | | 20.0 | | 87 | 70-130 | | |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SW846 8260C** | | | | | | | | | | |
| **Batch 1808754 - SW846 5030 Water MS** | | | | | | | | | | |
| **LCS (1808754-BS1)** | | | | | Prepared & Analyzed: 25-Jun-18 | | | | | |
| Chloromethane | **15.2** | | µg/l | | 20.0 | | 76 | 70-130 | | |
| 2-Chlorotoluene | **19.2** | | µg/l | | 20.0 | | 96 | 70-130 | | |
| 4-Chlorotoluene | **19.8** | | µg/l | | 20.0 | | 99 | 70-130 | | |
| 1,2-Dibromo-3-chloropropane | **19.6** | | µg/l | | 20.0 | | 98 | 70-130 | | |
| Dibromochloromethane | **18.8** | | µg/l | | 20.0 | | 94 | 70-130 | | |
| 1,2-Dibromoethane (EDB) | **19.2** | | µg/l | | 20.0 | | 96 | 70-130 | | |
| Dibromomethane | **17.8** | | µg/l | | 20.0 | | 89 | 70-130 | | |
| 1,2-Dichlorobenzene | **21.1** | | µg/l | | 20.0 | | 105 | 70-130 | | |
| 1,3-Dichlorobenzene | **22.8** | | µg/l | | 20.0 | | 114 | 70-130 | | |
| 1,4-Dichlorobenzene | **19.3** | | µg/l | | 20.0 | | 96 | 70-130 | | |
| Dichlorodifluoromethane (Freon12) | **19.3** | | µg/l | | 20.0 | | 96 | 70-130 | | |
| 1,1-Dichloroethane | **18.2** | | µg/l | | 20.0 | | 91 | 70-130 | | |
| 1,2-Dichloroethane | **17.5** | | µg/l | | 20.0 | | 88 | 70-130 | | |
| 1,1-Dichloroethene | **20.1** | | µg/l | | 20.0 | | 101 | 70-130 | | |
| cis-1,2-Dichloroethene | **18.0** | | µg/l | | 20.0 | | 90 | 70-130 | | |
| trans-1,2-Dichloroethene | **18.7** | | µg/l | | 20.0 | | 93 | 70-130 | | |
| 1,2-Dichloropropane | **17.0** | | µg/l | | 20.0 | | 85 | 70-130 | | |
| 1,3-Dichloropropane | **17.2** | | µg/l | | 20.0 | | 86 | 70-130 | | |
| 2,2-Dichloropropane | **16.2** | | µg/l | | 20.0 | | 81 | 70-130 | | |
| 1,1-Dichloropropene | **18.2** | | µg/l | | 20.0 | | 91 | 70-130 | | |
| cis-1,3-Dichloropropene | **17.5** | | µg/l | | 20.0 | | 88 | 70-130 | | |
| trans-1,3-Dichloropropene | **18.2** | | µg/l | | 20.0 | | 91 | 70-130 | | |
| Ethylbenzene | **20.4** | | µg/l | | 20.0 | | 102 | 70-130 | | |
| Hexachlorobutadiene | **23.2** | | µg/l | | 20.0 | | 116 | 70-130 | | |
| 2-Hexanone (MBK) | **18.9** | | µg/l | | 20.0 | | 94 | 70-130 | | |
| Isopropylbenzene | **23.0** | | µg/l | | 20.0 | | 115 | 70-130 | | |
| 4-Isopropyltoluene | **20.3** | | µg/l | | 20.0 | | 101 | 70-130 | | |
| Methyl tert-butyl ether | **19.7** | | µg/l | | 20.0 | | 98 | 70-130 | | |
| 4-Methyl-2-pentanone (MIBK) | **17.9** | | µg/l | | 20.0 | | 90 | 70-130 | | |
| Methylene chloride | **17.8** | | µg/l | | 20.0 | | 89 | 70-130 | | |
| Naphthalene | **22.7** | | µg/l | | 20.0 | | 114 | 70-130 | | |
| n-Propylbenzene | **20.7** | | µg/l | | 20.0 | | 104 | 70-130 | | |
| Styrene | **21.3** | | µg/l | | 20.0 | | 106 | 70-130 | | |
| 1,1,1,2-Tetrachloroethane | **21.5** | | µg/l | | 20.0 | | 108 | 70-130 | | |
| 1,1,2,2-Tetrachloroethane | **18.9** | | µg/l | | 20.0 | | 94 | 70-130 | | |
| Tetrachloroethene | **19.3** | | µg/l | | 20.0 | | 97 | 70-130 | | |
| Toluene | **18.7** | | µg/l | | 20.0 | | 94 | 70-130 | | |
| 1,2,3-Trichlorobenzene | **22.8** | | µg/l | | 20.0 | | 114 | 70-130 | | |
| 1,2,4-Trichlorobenzene | **22.3** | | µg/l | | 20.0 | | 111 | 70-130 | | |
| 1,3,5-Trichlorobenzene | **22.6** | | µg/l | | 20.0 | | 113 | 70-130 | | |
| 1,1,1-Trichloroethane | **17.7** | | µg/l | | 20.0 | | 88 | 70-130 | | |
| 1,1,2-Trichloroethane | **17.7** | | µg/l | | 20.0 | | 89 | 70-130 | | |
| Trichloroethene | **19.3** | | µg/l | | 20.0 | | 97 | 70-130 | | |
| Trichlorofluoromethane (Freon 11) | **19.7** | | µg/l | | 20.0 | | 98 | 70-130 | | |
| 1,2,3-Trichloropropane | **20.5** | | µg/l | | 20.0 | | 103 | 70-130 | | |
| 1,2,4-Trimethylbenzene | **21.3** | | µg/l | | 20.0 | | 107 | 70-130 | | |
| 1,3,5-Trimethylbenzene | **21.1** | | µg/l | | 20.0 | | 106 | 70-130 | | |
| Vinyl chloride | **21.9** | | µg/l | | 20.0 | | 109 | 70-130 | | |
| m,p-Xylene | **20.0** | | µg/l | | 20.0 | | 100 | 70-130 | | |
| o-Xylene | **20.0** | | µg/l | | 20.0 | | 100 | 70-130 | | |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SW846 8260C** | | | | | | | | | | |
| **Batch 1808754 - SW846 5030 Water MS** | | | | | | | | | | |
| **LCS (1808754-BS1)** | | | | | Prepared & Analyzed: 25-Jun-18 | | | | | |
| Tetrahydrofuran | **15.2** | | µg/l | | 20.0 | | 76 | 70-130 | | |
| Ethyl ether | **17.0** | | µg/l | | 20.0 | | 85 | 70-130 | | |
| Tert-amyl methyl ether | **16.8** | | µg/l | | 20.0 | | 84 | 70-130 | | |
| Ethyl tert-butyl ether | **19.9** | | µg/l | | 20.0 | | 100 | 70-130 | | |
| Di-isopropyl ether | **17.8** | | µg/l | | 20.0 | | 89 | 70-130 | | |
| Tert-Butanol / butyl alcohol | **195** | | µg/l | | 200 | | 97 | 70-130 | | |
| 1,4-Dioxane | **188** | | µg/l | | 200 | | 94 | 70-130 | | |
| trans-1,4-Dichloro-2-butene | **18.4** | | µg/l | | 20.0 | | 92 | 70-130 | | |
| Ethanol | **355** | | µg/l | | 400 | | 89 | 70-130 | | |
| *Surrogate: 4-Bromofluorobenzene* | *52.0* | | µg/l | | *50.0* | | *104* | *70-130* | | |
| *Surrogate: Toluene-d8* | *48.1* | | µg/l | | *50.0* | | *96* | *70-130* | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *47.5* | | µg/l | | *50.0* | | *95* | *70-130* | | |
| *Surrogate: Dibromofluoromethane* | *49.3* | | µg/l | | *50.0* | | *99* | *70-130* | | |
| **LCS Dup (1808754-BSD1)** | | | | | Prepared & Analyzed: 25-Jun-18 | | | | | |
| 1,1,2-Trichlorotrifluoroethane (Freon 113) | **16.9** | | µg/l | | 20.0 | | 84 | 70-130 | 8 | 20 |
| Acetone | **18.8** | | µg/l | | 20.0 | | 94 | 70-130 | 0.2 | 20 |
| Acrylonitrile | **16.3** | | µg/l | | 20.0 | | 82 | 70-130 | 1 | 20 |
| Benzene | **17.7** | | µg/l | | 20.0 | | 89 | 70-130 | 4 | 20 |
| Bromobenzene | **21.2** | | µg/l | | 20.0 | | 106 | 70-130 | 5 | 20 |
| Bromochloromethane | **17.0** | | µg/l | | 20.0 | | 85 | 70-130 | 1 | 20 |
| Bromodichloromethane | **17.0** | | µg/l | | 20.0 | | 85 | 70-130 | 4 | 20 |
| Bromoform | **20.8** | | µg/l | | 20.0 | | 104 | 70-130 | 1 | 20 |
| Bromomethane | **16.4** | | µg/l | | 20.0 | | 82 | 70-130 | 6 | 20 |
| 2-Butanone (MEK) | **17.9** | | µg/l | | 20.0 | | 89 | 70-130 | 4 | 20 |
| n-Butylbenzene | **18.7** | | µg/l | | 20.0 | | 94 | 70-130 | 8 | 20 |
| sec-Butylbenzene | **19.0** | | µg/l | | 20.0 | | 95 | 70-130 | 10 | 20 |
| tert-Butylbenzene | **20.6** | | µg/l | | 20.0 | | 103 | 70-130 | 6 | 20 |
| Carbon disulfide | **16.3** | | µg/l | | 20.0 | | 82 | 70-130 | 8 | 20 |
| Carbon tetrachloride | **16.6** | | µg/l | | 20.0 | | 83 | 70-130 | 6 | 20 |
| Chlorobenzene | **19.0** | | µg/l | | 20.0 | | 95 | 70-130 | 5 | 20 |
| Chloroethane | **16.5** | | µg/l | | 20.0 | | 82 | 70-130 | 5 | 20 |
| Chloroform | **16.3** | | µg/l | | 20.0 | | 82 | 70-130 | 6 | 20 |
| Chloromethane | **14.3** | | µg/l | | 20.0 | | 71 | 70-130 | 7 | 20 |
| 2-Chlorotoluene | **17.7** | | µg/l | | 20.0 | | 89 | 70-130 | 8 | 20 |
| 4-Chlorotoluene | **18.6** | | µg/l | | 20.0 | | 93 | 70-130 | 7 | 20 |
| 1,2-Dibromo-3-chloropropane | **19.9** | | µg/l | | 20.0 | | 99 | 70-130 | 1 | 20 |
| Dibromochloromethane | **18.5** | | µg/l | | 20.0 | | 92 | 70-130 | 2 | 20 |
| 1,2-Dibromoethane (EDB) | **18.6** | | µg/l | | 20.0 | | 93 | 70-130 | 3 | 20 |
| Dibromomethane | **17.1** | | µg/l | | 20.0 | | 85 | 70-130 | 4 | 20 |
| 1,2-Dichlorobenzene | **20.3** | | µg/l | | 20.0 | | 102 | 70-130 | 4 | 20 |
| 1,3-Dichlorobenzene | **21.8** | | µg/l | | 20.0 | | 109 | 70-130 | 4 | 20 |
| 1,4-Dichlorobenzene | **18.3** | | µg/l | | 20.0 | | 92 | 70-130 | 5 | 20 |
| Dichlorodifluoromethane (Freon12) | **17.4** | | µg/l | | 20.0 | | 87 | 70-130 | 10 | 20 |
| 1,1-Dichloroethane | **16.9** | | µg/l | | 20.0 | | 85 | 70-130 | 7 | 20 |
| 1,2-Dichloroethane | **16.8** | | µg/l | | 20.0 | | 84 | 70-130 | 4 | 20 |
| 1,1-Dichloroethene | **18.1** | | µg/l | | 20.0 | | 91 | 70-130 | 10 | 20 |
| cis-1,2-Dichloroethene | **17.2** | | µg/l | | 20.0 | | 86 | 70-130 | 5 | 20 |
| trans-1,2-Dichloroethene | **17.3** | | µg/l | | 20.0 | | 86 | 70-130 | 8 | 20 |
| 1,2-Dichloropropane | **15.8** | | µg/l | | 20.0 | | 79 | 70-130 | 7 | 20 |
| 1,3-Dichloropropane | **16.5** | | µg/l | | 20.0 | | 83 | 70-130 | 4 | 20 |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SW846 8260C** | | | | | | | | | | |
| **Batch 1808754 - SW846 5030 Water MS** | | | | | | | | | | |
| **LCS Dup (1808754-BSD1)** | | | | | Prepared & Analyzed: 25-Jun-18 | | | | | |
| 2,2-Dichloropropane | **15.0** | | µg/l | | 20.0 | | 75 | 70-130 | 8 | 20 |
| 1,1-Dichloropropene | **17.2** | | µg/l | | 20.0 | | 86 | 70-130 | 6 | 20 |
| cis-1,3-Dichloropropene | **16.6** | | µg/l | | 20.0 | | 83 | 70-130 | 5 | 20 |
| trans-1,3-Dichloropropene | **17.6** | | µg/l | | 20.0 | | 88 | 70-130 | 3 | 20 |
| Ethylbenzene | **19.5** | | µg/l | | 20.0 | | 97 | 70-130 | 5 | 20 |
| Hexachlorobutadiene | **21.2** | | µg/l | | 20.0 | | 106 | 70-130 | 9 | 20 |
| 2-Hexanone (MBK) | **18.3** | | µg/l | | 20.0 | | 91 | 70-130 | 3 | 20 |
| Isopropylbenzene | **21.7** | | µg/l | | 20.0 | | 108 | 70-130 | 6 | 20 |
| 4-Isopropyltoluene | **18.5** | | µg/l | | 20.0 | | 92 | 70-130 | 9 | 20 |
| Methyl tert-butyl ether | **18.9** | | µg/l | | 20.0 | | 95 | 70-130 | 4 | 20 |
| 4-Methyl-2-pentanone (MIBK) | **18.1** | | µg/l | | 20.0 | | 91 | 70-130 | 1 | 20 |
| Methylene chloride | **17.0** | | µg/l | | 20.0 | | 85 | 70-130 | 5 | 20 |
| Naphthalene | **21.5** | | µg/l | | 20.0 | | 107 | 70-130 | 6 | 20 |
| n-Propylbenzene | **19.6** | | µg/l | | 20.0 | | 98 | 70-130 | 6 | 20 |
| Styrene | **20.6** | | µg/l | | 20.0 | | 103 | 70-130 | 3 | 20 |
| 1,1,1,2-Tetrachloroethane | **20.3** | | µg/l | | 20.0 | | 101 | 70-130 | 6 | 20 |
| 1,1,2,2-Tetrachloroethane | **19.4** | | µg/l | | 20.0 | | 97 | 70-130 | 3 | 20 |
| Tetrachloroethene | **17.4** | | µg/l | | 20.0 | | 87 | 70-130 | 11 | 20 |
| Toluene | **16.8** | | µg/l | | 20.0 | | 84 | 70-130 | 11 | 20 |
| 1,2,3-Trichlorobenzene | **21.7** | | µg/l | | 20.0 | | 109 | 70-130 | 5 | 20 |
| 1,2,4-Trichlorobenzene | **21.5** | | µg/l | | 20.0 | | 107 | 70-130 | 4 | 20 |
| 1,3,5-Trichlorobenzene | **21.4** | | µg/l | | 20.0 | | 107 | 70-130 | 6 | 20 |
| 1,1,1-Trichloroethane | **16.2** | | µg/l | | 20.0 | | 81 | 70-130 | 8 | 20 |
| 1,1,2-Trichloroethane | **16.9** | | µg/l | | 20.0 | | 84 | 70-130 | 5 | 20 |
| Trichloroethene | **17.9** | | µg/l | | 20.0 | | 89 | 70-130 | 8 | 20 |
| Trichlorofluoromethane (Freon 11) | **17.8** | | µg/l | | 20.0 | | 89 | 70-130 | 10 | 20 |
| 1,2,3-Trichloropropane | **20.2** | | µg/l | | 20.0 | | 101 | 70-130 | 1 | 20 |
| 1,2,4-Trimethylbenzene | **19.8** | | µg/l | | 20.0 | | 99 | 70-130 | 7 | 20 |
| 1,3,5-Trimethylbenzene | **19.6** | | µg/l | | 20.0 | | 98 | 70-130 | 8 | 20 |
| Vinyl chloride | **18.2** | | µg/l | | 20.0 | | 91 | 70-130 | 18 | 20 |
| m,p-Xylene | **19.6** | | µg/l | | 20.0 | | 98 | 70-130 | 2 | 20 |
| o-Xylene | **19.4** | | µg/l | | 20.0 | | 97 | 70-130 | 3 | 20 |
| Tetrahydrofuran | **15.6** | | µg/l | | 20.0 | | 78 | 70-130 | 2 | 20 |
| Ethyl ether | **16.9** | | µg/l | | 20.0 | | 84 | 70-130 | 0.6 | 20 |
| Tert-amyl methyl ether | **15.9** | | µg/l | | 20.0 | | 79 | 70-130 | 6 | 20 |
| Ethyl tert-butyl ether | **19.1** | | µg/l | | 20.0 | | 95 | 70-130 | 4 | 20 |
| Di-isopropyl ether | **16.7** | | µg/l | | 20.0 | | 84 | 70-130 | 6 | 20 |
| Tert-Butanol / butyl alcohol | **190** | | µg/l | | 200 | | 95 | 70-130 | 2 | 20 |
| 1,4-Dioxane | **189** | | µg/l | | 200 | | 94 | 70-130 | 0.2 | 20 |
| trans-1,4-Dichloro-2-butene | **18.2** | | µg/l | | 20.0 | | 91 | 70-130 | 0.7 | 20 |
| Ethanol | **361** | | µg/l | | 400 | | 90 | 70-130 | 2 | 20 |
| *Surrogate: 4-Bromofluorobenzene* | *52.7* | | µg/l | | *50.0* | | *105* | *70-130* | | |
| *Surrogate: Toluene-d8* | *48.1* | | µg/l | | *50.0* | | *96* | *70-130* | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *47.0* | | µg/l | | *50.0* | | *94* | *70-130* | | |
| *Surrogate: Dibromofluoromethane* | *48.9* | | µg/l | | *50.0* | | *98* | *70-130* | | |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SW846 6010C** | | | | | | | | | | |
| **Batch 1809004 - SW846 3005A** | | | | | | | | | | |
| **Blank (1809004-BLK1)** | | | | | Prepared: 28-Jun-18 Analyzed: 30-Jun-18 | | | | | |
| Iron | < 0.125 | Ua | mg/l | 0.125 | | | | | | |
| **LCS (1809004-BS1)** | | | | | Prepared: 28-Jun-18 Analyzed: 30-Jun-18 | | | | | |
| Iron | **1.34** | | mg/l | 0.125 | 1.25 | | 107 | 85-115 | | |
| **LCS Dup (1809004-BSD1)** | | | | | Prepared: 28-Jun-18 Analyzed: 30-Jun-18 | | | | | |
| Iron | **1.33** | | mg/l | 0.125 | 1.25 | | 107 | 85-115 | 0.7 | 20 |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SW846 6010C** | | | | | | | | | | |
| **Batch 1808906 - SW846 3005A** | | | | | | | | | | |
| **Blank (1808906-BLK1)** | | | | | | Prepared: 27-Jun-18 Analyzed: 29-Jun-18 | | | | |
| Iron | < 0.250 | Ua | mg/l | 0.250 | | | | | | |
| **LCS (1808906-BS1)** | | | | | | Prepared: 27-Jun-18 Analyzed: 29-Jun-18 | | | | |
| Iron | **2.17** | | mg/l | 0.250 | 2.00 | | 108 | 85-115 | | |
| **LCS Dup (1808906-BSD1)** | | | | | | Prepared: 27-Jun-18 Analyzed: 29-Jun-18 | | | | |
| Iron | **2.19** | | mg/l | 0.250 | 2.00 | | 110 | 85-115 | 1 | 20 |

## General Chemistry Parameters - Quality Control

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **EPA 300.0** | | | | | | | | | | |
| **Batch 1808650 - General Preparation** | | | | | | | | | | |
| **Blank (1808650-BLK1)** | | | | | | Prepared & Analyzed: 21-Jun-18 | | | | |
| Sulfate as SO4 | < 1.00 | Ua | mg/l | 1.00 | | | | | | |
| **LCS (1808650-BS1)** | | | | | | Prepared & Analyzed: 21-Jun-18 | | | | |
| Sulfate as SO4 | **20.7** | | mg/l | 1.00 | 20.0 | | 104 | 90-110 | | |
| **Reference (1808650-SRM1)** | | | | | | Prepared & Analyzed: 21-Jun-18 | | | | |
| Sulfate as SO4 | **25.4** | | mg/l | 1.00 | 25.0 | | 101 | 90-110 | | |
| **SM5310B (00, 11)** | | | | | | | | | | |
| **Batch 1809105 - General Preparation** | | | | | | | | | | |
| **Blank (1809105-BLK1)** | | | | | | Prepared & Analyzed: 29-Jun-18 | | | | |
| Total Organic Carbon | < 1.00 | Ua | mg/l | 1.00 | | | | | | |
| **LCS (1809105-BS1)** | | | | | | Prepared & Analyzed: 29-Jun-18 | | | | |
| Total Organic Carbon | **13.3** | | mg/l | 1.00 | 15.0 | | 89 | 85-115 | | |
| **Reference (1809105-SRM1)** | | | | | | Prepared & Analyzed: 29-Jun-18 | | | | |
| Total Organic Carbon | **13.5** | | mg/l | 1.00 | 15.0 | | 90 | 85-115 | | |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **RSK-175** | | | | | | | | | | |
| **Batch 1808994 - General Air Prep** | | | | | | | | | | |
| **Blank (1808994-BLK1)** | | | | | | Prepared & Analyzed: 27-Jun-18 | | | | |
| Methane | < 2.20 | Ua | µg/l | 2.20 | | | | | | |
| Ethane | < 5.00 | Ua | µg/l | 5.00 | | | | | | |
| Ethene | < 5.00 | Ua | µg/l | 5.00 | | | | | | |
| **LCS (1808994-BS1)** | | | | | | Prepared & Analyzed: 27-Jun-18 | | | | |
| Methane | **465** | | mg/l | | 500 | | 93 | 70-130 | | |
| Ethane | **537** | | mg/l | | 500 | | 107 | 70-130 | | |
| Ethene | **450** | | mg/l | | 500 | | 90 | 70-130 | | |
| **Duplicate (1808994-DUP1)** | | | **Source: SC47887-01** | | | Prepared & Analyzed: 27-Jun-18 | | | | |
| Methane | < 2.20 | Ua | µg/l | 2.20 | | BRL | | | | 30 |
| Ethane | < 5.00 | Ua | µg/l | 5.00 | | BRL | | | | 30 |
| Ethene | < 5.00 | Ua | µg/l | 5.00 | | BRL | | | | 30 |

| Analyte(s) | Result | Flag | Units | *RDL | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| **SM4500S-D-11** | | | | | | | | | | |
| **Batch 436179A - 436179-SM450** | | | | | | | | | | |
| **BLK (CA77388-BLK)** | | | | | | Prepared & Analyzed: 26-Jun-18 | | | | |
| Sulfide | < 0.05 | U | mg/l | 0.05 | | | | - | | |
| **DUP (CA77388-DUP)** | | | **Source: CA77388** | | | Prepared & Analyzed: 26-Jun-18 | | | | |
| Sulfide | < 0.05 | U | mg/l | 0.05 | | | | - | NC | 20 |
| **LCS (CA77388-LCS)** | | | | | | Prepared & Analyzed: 26-Jun-18 | | | | |
| Sulfide | **0.1895** | | mg/l | 0.05 | 0.2 | | 94.8 | 90-110 | | 20 |
| **MS (CA77388-MS)** | | | **Source: CA77388** | | | Prepared & Analyzed: 26-Jun-18 | | | | |
| Sulfide | **0.1869** | | mg/l | 0.05 | 0.2 | | 93.4 | 75-125 | | 20 |

## Notes and Definitions

| | |
|---|---|
| J | Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag). |
| U | Analyte included in the analysis, but not detected at or above the MDL. at or above the MRL. |
| Ua | Analyte included in the analysis, but not detected |
| dry | Sample results reported on a dry weight basis |
| NR | Not Reported |
| RPD | Relative Percent Difference |

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

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# CHAIN OF CUSTODY RECORD

Page 1 of 1

**Special Handling:**
- ☑ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Mark Goldberg
WSP
4 Research Drive Ste. 204
Shelton CT, 06484
Telephone #:
Project Mgr:

Invoice To: Same

P.O No.: _____ Quote #: _____

Project No: 31401451.000
Site Name: Rowe Industries
Location: Sag Harbor State: NY
Sampler(s): Sierra Anseeuw

**F**=Field Filtered **1**=$Na_2S2O_3$ **2**=HCl **3**=$H_2SO_4$ **4**=$HNO_3$ **5**=NaOH **6**=Ascorbic Acid
**7**=CH3OH **8**=$NaHSO_4$ **9**=Deionized Water **10**=$H_3PO_4$ **11**= NaOH + ZnAc **12**= _____

**DW**=Drinking Water **GW**=Groundwater **SW**=Surface Water **WW**=Waste Water
**O**=Oil **SO**=Soil **SL**=Sludge **A**=Indoor/Ambient Air **SG**=Soil Gas
**X1**= _____ **X2**= _____ **X3**= _____

**G**= Grab **C**=Compsite

| Lab ID: | Sample ID: | Date: | Time: | Type | Matrix | Containers: # of VOA Vials | # of Amber Glass | # of Clear Glass | # of Plastic | List Preservative Code below: | Analysis: VOCs | TOC | Total Iron | Sulfate, Nitrate, Nitrite | Sulfide | Dissolved Iron | Dissolved methane, dissolved ethene | dissolved ethane | Check if chlorinated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 2 | 10 | 4 | | 11 | 4, F | | | | |
| SC47887-01 | MW-98-01A | 6/19/2018 | 1355 | | S | 7 | | | 4 | | X | X | X | X | X | X | X | X | ☐ |
| -02 | MW-98-04 | 6/19/2018 | 1515 | | S | 7 | | | 4 | | X | X | X | X | X | X | X | X | ☐ |
| -03 | MW-98-05AR | 6/19/2018 | 1205 | | S | 7 | | | 4 | | X | X | X | X | X | X | X | X | ☐ |
| -04 | Equipment Blank | 6/19/2018 | 1100 | | | 2 | | | | | X | | | | | | | | ☐ |
| -05 | Trip Blank | | | | | 2 | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | | ☐ |

**QA/QC Reporting Notes:**
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☑ Standard ☐ No QC
☐ DQA* ☐ ASP A* ☑ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

| Relinquished by: | Received by: | Date: | Time: | Temp °C |
|---|---|---|---|---|
| Mark My Goldberg | WSP Fridge | 6/20/18 | 830 | Observed 1.2 |
| | | 6/21/18 | 2:55pm | Correction Factor 0 |
| | | 6/21/18 | 17:00 | Corrected 1.2 |
| | | | | IR ID # 01 |

☑ EDD format: Excel, PDF
☑ E-mail to: mark.goldberg@wsp.com
tunde.sanda@wsp.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☑ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SC47887 By

eurofins | Spectrum Analytical

# CHAIN OF CUSTODY RECORD

Page 1 of 1

**Special Handling:**
- ☑ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Mark Goldberg
WSP
4 Research Drive Ste. 204
Shelton CT, 06484
Telephone #:
Project Mgr:

Invoice To: Same

P.O No.: _____ Quote #: _____

Project No: 31401451.000
Site Name: Rowe Industries
Location: Sag Harbor State: NY
Sampler(s): Sierra Anseeuw

**F**=Field Filtered **1**=$Na_2S2O_3$ **2**=HCl **3**=$H_2SO_4$ **4**=$HNO_3$ **5**=NaOH **6**=Ascorbic Acid
**7**=CH3OH **8**=$NaHSO_4$ **9**=Deionized Water **10**=$H_3PO_4$ **11**= NaOH + ZnAc **12**= _____

**DW**=Drinking Water **GW**=Groundwater **SW**=Surface Water **WW**=Waste Water
**O**=Oil **SO**=Soil **SL**=Sludge **A**=Indoor/Ambient Air **SG**=Soil Gas
**X1**= _____ **X2**= _____ **X3**= _____

**G**= Grab **C**=Composite

| Lab ID: | Sample ID: | Date: | Time: | Type | Matrix | Containers: # of VOA Vials | # of Amber Glass | # of Clear Glass | # of Plastic | List Preservative Code below: 2 | 10 | 4 | | 11 | 4, F | | | Check if chlorinated | QA/QC Reporting Notes: * additional charges may appply |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Analysis: VOCs | TOC | Total Iron | Sulfate, Nitrate, Nitrite | Sulfide | Dissolved Iron | Dissolved methane, dissolved ethene | dissolved ethane | | |
| SC47887-01 | MW-98-01A | 6/19/2018 | 1355 | | S | 7 | | | 4 | X | X | X | X | X | X | X | X | ☐ | Nitrate and Nitrite cancelled per client request. Bm 6/25 |
| -02 | MW-98-04 | 6/19/2018 | 1515 | | S | 7 | | | 4 | X | X | X | X | X | X | X | X | ☐ | |
| -03 | MW-98-05AR | 6/19/2018 | 1205 | | S | 7 | | | 4 | X | X | X | X | X | X | X | X | ☐ | |
| -04 | Equipment Blank | 6/19/2018 | 1100 | | | 2 | | | | X | | | | | | | | ☐ | |
| -05 | Trip Blank | | | | | 2 | | | | | | | | | | | | ☐ | |
| | | | | | | | | | | | | | | | | | | ☐ | |
| | | | | | | | | | | | | | | | | | | ☐ | |
| | | | | | | | | | | | | | | | | | | ☐ | |
| | | | | | | | | | | | | | | | | | | ☐ | |
| | | | | | | | | | | | | | | | | | | ☐ | |
| | | | | | | | | | | | | | | | | | | ☐ | |

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☑ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☑ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

| Relinquished by: | Received by: | Date: | Time: |
|---|---|---|---|
| Mark My Goldberg | WSP Fridge | 6/20/18 | 830 |
| | | 6/21/18 | 2:55pm |
| | | 6/21/18 | 17:00 |

Temp °C: Observed 1.2; Correction Factor 0; Corrected 1.2; IR ID # 01

☑ EDD format: Excel, PDF
☑ E-mail to: mark.goldberg@wsp.com; funde.sandra@wsp.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☑ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

eurofins | Spectrum Analytical

# CHAIN OF CUSTODY RECORD

Page 1 of 1

**Special Handling:**

- ☑ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

| | |
|---|---|
| Report To: | Mark Goldberg<br>WSP<br>4 Research Drive Ste. 204<br>Shelton CT, 06484 |
| Telephone #: | |
| Project Mgr: | |
| Invoice To: | Same |
| P.O No.: | Quote #: |
| Project No: | 31401451.000 |
| Site Name: | Rowe Industries |
| Location: | Sag Harbor State: NY |
| Sampler(s): | Sierra Anseeuw |

F=Field Filtered 1=$Na_2S2O_3$ 2=HCl 3=$H_2SO_4$ 4=$HNO_3$ 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=$H_3PO_4$ 11= NaOH + ZnAc 12= _____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= _____ X2= _____ X3= _____

G=Grab C=Compsite

| Lab ID: | Sample ID: | Date: | Time: | Type | Matrix | # of VOA Vials | # of Amber Glass | # of Clear Glass | # of Plastic | VOCs | TOC | Total Iron | Sulfate, Nitrate, Nitrite | Sulfide | Dissolved Iron | Dissolved methane, dissolved ethene | dissolved ethane | Check if chlorinated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 478870 01 | MW-98-01A | 6/19/2018 | 1355 | G | GW | 7 | | | 4 | X | X | X | X | X | X | X | X | ☐ |
| 02 | MW-98-04 | 6/19/2018 | 1515 | G | GW | 7 | | | 4 | X | X | X | X | X | X | X | X | ☐ |
| 03 | MW-98-05AR | 6/19/2018 | 1205 | G | GW | 7 | | | 4 | X | X | X | X | X | X | X | X | ☐ |
| 04 | Equipment Blank | 6/19/2018 | 1100 | G | GW | 2 | | | | X | | | | | | | | ☐ |
| 05 | Trip Blank | | | | | 2 | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | ☐ |
| | | | | | | | | | | | | | | | | | | ☐ |

List Preservative Code below:

| 2 | 10 | 4 | | 11 | 4, F | | |
|---|---|---|---|---|---|---|---|

**QA/QC Reporting Notes:**
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☑ Standard ☐ No QC
☐ DQA* ☐ ASP A* ☑ ASP B* ☐ NJ Reduced* ☐ NJ Full* ☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards

Nitrate and Nitrite
Ethene/Ethane per request
changes to 6/19
well label + matrix
per email 6/21 cc

| Relinquished by: | Received by: | Date: | Time: |
|---|---|---|---|
| | WSP Fridge | 6/20/18 | 530 |
| Mark Goldberg | | 6/21/18 | 2:55 pm |
| | | 6/21/18 | 17:00 |

Temp °C
Observed: 1.2
Correction Factor: 0
Corrected: 1.2
IR ID #: 01

☑ EDD format: Excel PDF
☐ E-mail to: _____

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☑ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

# Batch Summary

**1808650**

*General Chemistry Parameters*

1808650-BLK1
1808650-BS1
1808650-SRM1
SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**1808659**

*Soluble Metals by EPA 200/6000 Series Methods*

SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**1808718**

*Total Metals by EPA 200/6000 Series Methods*

SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**1808754**

*Volatile Organic Compounds*

1808754-BLK1
1808754-BS1
1808754-BSD1
SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)
SC47887-04 (Equipment Blank)
SC47887-05 (Trip Blank)

**1808906**

*Soluble Metals by EPA 6000/7000 Series Methods*

1808906-BLK1
1808906-BS1
1808906-BSD1
SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**1808994**

*Dissolved Gas Analysis*

1808994-BLK1
1808994-BS1
1808994-DUP1
SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**1809004**

*Total Metals by EPA 6000/7000 Series Methods*

1809004-BLK1
1809004-BS1
1809004-BSD1
SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**1809105**

*General Chemistry Parameters*

1809105-BLK1
1809105-BS1
1809105-SRM1
SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**436179A**

*Subcontracted Analyses*

CA77388-BLK
CA77388-DUP
CA77388-LCS
CA77388-MS
SC47887-01 (MW-98-01A)
SC47887-02 (MW-98-04)
SC47887-03 (MW-98-05BR)

**S816041**

*Dissolved Gas Analysis*

S816041-CAL1
S816041-CAL2
S816041-CAL3
S816041-CAL4
S816041-CAL5
S816041-CAL6
S816041-CAL7
S816041-ICV1
S816041-LCV1
S816041-LCV2

**S820051**

*Volatile Organic Compounds*

S820051-CAL1
S820051-CAL2
S820051-CAL3
S820051-CAL4
S820051-CAL5
S820051-CAL6
S820051-CAL7
S820051-CAL8
S820051-CAL9
S820051-ICV1
S820051-LCV1
S820051-LCV2
S820051-TUN1
S820051-TUN2

**S820339**

*Volatile Organic Compounds*

S820339-CCV1
S820339-TUN1

**S820455**

*Dissolved Gas Analysis*

S820455-CCV1
S820455-CCV2

# Technical Report

prepared for:

**WSP USA, Inc. (Shelton)**
4 Research Drive, Suite 204
Shelton CT, 06484
**Attention: Tunde Komuves-Sandor**

Report Date: 07/10/2018
**Client Project ID: 31401451.00 task 01.00**
York Project (SDG) No.: 18G0083

Report Date: 07/10/2018
Client Project ID: 31401451.00 task 01.00
York Project (SDG) No.: 18G0083

**WSP USA, Inc. (Shelton)**
4 Research Drive, Suite 204
Shelton CT, 06484
Attention: Tunde Komuves-Sandor

## 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 03, 2018 and listed below. The project was identified as your project: **31401451.00 task 01.00**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

| York Sample ID | Client Sample ID | Matrix | Date Collected | Date Received |
|---|---|---|---|---|
| 18G0083-01 | WQ070218:1350 FRW-1 | Water | 07/02/2018 | 07/03/2018 |
| 18G0083-02 | WQ070218:1355 FRW-2 | Water | 07/02/2018 | 07/03/2018 |
| 18G0083-03 | WQ070218:1400 FRW-3 | Water | 07/02/2018 | 07/03/2018 |
| 18G0083-04 | WQ070218:1405 FRW-4 | Water | 07/02/2018 | 07/03/2018 |

## General Notes for York Project (SDG) No.: 18G0083

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:** 

**Date:** 07/10/2018

Benjamin Gulizia
Laboratory Director

## Sample Information

**Client Sample ID:** WQ070218:1350 FRW-1 **York Sample ID:** 18G0083-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:50 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 563-58-6 | 1,1-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP | 07/06/2018 19:45 | SS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 142-28-9 | 1,3-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 594-20-7 | 2,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |

## Sample Information

**Client Sample ID:** WQ070218:1350 FRW-1 **York Sample ID:** 18G0083-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:50 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 95-49-8 | 2-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 591-78-6 | 2-Hexanone | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 106-43-4 | 4-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 67-64-1 | Acetone | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 71-43-2 | Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 108-86-1 | Bromobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 75-25-2 | Bromoform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 74-83-9 | Bromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 108-90-7 | Chlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 75-00-3 | Chloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 67-66-3 | Chloroform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 74-87-3 | Chloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 156-59-2 | **cis-1,2-Dichloroethylene** | **0.60** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 124-48-1 | Dibromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 74-95-3 | Dibromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 100-41-4 | Ethyl Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |
| 98-82-8 | Isopropylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 19:45 | SS |

## Sample Information

**Client Sample ID:** WQ070218:1350 FRW-1 **York Sample ID:** 18G0083-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:50 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-09-2 | Methylene chloride | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 91-20-3 | Naphthalene | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-47-6 | o-Xylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/L | 0.50 | 1.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 100-42-5 | Styrene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 127-18-4 | **Tetrachloroethylene** | **22** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-88-3 | Toluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 79-01-6 | **Trichloroethylene** | **0.66** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-01-4 | Vinyl Chloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 1330-20-7 | Xylenes, Total | ND | | ug/L | 0.60 | 1.5 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 19:45<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | SS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *97.6 %* | *69-130* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *92.7 %* | *81-117* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *99.6 %* | *79-122* |

### Nitrate as N

**Log-in Notes:**

**Sample Notes:**

## Sample Information

**Client Sample ID:** WQ070218:1350 FRW-1 **York Sample ID:** 18G0083-01

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:50 pm | 07/03/2018 |

Sample Prepared by Method: EPA 300

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| 14797-55-8 | **Nitrate as N** | **0.870** | | mg/L | 0.0500 | 1 | EPA 300.0 | 07/03/2018 20:16 | 07/03/2018 20:16 | AD |
| | | | | | | | Certifications: | NELAC-NY10854,CTDOH,NJDEP,PADEP | | |

**Nitrite as N** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 300

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | ND | | mg/L | 0.0500 | 1 | EPA 300.0 | 07/03/2018 20:16 | 07/03/2018 20:16 | AD |
| | | | | | | | Certifications: | NELAC-NY10854,CTDOH,PADEP | | |

## Sample Information

**Client Sample ID:** WQ070218:1355 FRW-2 **York Sample ID:** 18G0083-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:55 pm | 07/03/2018 |

**Volatile Organics, 8260 List - Low Level** **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 563-58-6 | 1,1-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP | | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |

## Sample Information

**Client Sample ID:** WQ070218:1355 FRW-2 **York Sample ID:** 18G0083-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:55 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 142-28-9 | 1,3-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 594-20-7 | 2,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-49-8 | 2-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 591-78-6 | 2-Hexanone | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 106-43-4 | 4-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 67-64-1 | Acetone | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 71-43-2 | Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-86-1 | Bromobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-25-2 | Bromoform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-83-9 | Bromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-90-7 | Chlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-00-3 | Chloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |

## Sample Information

**Client Sample ID:** WQ070218:1355 FRW-2 **York Sample ID:** 18G0083-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:55 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 67-66-3 | Chloroform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-87-3 | Chloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 124-48-1 | Dibromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-95-3 | Dibromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 100-41-4 | Ethyl Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 98-82-8 | Isopropylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-09-2 | Methylene chloride | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 91-20-3 | Naphthalene | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 104-51-8 | n-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 103-65-1 | n-Propylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 95-47-6 | o-Xylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/L | 0.50 | 1.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 135-98-8 | sec-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 100-42-5 | Styrene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 98-06-6 | tert-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 127-18-4 | **Tetrachloroethylene** | **3.8** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 108-88-3 | Toluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:17 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |

## Sample Information

**Client Sample ID:** WQ070218:1355 FRW-2 **York Sample ID:** 18G0083-02

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 1:55 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 79-01-6 | Trichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/L | 0.60 | 1.5 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 20:17 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *98.0 %* | *69-130* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *92.5 %* | *81-117* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *98.2 %* | *79-122* |

### Nitrate as N

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 300

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| 14797-55-8 | **Nitrate as N** | **0.0820** | | mg/L | 0.0500 | 1 | EPA 300.0 | 07/03/2018 20:34 | 07/03/2018 20:34 | AD |
| | | | | | | | Certifications: | NELAC-NY10854,CTDOH,NJDEP,PADEP | | |

### Nitrite as N

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 300

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | ND | | mg/L | 0.0500 | 1 | EPA 300.0 | 07/03/2018 20:34 | 07/03/2018 20:34 | AD |
| | | | | | | | Certifications: | NELAC-NY10854,CTDOH,PADEP | | |

## Sample Information

**Client Sample ID:** WQ070218:1400 FRW-3 **York Sample ID:** 18G0083-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:00 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|

## Sample Information

**Client Sample ID:** WQ070218:1400 FRW-3 **York Sample ID:** 18G0083-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:00 pm | 07/03/2018 |

**Volatile Organics, 8260 List - Low Level**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 563-58-6 | 1,1-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP | 07/06/2018 20:48 | SS |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 142-28-9 | 1,3-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 594-20-7 | 2,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |
| 95-49-8 | 2-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 20:48 | SS |

## Sample Information

**Client Sample ID:** WQ070218:1400 FRW-3 **York Sample ID:** 18G0083-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:00 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 106-43-4 | 4-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 67-64-1 | Acetone | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 71-43-2 | Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 108-86-1 | Bromobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-97-5 | Bromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-27-4 | Bromodichloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-25-2 | Bromoform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-83-9 | Bromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 56-23-5 | Carbon tetrachloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 108-90-7 | Chlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-00-3 | Chloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 67-66-3 | Chloroform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-87-3 | Chloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 156-59-2 | **cis-1,2-Dichloroethylene** | **1.4** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 124-48-1 | Dibromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 74-95-3 | Dibromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 100-41-4 | Ethyl Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 98-82-8 | Isopropylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48 | SS<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP |

## Sample Information

**Client Sample ID:** WQ070218:1400 FRW-3 **York Sample ID:** 18G0083-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:00 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 75-09-2 | Methylene chloride | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 91-20-3 | Naphthalene | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-47-6 | o-Xylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/L | 0.50 | 1.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 100-42-5 | Styrene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 127-18-4 | **Tetrachloroethylene** | **49** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 108-88-3 | Toluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 79-01-6 | **Trichloroethylene** | **1.4** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-01-4 | Vinyl Chloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 1330-20-7 | Xylenes, Total | ND | | ug/L | 0.60 | 1.5 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 20:48<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | SS |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *98.2 %* | *69-130* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *92.9 %* | *81-117* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *104 %* | *79-122* |

### Nitrate as N

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 300

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|

## Sample Information

**Client Sample ID:** WQ070218:1400 FRW-3 **York Sample ID:** 18G0083-03

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:00 pm | 07/03/2018 |

### Nitrate as N

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 300

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| 14797-55-8 | **Nitrate as N** | **1.02** | | mg/L | 0.0500 | 1 | EPA 300.0 | 07/03/2018 20:52 | 07/03/2018 20:52 | AD |
| | | | | | | | Certifications: | NELAC-NY10854,CTDOH,NJDEP,PADEP | | |

### Nitrite as N

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 300

| CAS No. | Parameter | Result | Flag | Units | Reported to LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| 14797-65-0 | Nitrite as N | ND | | mg/L | 0.0500 | 1 | EPA 300.0 | 07/03/2018 20:52 | 07/03/2018 20:52 | AD |
| | | | | | | | Certifications: | NELAC-NY10854,CTDOH,PADEP | | |

## Sample Information

**Client Sample ID:** WQ070218:1405 FRW-4 **York Sample ID:** 18G0083-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:05 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-34-3 | 1,1-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-35-4 | 1,1-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 563-58-6 | 1,1-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP | | |
| 87-61-6 | 1,2,3-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 96-18-4 | 1,2,3-Trichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |

## Sample Information

**Client Sample ID:** WQ070218:1405 FRW-4 **York Sample ID:** 18G0083-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:05 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 95-63-6 | 1,2,4-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 106-93-4 | 1,2-Dibromoethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 95-50-1 | 1,2-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 107-06-2 | 1,2-Dichloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 78-87-5 | 1,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 108-67-8 | 1,3,5-Trimethylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 541-73-1 | 1,3-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 142-28-9 | 1,3-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 106-46-7 | 1,4-Dichlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 594-20-7 | 2,2-Dichloropropane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 95-49-8 | 2-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 591-78-6 | 2-Hexanone | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 106-43-4 | 4-Chlorotoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 67-64-1 | Acetone | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 71-43-2 | Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 108-86-1 | Bromobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 74-97-5 | Bromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 75-27-4 | Bromodichloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 75-25-2 | Bromoform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 74-83-9 | Bromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |
| 56-23-5 | Carbon tetrachloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | 07/06/2018 21:20 | SS |

## Sample Information

**Client Sample ID:** WQ070218:1405 FRW-4 **York Sample ID:** 18G0083-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:05 pm | 07/03/2018 |

**Volatile Organics, 8260 List - Low Level**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 108-90-7 | Chlorobenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-00-3 | Chloroethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 67-66-3 | Chloroform | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-87-3 | Chloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 10061-01-5 | cis-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 124-48-1 | Dibromochloromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 74-95-3 | Dibromomethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-71-8 | Dichlorodifluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 100-41-4 | Ethyl Benzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 87-68-3 | Hexachlorobutadiene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 98-82-8 | Isopropylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 1634-04-4 | Methyl tert-butyl ether (MTBE) | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 75-09-2 | Methylene chloride | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 91-20-3 | Naphthalene | ND | | ug/L | 1.0 | 2.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 104-51-8 | n-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 103-65-1 | n-Propylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 95-47-6 | o-Xylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 179601-23-1 | p- & m- Xylenes | ND | | ug/L | 0.50 | 1.0 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP | SS |
| 99-87-6 | p-Isopropyltoluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 135-98-8 | sec-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 100-42-5 | Styrene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |
| 98-06-6 | tert-Butylbenzene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C<br>Certifications: | 07/06/2018 07:30 | 07/06/2018 21:20<br>CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | SS |

## Sample Information

**Client Sample ID:** WQ070218:1405 FRW-4 **York Sample ID:** 18G0083-04

| York Project (SDG) No. | Client Project ID | Matrix | Collection Date/Time | Date Received |
|---|---|---|---|---|
| 18G0083 | 31401451.00 task 01.00 | Water | July 2, 2018 2:05 pm | 07/03/2018 |

### Volatile Organics, 8260 List - Low Level

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

| CAS No. | Parameter | Result | Flag | Units | Reported to LOD/MDL | LOQ | Dilution | Reference Method | Date/Time Prepared | Date/Time Analyzed | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127-18-4 | **Tetrachloroethylene** | **1.7** | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 108-88-3 | Toluene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 10061-02-6 | trans-1,3-Dichloropropylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 79-01-6 | Trichloroethylene | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-69-4 | Trichlorofluoromethane | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 75-01-4 | Vinyl Chloride | ND | | ug/L | 0.20 | 0.50 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP | | |
| 1330-20-7 | Xylenes, Total | ND | | ug/L | 0.60 | 1.5 | 1 | EPA 8260C | 07/06/2018 07:30 | 07/06/2018 21:20 | SS |
| | | | | | | | | Certifications: | CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP | | |

| | Surrogate Recoveries | Result | Acceptance Range |
|---|---|---|---|
| 17060-07-0 | *Surrogate: 1,2-Dichloroethane-d4* | *99.4 %* | *69-130* |
| 2037-26-5 | *Surrogate: Toluene-d8* | *92.7 %* | *81-117* |
| 460-00-4 | *Surrogate: p-Bromofluorobenzene* | *101 %* | *79-122* |

# Analytical Batch Summary

**Batch ID:** BG80217 **Preparation Method:** EPA 300 **Prepared By:** AD

| YORK Sample ID | Client Sample ID | Preparation Date |
|---|---|---|
| 18G0083-01 | WQ070218:1350 FRW-1 | 07/03/18 |
| 18G0083-02 | WQ070218:1355 FRW-2 | 07/03/18 |
| 18G0083-03 | WQ070218:1400 FRW-3 | 07/03/18 |
| BG80217-BLK1 | Blank | 07/03/18 |
| BG80217-BS1 | LCS | 07/03/18 |

**Batch ID:** BG80246 **Preparation Method:** EPA 5030B **Prepared By:** TAB

| YORK Sample ID | Client Sample ID | Preparation Date |
|---|---|---|
| 18G0083-01 | WQ070218:1350 FRW-1 | 07/06/18 |
| 18G0083-02 | WQ070218:1355 FRW-2 | 07/06/18 |
| 18G0083-03 | WQ070218:1400 FRW-3 | 07/06/18 |
| 18G0083-04 | WQ070218:1405 FRW-4 | 07/06/18 |
| BG80246-BLK1 | Blank | 07/06/18 |
| BG80246-BS1 | LCS | 07/06/18 |
| BG80246-BSD1 | LCS Dup | 07/06/18 |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BG80246 - EPA 5030B** | | | | | | | | | | | |
| **Blank (BG80246-BLK1)** | | | | | | | | | Prepared & Analyzed: 07/06/2018 | | |
| 1,1,1,2-Tetrachloroethane | ND | 0.50 | ug/L | | | | | | | | |
| 1,1,1-Trichloroethane | ND | 0.50 | " | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | ND | 0.50 | " | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | ND | 0.50 | " | | | | | | | | |
| 1,1,2-Trichloroethane | ND | 0.50 | " | | | | | | | | |
| 1,1-Dichloroethane | ND | 0.50 | " | | | | | | | | |
| 1,1-Dichloroethylene | ND | 0.50 | " | | | | | | | | |
| 1,1-Dichloropropylene | ND | 0.50 | " | | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | 0.50 | " | | | | | | | | |
| 1,2,3-Trichloropropane | ND | 0.50 | " | | | | | | | | |
| 1,2,4-Trichlorobenzene | ND | 0.50 | " | | | | | | | | |
| 1,2,4-Trimethylbenzene | ND | 0.50 | " | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | ND | 0.50 | " | | | | | | | | |
| 1,2-Dibromoethane | ND | 0.50 | " | | | | | | | | |
| 1,2-Dichlorobenzene | ND | 0.50 | " | | | | | | | | |
| 1,2-Dichloroethane | ND | 0.50 | " | | | | | | | | |
| 1,2-Dichloropropane | ND | 0.50 | " | | | | | | | | |
| 1,3,5-Trimethylbenzene | ND | 0.50 | " | | | | | | | | |
| 1,3-Dichlorobenzene | ND | 0.50 | " | | | | | | | | |
| 1,3-Dichloropropane | ND | 0.50 | " | | | | | | | | |
| 1,4-Dichlorobenzene | ND | 0.50 | " | | | | | | | | |
| 2,2-Dichloropropane | ND | 0.50 | " | | | | | | | | |
| 2-Chlorotoluene | ND | 0.50 | " | | | | | | | | |
| 2-Hexanone | ND | 0.50 | " | | | | | | | | |
| 4-Chlorotoluene | ND | 0.50 | " | | | | | | | | |
| Acetone | ND | 2.0 | " | | | | | | | | |
| Benzene | ND | 0.50 | " | | | | | | | | |
| Bromobenzene | ND | 0.50 | " | | | | | | | | |
| Bromochloromethane | ND | 0.50 | " | | | | | | | | |
| Bromodichloromethane | ND | 0.50 | " | | | | | | | | |
| Bromoform | ND | 0.50 | " | | | | | | | | |
| Bromomethane | ND | 0.50 | " | | | | | | | | |
| Carbon tetrachloride | ND | 0.50 | " | | | | | | | | |
| Chlorobenzene | ND | 0.50 | " | | | | | | | | |
| Chloroethane | ND | 0.50 | " | | | | | | | | |
| Chloroform | ND | 0.50 | " | | | | | | | | |
| Chloromethane | ND | 0.50 | " | | | | | | | | |
| cis-1,2-Dichloroethylene | ND | 0.50 | " | | | | | | | | |
| cis-1,3-Dichloropropylene | ND | 0.50 | " | | | | | | | | |
| Dibromochloromethane | ND | 0.50 | " | | | | | | | | |
| Dibromomethane | ND | 0.50 | " | | | | | | | | |
| Dichlorodifluoromethane | ND | 0.50 | " | | | | | | | | |
| Ethyl Benzene | ND | 0.50 | " | | | | | | | | |
| Hexachlorobutadiene | ND | 0.50 | " | | | | | | | | |
| Isopropylbenzene | ND | 0.50 | " | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | ND | 0.50 | " | | | | | | | | |
| Methylene chloride | ND | 2.0 | " | | | | | | | | |
| Naphthalene | ND | 2.0 | " | | | | | | | | |
| n-Butylbenzene | ND | 0.50 | " | | | | | | | | |
| n-Propylbenzene | ND | 0.50 | " | | | | | | | | |

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

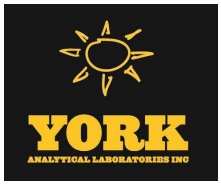
## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BG80246 - EPA 5030B** | | | | | | | | | | | |
| **Blank (BG80246-BLK1)** | | | | | | | | Prepared & Analyzed: 07/06/2018 | | | |
| o-Xylene | ND | 0.50 | ug/L | | | | | | | | |
| p- & m- Xylenes | ND | 1.0 | " | | | | | | | | |
| p-Isopropyltoluene | ND | 0.50 | " | | | | | | | | |
| sec-Butylbenzene | ND | 0.50 | " | | | | | | | | |
| Styrene | ND | 0.50 | " | | | | | | | | |
| tert-Butylbenzene | ND | 0.50 | " | | | | | | | | |
| Tetrachloroethylene | ND | 0.50 | " | | | | | | | | |
| Toluene | ND | 0.50 | " | | | | | | | | |
| trans-1,2-Dichloroethylene | ND | 0.50 | " | | | | | | | | |
| trans-1,3-Dichloropropylene | ND | 0.50 | " | | | | | | | | |
| Trichloroethylene | ND | 0.50 | " | | | | | | | | |
| Trichlorofluoromethane | ND | 0.50 | " | | | | | | | | |
| Vinyl Chloride | ND | 0.50 | " | | | | | | | | |
| Xylenes, Total | ND | 1.5 | " | | | | | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *10.5* | | *"* | *10.0* | | *105* | *69-130* | | | | |
| *Surrogate: Toluene-d8* | *9.64* | | *"* | *10.0* | | *96.4* | *81-117* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *9.87* | | *"* | *10.0* | | *98.7* | *79-122* | | | | |
| **LCS (BG80246-BS1)** | | | | | | | | Prepared & Analyzed: 07/06/2018 | | | |
| 1,1,1,2-Tetrachloroethane | 10.4 | | ug/L | 10.0 | | 104 | 82-126 | | | | |
| 1,1,1-Trichloroethane | 11.1 | | " | 10.0 | | 111 | 78-136 | | | | |
| 1,1,2,2-Tetrachloroethane | 10.1 | | " | 10.0 | | 101 | 76-129 | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 11.6 | | " | 10.0 | | 116 | 54-165 | | | | |
| 1,1,2-Trichloroethane | 10.8 | | " | 10.0 | | 108 | 82-123 | | | | |
| 1,1-Dichloroethane | 10.9 | | " | 10.0 | | 109 | 82-129 | | | | |
| 1,1-Dichloroethylene | 10.4 | | " | 10.0 | | 104 | 68-138 | | | | |
| 1,1-Dichloropropylene | 10.8 | | " | 10.0 | | 108 | 83-133 | | | | |
| 1,2,3-Trichlorobenzene | 10.2 | | " | 10.0 | | 102 | 76-136 | | | | |
| 1,2,3-Trichloropropane | 10.3 | | " | 10.0 | | 103 | 77-128 | | | | |
| 1,2,4-Trichlorobenzene | 9.45 | | " | 10.0 | | 94.5 | 76-137 | | | | |
| 1,2,4-Trimethylbenzene | 9.51 | | " | 10.0 | | 95.1 | 82-132 | | | | |
| 1,2-Dibromo-3-chloropropane | 10.1 | | " | 10.0 | | 101 | 45-147 | | | | |
| 1,2-Dibromoethane | 10.8 | | " | 10.0 | | 108 | 83-124 | | | | |
| 1,2-Dichlorobenzene | 9.57 | | " | 10.0 | | 95.7 | 79-123 | | | | |
| 1,2-Dichloroethane | 11.5 | | " | 10.0 | | 115 | 73-132 | | | | |
| 1,2-Dichloropropane | 9.92 | | " | 10.0 | | 99.2 | 78-126 | | | | |
| 1,3,5-Trimethylbenzene | 9.42 | | " | 10.0 | | 94.2 | 80-131 | | | | |
| 1,3-Dichlorobenzene | 9.65 | | " | 10.0 | | 96.5 | 86-122 | | | | |
| 1,3-Dichloropropane | 10.6 | | " | 10.0 | | 106 | 81-125 | | | | |
| 1,4-Dichlorobenzene | 9.43 | | " | 10.0 | | 94.3 | 85-124 | | | | |
| 2,2-Dichloropropane | 10.8 | | " | 10.0 | | 108 | 56-150 | | | | |
| 2-Chlorotoluene | 9.54 | | " | 10.0 | | 95.4 | 79-130 | | | | |
| 2-Hexanone | 11.2 | | " | 10.0 | | 112 | 51-146 | | | | |
| 4-Chlorotoluene | 9.53 | | " | 10.0 | | 95.3 | 79-128 | | | | |
| Acetone | 13.7 | | " | 10.0 | | 137 | 14-150 | | | | |
| Benzene | 11.0 | | " | 10.0 | | 110 | 85-126 | | | | |
| Bromobenzene | 9.43 | | " | 10.0 | | 94.3 | 78-129 | | | | |
| Bromochloromethane | 11.3 | | " | 10.0 | | 113 | 77-128 | | | | |
| Bromodichloromethane | 10.2 | | " | 10.0 | | 102 | 79-128 | | | | |
| Bromoform | 10.5 | | " | 10.0 | | 105 | 78-133 | | | | |
| Bromomethane | 4.27 | | " | 10.0 | | 42.7 | 43-168 | Low Bias | | | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BG80246 - EPA 5030B** | | | | | | | | | | | |
| **LCS (BG80246-BS1)** | | | | | | | | Prepared & Analyzed: 07/06/2018 | | | |
| Carbon tetrachloride | 11.0 | | ug/L | 10.0 | | 110 | 77-141 | | | | |
| Chlorobenzene | 10.2 | | " | 10.0 | | 102 | 88-120 | | | | |
| Chloroethane | 10.4 | | " | 10.0 | | 104 | 65-136 | | | | |
| Chloroform | 11.2 | | " | 10.0 | | 112 | 82-128 | | | | |
| Chloromethane | 7.87 | | " | 10.0 | | 78.7 | 43-155 | | | | |
| cis-1,2-Dichloroethylene | 11.0 | | " | 10.0 | | 110 | 83-129 | | | | |
| cis-1,3-Dichloropropylene | 10.0 | | " | 10.0 | | 100 | 80-131 | | | | |
| Dibromochloromethane | 10.6 | | " | 10.0 | | 106 | 80-130 | | | | |
| Dibromomethane | 10.6 | | " | 10.0 | | 106 | 72-134 | | | | |
| Dichlorodifluoromethane | 9.21 | | " | 10.0 | | 92.1 | 44-144 | | | | |
| Ethyl Benzene | 10.2 | | " | 10.0 | | 102 | 80-131 | | | | |
| Hexachlorobutadiene | 8.13 | | " | 10.0 | | 81.3 | 67-146 | | | | |
| Isopropylbenzene | 9.38 | | " | 10.0 | | 93.8 | 76-140 | | | | |
| Methyl tert-butyl ether (MTBE) | 11.6 | | " | 10.0 | | 116 | 76-135 | | | | |
| Methylene chloride | 8.50 | | " | 10.0 | | 85.0 | 55-137 | | | | |
| Naphthalene | 10.6 | | " | 10.0 | | 106 | 70-147 | | | | |
| n-Butylbenzene | 9.15 | | " | 10.0 | | 91.5 | 79-132 | | | | |
| n-Propylbenzene | 9.48 | | " | 10.0 | | 94.8 | 78-133 | | | | |
| o-Xylene | 10.3 | | " | 10.0 | | 103 | 78-130 | | | | |
| p- & m- Xylenes | 19.0 | | " | 20.0 | | 94.8 | 77-133 | | | | |
| p-Isopropyltoluene | 9.34 | | " | 10.0 | | 93.4 | 81-136 | | | | |
| sec-Butylbenzene | 9.38 | | " | 10.0 | | 93.8 | 79-137 | | | | |
| Styrene | 10.4 | | " | 10.0 | | 104 | 67-132 | | | | |
| tert-Butylbenzene | 9.37 | | " | 10.0 | | 93.7 | 77-138 | | | | |
| Tetrachloroethylene | 10.5 | | " | 10.0 | | 105 | 82-131 | | | | |
| Toluene | 10.0 | | " | 10.0 | | 100 | 80-127 | | | | |
| trans-1,2-Dichloroethylene | 10.6 | | " | 10.0 | | 106 | 80-132 | | | | |
| trans-1,3-Dichloropropylene | 9.92 | | " | 10.0 | | 99.2 | 78-131 | | | | |
| Trichloroethylene | 9.69 | | " | 10.0 | | 96.9 | 82-128 | | | | |
| Trichlorofluoromethane | 10.9 | | " | 10.0 | | 109 | 67-139 | | | | |
| Vinyl Chloride | 10.1 | | " | 10.0 | | 101 | 58-145 | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *10.4* | | *"* | *10.0* | | *104* | *69-130* | | | | |
| *Surrogate: Toluene-d8* | *9.61* | | *"* | *10.0* | | *96.1* | *81-117* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *9.44* | | *"* | *10.0* | | *94.4* | *79-122* | | | | |




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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BG80246 - EPA 5030B** | | | | | | | | | | | |
| **LCS Dup (BG80246-BSD1)** | | | | | | | | Prepared & Analyzed: 07/06/2018 | | | |
| 1,1,1,2-Tetrachloroethane | 10.4 | | ug/L | 10.0 | | 104 | 82-126 | | 0.673 | 30 | |
| 1,1,1-Trichloroethane | 10.5 | | " | 10.0 | | 105 | 78-136 | | 4.91 | 30 | |
| 1,1,2,2-Tetrachloroethane | 9.79 | | " | 10.0 | | 97.9 | 76-129 | | 3.02 | 30 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 11.0 | | " | 10.0 | | 110 | 54-165 | | 5.59 | 30 | |
| 1,1,2-Trichloroethane | 10.5 | | " | 10.0 | | 105 | 82-123 | | 3.19 | 30 | |
| 1,1-Dichloroethane | 10.5 | | " | 10.0 | | 105 | 82-129 | | 3.65 | 30 | |
| 1,1-Dichloroethylene | 9.93 | | " | 10.0 | | 99.3 | 68-138 | | 4.33 | 30 | |
| 1,1-Dichloropropylene | 10.4 | | " | 10.0 | | 104 | 83-133 | | 4.14 | 30 | |
| 1,2,3-Trichlorobenzene | 9.60 | | " | 10.0 | | 96.0 | 76-136 | | 6.06 | 30 | |
| 1,2,3-Trichloropropane | 9.75 | | " | 10.0 | | 97.5 | 77-128 | | 5.78 | 30 | |
| 1,2,4-Trichlorobenzene | 9.13 | | " | 10.0 | | 91.3 | 76-137 | | 3.44 | 30 | |
| 1,2,4-Trimethylbenzene | 9.20 | | " | 10.0 | | 92.0 | 82-132 | | 3.31 | 30 | |
| 1,2-Dibromo-3-chloropropane | 9.59 | | " | 10.0 | | 95.9 | 45-147 | | 5.38 | 30 | |
| 1,2-Dibromoethane | 10.4 | | " | 10.0 | | 104 | 83-124 | | 3.87 | 30 | |
| 1,2-Dichlorobenzene | 9.28 | | " | 10.0 | | 92.8 | 79-123 | | 3.08 | 30 | |
| 1,2-Dichloroethane | 11.0 | | " | 10.0 | | 110 | 73-132 | | 4.10 | 30 | |
| 1,2-Dichloropropane | 9.70 | | " | 10.0 | | 97.0 | 78-126 | | 2.24 | 30 | |
| 1,3,5-Trimethylbenzene | 9.12 | | " | 10.0 | | 91.2 | 80-131 | | 3.24 | 30 | |
| 1,3-Dichlorobenzene | 9.31 | | " | 10.0 | | 93.1 | 86-122 | | 3.59 | 30 | |
| 1,3-Dichloropropane | 10.2 | | " | 10.0 | | 102 | 81-125 | | 3.77 | 30 | |
| 1,4-Dichlorobenzene | 9.20 | | " | 10.0 | | 92.0 | 85-124 | | 2.47 | 30 | |
| 2,2-Dichloropropane | 10.3 | | " | 10.0 | | 103 | 56-150 | | 4.75 | 30 | |
| 2-Chlorotoluene | 9.20 | | " | 10.0 | | 92.0 | 79-130 | | 3.63 | 30 | |
| 2-Hexanone | 11.0 | | " | 10.0 | | 110 | 51-146 | | 1.89 | 30 | |
| 4-Chlorotoluene | 9.32 | | " | 10.0 | | 93.2 | 79-128 | | 2.23 | 30 | |
| Acetone | 16.2 | | " | 10.0 | | 162 | 14-150 | High Bias | 16.9 | 30 | |
| Benzene | 10.6 | | " | 10.0 | | 106 | 85-126 | | 2.87 | 30 | |
| Bromobenzene | 9.07 | | " | 10.0 | | 90.7 | 78-129 | | 3.89 | 30 | |
| Bromochloromethane | 11.1 | | " | 10.0 | | 111 | 77-128 | | 2.41 | 30 | |
| Bromodichloromethane | 10.1 | | " | 10.0 | | 101 | 79-128 | | 1.18 | 30 | |
| Bromoform | 10.4 | | " | 10.0 | | 104 | 78-133 | | 1.53 | 30 | |
| Bromomethane | 4.72 | | " | 10.0 | | 47.2 | 43-168 | | 10.0 | 30 | |
| Carbon tetrachloride | 10.4 | | " | 10.0 | | 104 | 77-141 | | 5.22 | 30 | |
| Chlorobenzene | 10.2 | | " | 10.0 | | 102 | 88-120 | | 0.293 | 30 | |
| Chloroethane | 10.0 | | " | 10.0 | | 100 | 65-136 | | 3.82 | 30 | |
| Chloroform | 10.9 | | " | 10.0 | | 109 | 82-128 | | 2.71 | 30 | |
| Chloromethane | 7.91 | | " | 10.0 | | 79.1 | 43-155 | | 0.507 | 30 | |
| cis-1,2-Dichloroethylene | 10.7 | | " | 10.0 | | 107 | 83-129 | | 2.75 | 30 | |
| cis-1,3-Dichloropropylene | 9.72 | | " | 10.0 | | 97.2 | 80-131 | | 2.94 | 30 | |
| Dibromochloromethane | 10.3 | | " | 10.0 | | 103 | 80-130 | | 2.68 | 30 | |
| Dibromomethane | 10.3 | | " | 10.0 | | 103 | 72-134 | | 3.26 | 30 | |
| Dichlorodifluoromethane | 8.85 | | " | 10.0 | | 88.5 | 44-144 | | 3.99 | 30 | |
| Ethyl Benzene | 9.94 | | " | 10.0 | | 99.4 | 80-131 | | 2.68 | 30 | |
| Hexachlorobutadiene | 7.77 | | " | 10.0 | | 77.7 | 67-146 | | 4.53 | 30 | |
| Isopropylbenzene | 9.19 | | " | 10.0 | | 91.9 | 76-140 | | 2.05 | 30 | |
| Methyl tert-butyl ether (MTBE) | 11.2 | | " | 10.0 | | 112 | 76-135 | | 3.08 | 30 | |
| Methylene chloride | 8.28 | | " | 10.0 | | 82.8 | 55-137 | | 2.62 | 30 | |
| Naphthalene | 9.93 | | " | 10.0 | | 99.3 | 70-147 | | 6.81 | 30 | |
| n-Butylbenzene | 8.72 | | " | 10.0 | | 87.2 | 79-132 | | 4.81 | 30 | |
| n-Propylbenzene | 9.17 | | " | 10.0 | | 91.7 | 78-133 | | 3.32 | 30 | |
| o-Xylene | 10.1 | | " | 10.0 | | 101 | 78-130 | | 1.76 | 30 | |

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

## York Analytical Laboratories, Inc.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source* Result | %REC | %REC Limits | Flag | RPD | RPD Limit | Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Batch BG80246 - EPA 5030B** | | | | | | | | | | | |
| **LCS Dup (BG80246-BSD1)** | | | | | | | | Prepared & Analyzed: 07/06/2018 | | | |
| p- & m- Xylenes | 18.5 | | ug/L | 20.0 | | 92.4 | 77-133 | | 2.51 | 30 | |
| p-Isopropyltoluene | 8.91 | | " | 10.0 | | 89.1 | 81-136 | | 4.71 | 30 | |
| sec-Butylbenzene | 8.93 | | " | 10.0 | | 89.3 | 79-137 | | 4.92 | 30 | |
| Styrene | 10.3 | | " | 10.0 | | 103 | 67-132 | | 1.45 | 30 | |
| tert-Butylbenzene | 9.04 | | " | 10.0 | | 90.4 | 77-138 | | 3.59 | 30 | |
| Tetrachloroethylene | 10.5 | | " | 10.0 | | 105 | 82-131 | | 0.0954 | 30 | |
| Toluene | 9.77 | | " | 10.0 | | 97.7 | 80-127 | | 2.53 | 30 | |
| trans-1,2-Dichloroethylene | 10.3 | | " | 10.0 | | 103 | 80-132 | | 2.97 | 30 | |
| trans-1,3-Dichloropropylene | 9.74 | | " | 10.0 | | 97.4 | 78-131 | | 1.83 | 30 | |
| Trichloroethylene | 9.75 | | " | 10.0 | | 97.5 | 82-128 | | 0.617 | 30 | |
| Trichlorofluoromethane | 10.6 | | " | 10.0 | | 106 | 67-139 | | 3.17 | 30 | |
| Vinyl Chloride | 9.80 | | " | 10.0 | | 98.0 | 58-145 | | 3.21 | 30 | |
| *Surrogate: 1,2-Dichloroethane-d4* | *10.2* | | *"* | *10.0* | | *102* | *69-130* | | | | |
| *Surrogate: Toluene-d8* | *9.62* | | *"* | *10.0* | | *96.2* | *81-117* | | | | |
| *Surrogate: p-Bromofluorobenzene* | *9.31* | | *"* | *10.0* | | *93.1* | *79-122* | | | | |

## Anions by Ion Chromatography - 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 BG80217 - EPA 300** | | | | | | | | | | | |
| **Blank (BG80217-BLK1)** | | | | | | | | | Prepared & Analyzed: 07/03/2018 | | |
| Nitrate as N | ND | 0.0500 | mg/L | | | | | | | | |
| Nitrite as N | ND | 0.0500 | " | | | | | | | | |
| **LCS (BG80217-BS1)** | | | | | | | | | Prepared & Analyzed: 07/03/2018 | | |
| Nitrate as N | 9.90 | 0.0500 | mg/L | 10.0 | | 99.0 | 90-110 | | | | |
| Nitrite as N | 10.2 | 0.0500 | " | 10.0 | | 102 | 90-110 | | | | |

## Volatile Analysis Sample Containers

| Lab ID | Client Sample ID | Volatile Sample Container |
|---|---|---|
| 18G0083-01 | WQ070218:1350 FRW-1 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 18G0083-02 | WQ070218:1355 FRW-2 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 18G0083-03 | WQ070218:1400 FRW-3 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |
| 18G0083-04 | WQ070218:1405 FRW-4 | 40mL Clear Vial (pre-pres.) HCl; Cool to 4° C |

## Sample and Data Qualifiers Relating to This Work Order

QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.

CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

## Definitions and Other Explanations

* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.

ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)

RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.

LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.

LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.

MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.

Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.

NR Not reported

RPD Relative Percent Difference

Wet The data has been reported on an as-received (wet weight) basis

Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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

# Field Chain-of-Custody Record

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

**York Project No.** 18G0083

| YOUR Information | Report to: | Invoice To: | Your Project ID | Turn-Around Time |
|---|---|---|---|---|
| Company: WSP USA | SAME [X] | SAME [X] | 31401451.000 task 01.00 | RUSH-Same Day |
| Address: 4 Research Drive | Name: | Name: | | RUSH-Next Day |
| Suite 301, Shelton CT 06484 | Company: | Company: | Purchase Order # | RUSH-Two Day |
| Phone.: 203.929.8555 | Address: | Address: | 31401451.000 task 01.00 | RUSH-Three Day |
| Contact: Tunde Sandor | | | | RUSH-Four Day |
| E-mail: tunde.sandor@wsp.com | | E-mail | Samples from CT__NY x_NJ__ | Standard (5-7day) X |

| Report/Deliverable Type | |
|---|---|
| Summary Report | X, PDF |
| QA Report | X, PDF |
| CT RCP | |
| CT RCP DQA/DUE Pkg | |
| NY ASP A Package | |
| NY ASP B Package | X, PDF |
| NJDEP Reduced Deliv | |
| Excel | X |
| NYSDEC EQuIS | |
| NJDEP SRP HazSite EQuIS | |
| GIS/KEY (std) | |
| YORK Regulatory Comp Excel compared to: | |
| OTHER: | |

***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.***

Samples Collected/Authorized By (Signature)

Evan Foster
Name (printed)

Matrix Codes
S - soil
Other - specify (oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

| Volatiles | | Semi-Vols. | Pest/PCB/Herb | Metals | Misc. Org. | Full Lists |
|---|---|---|---|---|---|---|
| 8260 full | TICs | 8270 or 625 | 8082PCB | RCRA8 | TPH GRO | Pri.Poll. |
| 624 | Site Spec. | STARS list | 8081Pest | PP13 list | TPH DRO | TCL Organics |
| STARS list | Nassau Co. | BN Only | 8151Herb | TAL | CT ETPH | TAL Met/CN |
| BTEX | Suffolk Co. | Acids Only | CT RCP | CT15 list | NY 310-13 | Full TCLP |
| MTBE | Ketones | PAH list | App. IX | TAGM list | TPH 1664 | Full App. IX |
| TCL list | Oxygenates | TAGM list | Site Spec. | NJDEP list | Air TO14A | Part360-Routine |
| TAGM list | TCLP list | CT RCP list | SPLP or TCLP | Total | Air TO15 | Part360-Baseline |
| CT RCP list | 524.2 | TCL list | TCLP Pest | Dissolved | Air STARS | Part360-Expanded No Dioxins/Furans |
| Arom. only | 502.2 | NJDEP list | TCLP Herb | SPLP or TCLP | Air VPH | Part360-Expanded Full List |
| Halog.only | NJDEP list | App. IX | Chlordane | Indiv. Metals | Air TICs | NYCDEP Sewer |
| App.IX list | SPLP or TCLP | TCLP BNA | 608 Pest | LIST Below | Methane | NYSDEC Sewer |
| 8021B list | | SPLP or TCLP | 608 PCB | | Helium | TAGM |

| Sample Identification | Date+Time Sampled | Matrix | Analysis Requested (List above includes common analysis) | Container Description |
|---|---|---|---|---|
| WQ070218: 1350 FRW-1 | 7-2-18 ; 1350 | GW | VOCs 8260 full plus freon 113; Nitrate/Nitrite | 3 Voa; 1 plastic |
| 1355 FRW-2 | ; 1355 | | | 3 Voa; 1 plastic |
| 1400 FRW-3 | ; 1400 | | | 3 Voa; 1 plastic |
| 1405 FRW-4 | ; 1405 | | | |

**Preservation** (check all applicable): 4°C ✓ Frozen ___ HCl ✓ MeOH ___ $HNO_3$ ___ $H_2SO_4$ ___ NaOH ___ ZnAc ___ Ascorbic Acid ___ Other ___

**Comments:**

Special Instructions
Field Filtered ☐
Lab to Filter ☐

(system)

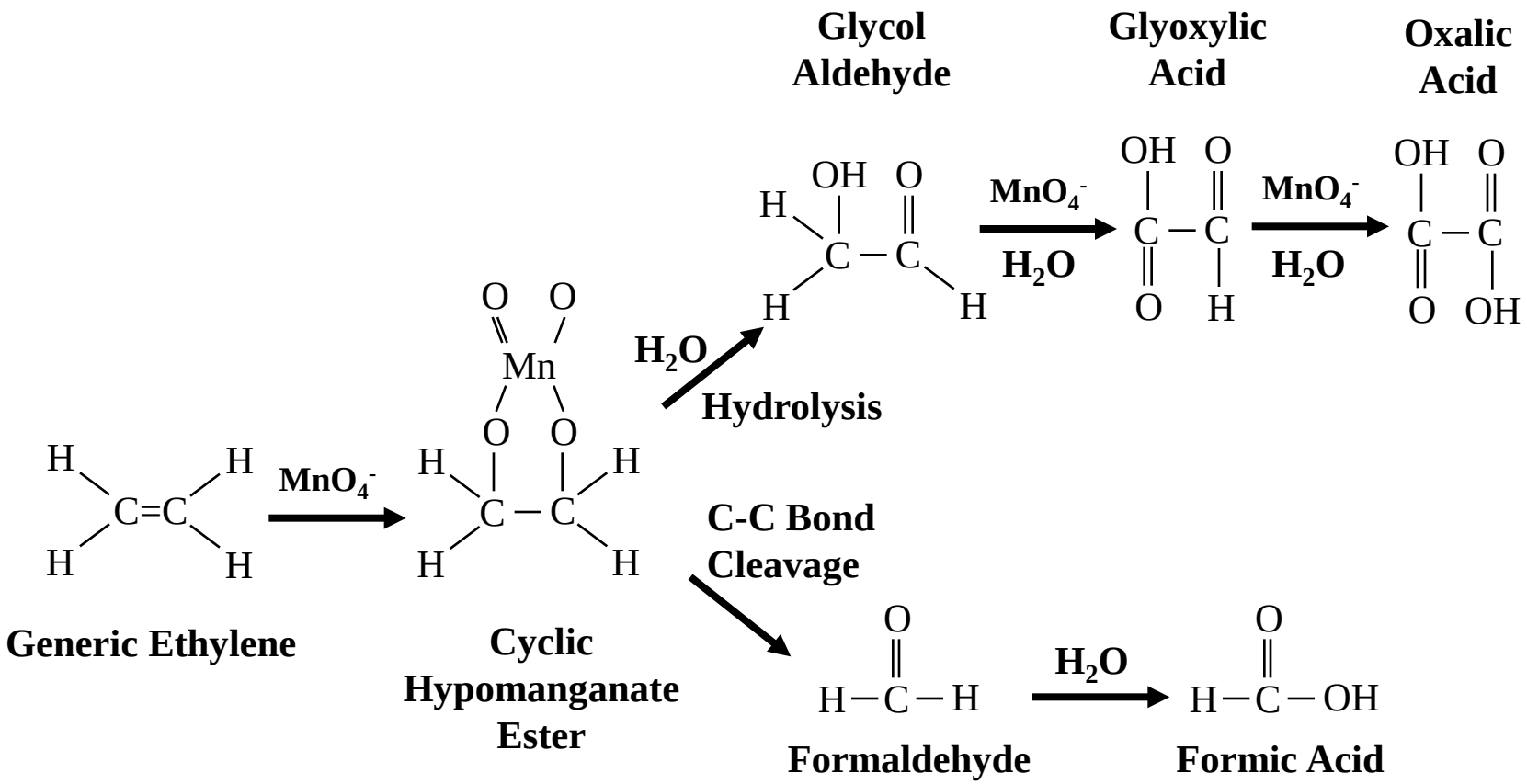
| | | | |
|---|---|---|---|
| Samples Relinquished By | 7-3-18 800 | Samples Received By: WSP Fridge | 7-3-18 800 |
| Samples Relinquished By | 7/3/18 13:34 | Samples Received in LAB by | 7-3-18 13:34 |

Temperature on Receipt: 2-3 °C

Rec'd 7/3/18 1223

# APPENDIX

# IV. DIAGRAM OF PERMANGANATE METABOLIC PATHWAYS




*Reference: Yan & Schwartz (1999)*

## Permanganate Oxidation Pathway for Ethylenes

Geo-Cleanse® INTERNATIONAL, INC.