

APPENDIX C
PREVIOUS ENVIRONMENTAL REPORTS

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Date: August 27, 2019

Re: Remedial Design Memorandum and Supplement to the December 7, 2018 Draft
Remedial Action Work Plan
561 Greenwich Street (BCP Site No. C231129)
New York, New York
Langan Project No.: 190043701

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) prepared this Remedial Design Memorandum on behalf of The Rector, Church-Wardens, and Vestrymen of Trinity Church, in the city of New-York; 561 HH LLC; and Remainderman 561 Greenwich LLC (the Participants) for the property at 561 Greenwich Street in the Hudson Square neighborhood of Manhattan, New York (the site). The site will be remediated under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP Site No. C231129). A site location map is provided as Figure 1.

This technical memorandum presents environmental data and findings from a supplemental remedial investigation (SRI) and bench-scale treatability study and supplements Langan's December 7, 2018 Draft Remedial Action Work Plan (RAWP). The memorandum is organized as follows:

- Section 1: Site Background
- Section 2: Supplemental Remedial Investigation
- Section 3: Pre-Design Investigation
- Section 4: Bench-Scale Treatability Study
- Section 5: Remedial Technology Recommendation and Implementation
- Section 6: Performance Monitoring

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1.0 SITE BACKGROUND

The site is identified as Block 598, Lot 42 (prior to their merger, Lots 42 and 48) in the Hudson Square neighborhood of Manhattan, and bears the addresses 551-561 Greenwich Street. The 20,045-square-foot site is bound by King Street to the north, a 17-story commercial office building to the east (345 Hudson Street), Charlton Street to the south, and Greenwich Street to the west. The site has about 100 feet of frontage along King and Charlton streets to the north and south, respectively, and about 200 feet of frontage along Greenwich Street to the west. A site location map is provided as Figure 1.

According to the May 24, 2018, American Land Title Association (ALTA)/National Society of Professional Surveyors (NSPS) Land Title Survey, prepared by Langan, the site elevations (el) are 10.77 in the southern part of the site and 13.88 in the northeastern part of the site. Elevations presented in the survey are measured in feet and are referenced to the North American Vertical Datum of 1988 (NAVD88).

The site is occupied by an open-air parking lot and a one-story parking garage building with a partial cellar constructed circa 1932. Two 550-gallon gasoline underground storage tanks (UST) were located beneath the parking garage, as indicated on the 1951, 1968, 1980 and 1994 Sanborn Fire Insurance Maps. Historical uses of the site included a preserves factory, a packing canned goods company, a confectioners' supplier, and an express depot.

1.1 Proposed Development Plan

The proposed development project is in the early planning stages, but is anticipated to include a 10-story commercial office building spanning the site footprint with ground-floor retail and one full cellar level. General excavation is expected to extend to a minimum of about 19 feet below grade surface (bgs) (about el -5).

1.2 Previous Environmental Investigations

Langan's remedial investigation (RI), conducted between April 23 and May 2, 2018, included collecting soil, groundwater, and soil vapor samples. Petroleum impacts to soil, including photoionization detector (PID) readings above background (maximum [max.] of 3,600 parts per million [ppm] at EB-02), odors, and staining were observed from 6.5 to 26 feet bgs in the western and central parts of the site.

Analytical results for the soil samples exhibited concentrations of eight petroleum-related volatile organic compounds (VOC) and one petroleum-related semivolatile organic compound (SVOC)

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exceeding the NYSDEC Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use (UU) and/or Commercial Use (CU) Soil Cleanup Objectives (SCO) at the groundwater interface.

During the RI, groundwater was encountered between about 14.97 and 17.36 feet bgs (about el. -4.40 to el. -4.88). Petroleum impacts to groundwater were observed during sampling of groundwater monitoring wells MW02 and MW06, as evidenced by odors, sheen, and elevated PID readings. Headspace PID readings above background, and gasoline-like odors were apparent in MW02 (250 ppm), MW03 (21.9 ppm) and MW06 (250 ppm). No sheen was observed on groundwater during groundwater sampling. Ten petroleum-related VOCs and three petroleum-related SVOCs were detected at concentrations above the NYSDEC 6 NYCRR Part 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (SGV) for Class GA Water in monitoring wells MW02 and MW06.

Analytical results for soil vapor samples across the site exhibited petroleum-related VOC concentrations above outdoor ambient air concentrations. In response to the subsurface conditions, the NYSDEC was contacted on May 1, 2018, and Spill Number 1801068 was assigned. A copy of the December 7, 2018, Draft Remedial Investigation Report (RIR) is provided in Appendix A.

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2.0 SUPPLEMENTAL REMEDIAL INVESTIGATION

A SRI was performed between 29 October and 8 November 2018 to supplement the RI dataset and delineate petroleum-related VOCs in soil and groundwater both on and off site. The SRI included the following and was conducted in accordance with 6 NYCRR NYSDEC Part 375 and the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (May 2010):

Soil Borings and Sampling

- Completed 16 soil borings
- Field screened soil borings for environmental impacts using visual and olfactory methods and with a PID equipped with a 10.6 electron volt (eV) bulb
- Collected up to five soil samples per boring (of 30 soil samples, including two duplicates) for laboratory analysis

Monitoring Well Installation and Sampling

- Installed six off-site and three on-site permanent groundwater monitoring wells at select soil boring locations
- Collected one groundwater sample from each newly installed and two existing on-site groundwater monitoring wells for laboratory analysis of VOCs (12 samples, including one duplicate)
- Collected one groundwater sample from the three newly installed on site and four existing groundwater monitoring wells for laboratory analysis of emerging contaminants (8 samples, including one duplicate)

Sample locations from the SRI are shown on Figure 2 and are summarized in Table 1.

2.1 Soil Investigation

Sixteen soil borings (WC01, WC05, WC07, WC09, WC10, WC11, WC13, WC14, WC15, WC18, and EB21 through EB26) were installed by AARCO Environmental Services Corp. between October 29 and November 5, 2018. Boring locations are shown on Figure 2. Soil borings were advanced to between 20 and 28 feet bgs to vertically delineate petroleum impacts and to accommodate installation of a groundwater monitoring well.

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2.1.1 Investigation Methodology

Soil borings were advanced continuously by AARCO using a Geoprobe 7822DT direct-push drill rig from the surface to the boring termination depth. The direct-push drill rig was equipped with a MacroCore™ sampler with 4-foot-long acetate liners. Langan field personnel documented the work, screened soil borings for environmental impacts, and collected soil samples for laboratory analyses. Soil was screened continuously to the boring termination depth for organic vapors with a PID equipped with a 10.6 eV lamp and for visual and olfactory evidence of environmental impacts (e.g., staining and odor). Soil was visually classified for color, grain size, texture, and moisture content, and was recorded in a field log. Soil boring logs documenting these observations are included in Appendix B.

After collecting samples, AARCO backfilled certain borings with sand and soil cuttings that did not exhibit evidence of impacts and converted other borings to groundwater monitoring wells. Excess soil was containerized in labeled United Nations/Department of Transportation (UN/DOT)-approved 55-gallon steel drums with sealed lids for off-site disposal.

Work complied with the safety guidelines outlined in Langan's April 2018 Health and Safety Plan (HASP).

2.1.2 Sampling Methodology and Rationale

Thirty soil samples, including two duplicate samples, were collected and submitted for laboratory analysis during the SRI. Discrete (grab) soil samples were collected to horizontally and vertically delineate petroleum impacts based on visual, olfactory, and PID evidence of petroleum-like contamination, as outlined in the table below. Starred (*) borings represent borings within the source area.

Boring(s)	Samples Collected	Sample Collection Rationale
WC01	18-19	Horizontal and vertical delineation of source area – interval showing greatest degree of petroleum-like impacts
WC05	19-20	
WC09*	16-18	
WC10*	9-11	
WC11	18-20	
WC14*	14-16	
EB23	15-17	
EB24	5-6	

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Boring(s)	Samples Collected	Sample Collection Rationale
WC07	11-12	Horizontal delineation of groundwater impacts – interval at apparent groundwater interface Horizontal delineation of groundwater impacts – interval at apparent groundwater interface
WC15	12-14	
WC18	13-15	
EB21	9-11	
EB22*	12-14	
EB25	8-10	
EB26	14-16	
WC10*	16-18; 18-20; 20-22; 22-24	Vertical delineation of source area
WC13*	16-18; 18-20; 20-22; 23-24	
WC14*	16-18; 18-20; 20-22; 22-24	
EB22	22-24	

A sample collection summary is provided in Table 1.

Soil samples were collected in laboratory-supplied containers and were sealed, labeled, placed in an ice-chilled cooler (to maintain a temperature of about 4°C), and transported via courier service to Alpha Analytical, Inc. (Alpha) for analytical analysis. Alpha, a NYSDOH (New York State Department of Health) Environmental Laboratory Approval Program (ELAP)-certified laboratory, is located in Westborough, Massachusetts (ELAP No. 11148). Samples submitted for VOC analysis were collected directly from the acetate liner by Terra Core® samplers and were analyzed using United States Environmental Protection Agency (EPA) method 8260C for NYSDEC Part 375 list and EPA Target Compound List (TCL) VOCs.

2.2 Groundwater Investigation

Ten groundwater monitoring wells were installed by AARCO between October 31 and November 5, 2018. Monitoring well locations are shown on Figure 2.

2.2.1 Monitoring Well Installation and Development Methodology

Soil borings WC05, WC11, WC15, and EB21 through EB26 were converted to permanent groundwater monitoring wells, which were constructed with 2-inch-diameter, 0.01-inch-slotted schedule-40 polyvinyl chloride (PVC) screens. Monitoring wells were installed with 10-foot-long screens straddling the groundwater interface and schedule-40 PVC risers to the surface. The annulus of the borehole was backfilled to about 2 feet above the screened interval using FilPro No. 2 filter sand, followed by a 1-foot-thick hydrated bentonite seal and No. 2 sand to surface grade. The wells were finished with an expanding well plug and flush-mounted steel manhole cover. After installation, the wells were developed to remove sediments and prevent fines from

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blocking the well screen. A minimum of three well volumes were purged using a peristaltic pump. Monitoring well construction and development logs are included in Appendix C.

2.2.2 Groundwater Sampling

Newly constructed monitoring wells were sampled at least one week after development. Before sampling, the headspace of each monitoring well was screened with a PID. Monitoring wells were sampled in general accordance with the EPA's low-flow groundwater sampling procedure to allow for collection of a representative sample ("Low Stress [low flow] Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells," EQASOP-GW 001, January 19, 2010). Before collecting samples, Langan personnel purged groundwater from each well until groundwater parameters (pH, conductivity, turbidity, dissolved oxygen [DO], temperature, and oxidation-reduction potential [ORP]) stabilized. Limited groundwater recharge was encountered in monitoring wells MW03, MW21, and MW22; groundwater samples were collected from these monitoring wells after purging them dry. Monitoring wells were purged and groundwater samples were collected using a peristaltic pump connected to high-density polyethylene (HDPE) tubing. Groundwater sampling logs are included in Appendix D. Purged groundwater was containerized in labeled 55-gallon steel drums in preparation for off-site disposal.

Twenty groundwater samples, including two field duplicate samples, were collected for laboratory analysis:

- 11 groundwater samples (plus one duplicate sample) were collected from off-site groundwater monitoring wells (MW21 through MW26) and select on-site groundwater monitoring wells (MW02, MW05, MW06, MW11, and MW15), and were analyzed for NYSDEC Part 375 list and EPA TCL VOCs by EPA Method 8260C.
- 7 groundwater samples (plus one duplicate sample) were collected from all seven on-site groundwater monitoring wells and were analyzed for emerging contaminants, including 1,4-dioxane and perfluoroalkyl substances (PFAS) (21 compounds) using SW-846 Method 8270D-SIM and EPA Method 537M, respectively.

The samples were collected in laboratory-supplied containers and were sealed, labeled, placed in an ice-chilled cooler (to maintain a temperature of about 4°C), and transported via courier service to Alpha for analytical analysis. A sample collection summary is provided in Table 1.

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2.3 Quality Assurance and Quality Control Sampling

During the course of the SRI, Quality Assurance and Quality Control (QA/QC) samples were collected for laboratory analysis. Collected QA/QC samples are detailed below and in Table 1.

Soil samples

- Two field duplicate samples
- One field blank sample
- Two matrix spike/matrix spike duplicate (MS/MSD) samples

Groundwater samples

- One field duplicate sample (VOCs, emerging contaminants)
- Two field blank samples (emerging contaminants)
- One MS/MSD sample

Field duplicates were collected to assess the precision of the analytical methods relative to the sample matrix. Duplicates were collected from the same material as the primary sample by splitting the volume of homogenized sample collected in the field into two sample containers.

Field blanks were collected to determine the cleanliness of unused tubing, neoprene gloves and acetate liners used to collect groundwater and/or soil samples. Field blank samples consisted of deionized, distilled, and/or PFAS-free water, provided by the laboratory that has passed through the sampling apparatus. Field blank samples were analyzed for the same list of analytes as the corresponding sampling event and sample matrix.

2.4 Data Validation

Laboratory analyses of soil and groundwater samples were conducted by an NYSDOH ELAP-certified laboratory in accordance with EPA SW-846 methods and analytical data was reported consistent with the NYSDEC Analytical Services Protocol (ASP) Category B deliverable format. Environmental data was reported electronically using the database software application Environmental Quality Information Systems (EQulS) as part of the NYSDEC's Environmental Information Management System (EIMS).

QA/QC procedures required by the NYSDEC ASP and SW-846 methods, including initial and continuing instrument calibrations, surrogate compound spikes, and analysis of other samples (blanks and laboratory control samples) were followed.

The laboratory provided clean sample bottles, which were preserved in accordance with the SW-846 methods. Where there were differences in the SW-846 and NYSDEC ASP requirements, the NYSDEC ASP took precedence.

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Data validation was performed in accordance with the EPA validation guidelines for organic and inorganic data review. Validation included the following:

- Verification of QC sample results (both qualitative and quantitative)
- Verification of sample results (both positive hits and nondetects)
- Recalculation of 10% of all investigative sample results
- Preparation of Data Usability Summary Reports (DUSR)

Laboratory analytical results from the SRI were reported in the NYSDEC ASP Category B deliverable format and validated by Ms. Emily Strake of Langan, a qualified data validator.

2.4.1 Data Usability Summary Reports (DUSR)

A DUSR was prepared for each sampling matrix. The DUSRs present the results of the data validation, including a summary assessment of laboratory data packages, sample preservation and chain-of-custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. For the soil and groundwater samples, the following items were assessed:

- Holding times
- Sample preservation
- Sample extraction and digestion
- Laboratory blanks
- Laboratory control samples
- System monitoring compounds
- MS/MSD recoveries
- Initial and continuing calibrations
- Target compound identification and quantification
- Instrument tune
- Internal standard area counts
- Dual column imprecision
- Contract-required detection limit standards
- Inductively Coupled Plasma (ICP) serial dilutions
- Field duplicate, trip blanks, and field blanks sample results
- Overall method performance

Based on the results of data validation, the following qualifiers were assigned to the data in accordance with the EPA's guidelines and best professional judgment:

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- “U” – The analyte was analyzed for, but was not detected at a level greater than or equal to the reporting limit (RL), or the sample concentration results were impacted by blank contamination.
- “UJ” – The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
- “J” – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- “R” – The sample results are not useable because the quality of the data generated did not meet certain criteria. The analyte may or may not be present in the sample.
- “NJ” – The analysis indicates the presence of an analyte that has been “tentatively identified,” and the associated numerical value represents its approximate concentration.
- No Flag – The results are accepted without qualification.

The data were determined to be acceptable; however, minor deficiencies were identified and are summarized in the DUSRs. Completeness, defined as the percentage of analytical results that are judged to be valid, is 100%. The data are considered usable, as qualified. Copies of the DUSRs are provided in Appendix E.

2.5 Field Observations and Analytical Results

2.5.1 Soil Findings

2.5.1.1 *Field Observations*

Chemical or petroleum impacts, evidenced by odors, staining or elevated PID readings above background levels were apparent at 12 of 16 soil boring locations. The following table presents the observed fill interval, depth of impacted interval, the highest recorded PID readings (with depth), and the associated field observations at the locations where petroleum-like impacts were observed:

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Soil Boring ID	Observed Fill Interval (feet bgs)	Impacted Interval (feet bgs)	Max PID Reading and Depth (ppm)	Field Observations
WC01	0 – 9.5	17 – 20	1,532 ppm (18.5 feet bgs)	Petroleum-like odor
WC05	0 – 9.5	18 – 24	248 ppm (19.5 feet bgs)	Staining and petroleum-like odor
WC07	0 – 10	11 – 12	58.6 ppm (12 feet bgs)	Petroleum-like odor
WC09	0 – 8.5	8 – 22.5	5,860 ppm (12.5 feet bgs)	Staining and petroleum-like odor
WC10	0 – 9	9 – 18	15,000 ppm (10.5 feet bgs)	Staining and petroleum-like odor
WC13	0 – 10.5	9.5 – 22.5	15,000 ppm (15 feet bgs)	Staining and petroleum-like odor
WC14	0 – 8.5	9 – 28	15,000 ppm (15 feet bgs)	Staining and petroleum-like odor
WC15	0 – 6.5	9.5 – 20	2,342 ppm (10.5 feet bgs)	Petroleum-like odor
WC18	0 – 11	12 – 15	27.8 ppm (13.5 feet bgs)	Petroleum-like odor
EB21	0 – 9.5	10 – 21	816.8 ppm (17 feet bgs)	Petroleum-like odor
EB22	0 – 7.5	6 – 21	3,906 ppm (13.5 feet bgs)	Staining and petroleum-like odor
EB23	0 – 9	13 – 20	4,144 ppm (15 feet bgs)	Petroleum-like odor

The depth of impacts was delineated vertically at the boring locations by field observations or analytical results. A map showing delineated petroleum impacts, based on field observations, is provided as Figure 2.

2.5.1.2 Analytical Results

Soil samples were collected and analyzed for VOCs. A soil sample analytical results summary is provided as Table 2 with comparisons to the NYSDEC 6 NYCRR Part 375 UU and CU SCO. Soil sample results that exceed the UU or CU SCOs for soil samples are shown in Figure 3. Analytes detected above the UU and CU SCOs are listed below; borings with corresponding analytes detected above CU SCOs are shown in **bold**:

- 1,2,4-Trimethylbenzene (max of 650 mg/kg at EB22_12-14): **EB22**, WC09, WC13, and **WC14**

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- 1,3,5-Trimethylbenzene (max of 220 mg/kg at EB22_12-14): **EB22**, WC09, WC13, and WC14
- Acetone (max of 0.088 mg/kg at EB24_5-6): EB24, and EB25
- Benzene (max of 41 mg/kg at EB14_18-20): EB21, EB22, WC09, WC10, WC13, WC14, and WC18
- Ethylbenzene (max of 190 mg/kg at EB22_12-14): EB22, WC01, WC09, WC13 and WC14
- Naphthalene (max of 120 mg/kg EB22_12-14): EB22, WC09, WC13, and WC14
- N-Butylbenzene (max of 25 mg/kg EB22_12-14): EB22 and WC14
- N-Propylbenzene (max of 90 mg/kg EB22_12-14): EB22, WC01, WC09, WC13, WC14, and WC15
- Toluene (max of 450 mg/kg EB22_12-14): EB22, WC09, WC13, and WC14
- Total Xylenes (max of 1,300 mg/kg EB22_12-14): EB21, **EB22**, EB23, WC09, WC10, WC13, **WC14**, and WC18

Petroleum impacts to soil were identified in the western part of the site and in the west-adjoint sidewalk in samples collected from about 9 to 24 feet bgs.

Petroleum impacts were horizontally delineated during the RI and SRI:

- To the north (WC05_19-20, WC07_11-12, WC07_14-16, EB-09_14-15, EB-04_15-16, and EB-07_14-15)
- East (WC07_11-12, WC11_18-20, EB-03_16-17, and EB-05_13-15)
- South (EB-01_14-16, and EB-08_13-15)
- West (EB25_8-10 and EB26_14-16)

Petroleum impacts were vertically delineated by samples EB-06_22-24, EB-02_26-28, EB22_23-24, WC10_18-20, WC10_20-22, WC10_22-24, and WC13_22-24.

2.5.2 Groundwater Findings

2.5.2.1 *Field Observations*

Monitoring wells were gauged for free product with an oil-water interface probe. Free product was not detected in any of the monitoring wells. Before sampling, Langan personnel screened well headspaces with a PID and found readings from zero to 1,195 ppm (highest reading in MW23). Monitoring wells MW02 and MW06 exhibited petroleum-like odor during purging and

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sampling. Monitoring well construction logs are included in Appendix C. Groundwater sampling logs are included in Appendix D.

2.5.2.2 Analytical Results

Groundwater samples were collected and analyzed for VOCs to delineate petroleum impacts to groundwater both on and off site. On-site monitoring wells were also sampled for emerging contaminants, which include 1,4-dioxane and PFAS. Groundwater sample analytical results are summarized in Tables 3 and 4. Groundwater VOC sample results that exceed the Class GA SGVs are shown in Figure 4.

The total VOCs detected in each groundwater monitoring well sampled during the SRI are summarized below:

Groundwater Monitoring Well	Total VOCs (mg/L)
MW02	31.39
MW05	0.002
MW06	7.76
MW06 – Duplicate	8.23
MW11	ND
MW15	0.06
MW21	5.60
MW22	27.22
MW23	14.56
MW24	0.04
MW25	0.02
MW26	0.02

Petroleum impacts to groundwater were identified in the western part of the site and within the west-adjoint sidewalk in samples collected from monitoring wells MW02, MW06, MW21, MW22, and MW23. Petroleum impacts to groundwater were horizontally delineated to the north, east, south, and west by groundwater samples collected from monitoring wells MW03, MW05, MW11, MW15, MW24, MW25, and MW26.

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3.0 PRE-DESIGN INVESTIGATION

To evaluate the feasibility and effectiveness of in situ remediation technologies, a predesign investigation was conducted concurrently with the SRI. The investigation consisted of soil and groundwater sampling to assess current geochemical and biological conditions. The geochemical parameter evaluation focuses on certain indicator data that supports the presence of favorable conditions for natural attenuation and the feasibility of in situ remediation. The natural attenuation evaluation focuses on biodegradation, the main destruction process for natural attenuation. In-situ enhanced bioremediation (ISEB) and in situ chemical oxidation (ISCO) are the two remedial technologies considered for evaluation.

Soil samples were collected on October 31, 2018 from boring WC14 from the intervals 12 to 16, 18 to 22, and 24 to 28 feet bgs, and on November 1, 2018, from boring EB21 from the intervals 12 to 15 and 15 to 22 feet bgs. Groundwater samples were collected on November 6, 2018, from monitoring wells MW02, MW03, and MW05, and on November 7, 2018, from MW26. Soil samples were analyzed for geochemical analyses including chemical oxygen demand (COD), biochemical oxygen demand (BOD), and total organic content (TOC). Groundwater samples were analyzed for geochemical analyses including COD, BOD, TOC, alkalinity, sulfate, nitrate and nitrite, iron (total and dissolved), manganese (total and dissolved), and total heterotrophic plate count (HPC).

Monitoring wells were sampled in accordance with the EPA's low-flow groundwater sampling procedure to allow for collection of a representative sample ("Low Stress [low-flow] Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells," EQASOP-GW 001, January 19, 2010). Before samples were collected, groundwater-quality parameters (pH, conductivity, turbidity, DO, temperature, and ORP) were allowed to stabilize, and, if possible, turbidity measurements were below 50 Nephelometric Turbidity Units (NTU). Poor groundwater recovery precluded stabilization of groundwater-quality parameters before collecting a sample from MW03. Analytical data packages are included in Appendix F, and monitoring well sampling logs are provided as Appendix D. Table 5 summarizes the geochemical remedial parameters used to evaluate the remedial technologies proposed for this site.

3.1 Total Organic Carbon and Oxygen Demand

Microbial activities require an organic carbon source to provide energy, biomass, and electrons. Total organic carbon (TOC) measures organic carbon in the groundwater. Because petroleum contaminants and organic carbon typically act as an electron donor during biodegradation, TOC competes with petroleum products for electron acceptors. The TOC level measured in a

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groundwater sample collected from MW02 was 160 mg/L, which was significantly higher than the petroleum VOC concentration of about 30 mg/L. Meanwhile, soil TOC was detected from 590 mg/kg to 13,000 mg/kg, orders of magnitude higher than the petroleum VOC concentrations at each respective location. This indicates that TOC will compete with petroleum contaminants for electron acceptors during biodegradation. COD and BOD reflect the oxygen demand via chemical and biological processes and are indicators of the presence of reductive compounds including TOC and dissolved metals. COD is generally higher than BOD. Elevated BOD and COD suggest high demand for oxygen (electron acceptor for aerobic biodegradation) or oxidant (for chemical oxidation). Average BOD and COD concentrations within the predesign investigation area were 15.8 and 89.25 milligrams per liter (mg/L) in groundwater and 177 and 7,644 mg/kg in soil, respectively. The elevated BOD and COD would indicate the presence of high levels of reducing reagent, and, in turn, would result in a high oxidant demand.

3.2 Electron Acceptors

Petroleum biodegradation requires electron acceptors—oxygen being the most preferred. When oxygen is consumed, the hierarchy for electron acceptor consumption is nitrate, manganese (IV), iron (III), sulfate, and last, carbon dioxide. Elevated levels of electron acceptors are favorable for biodegradation of petroleum compounds. However, the subsurface often lacks electron acceptors, and the degradation kinetics could be insufficient when electron acceptors are absent, or when only lower hierarchy electron acceptors are present. The electron acceptors, except for oxygen and carbon dioxide, are discussed below.

- Nitrate and nitrite concentrations were not detected in monitoring wells close to the source area (MW02, MW05), but were detected upgradient of the source area at a concentration of 260 µg/L. Nitrate and nitrite were detected in off-site monitoring well MW26, which is down-gradient and outside of the source area, at a maximum value of 3,900 µg/L as nitrogen. The absence of nitrate in the source area suggests its complete consumption, indicating that the lack of electron acceptor nitrate may limit the rate of biodegradation.
- Iron (III) and manganese (IV) are typically insoluble, but their respective reduction products, iron (II) (via iron-reduction) and manganese (II) (via manganese reduction) are highly soluble and can be readily measured in groundwater samples. The higher total and soluble metal concentrations at the source area confirmed that iron and manganese are the electron acceptors for petroleum contaminant degradation at the source area.

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- Dissolved and total manganese concentrations were highest in the source area (MW02) at concentrations of 3,450 µg/L and 3,477 µg/L, respectively. Dissolved manganese concentrations outside of the source area were 380.2 µg/L in MW03 to 1,284 in off-site monitoring well MW26, and total manganese concentrations were 365.2 µg/L in MW03 to 1,201 µg/L in MW26.
- Dissolved and total iron concentrations were also highest in the source area (MW02) at concentrations of 7,020 µg/L and 6,370 µg/L, respectively. Dissolved iron concentrations outside of the source area were 69 µg/L in MW26 to 1,400 µg/L in MW03, and total iron concentrations were 110 µg/L in MW05 to 1,150 µg/L in MW26.
- Sulfate reduction is the process mediated by sulfate reducers to generate sulfide and also can degrade petroleum product using sulfate as the electron acceptor. Sulfide then forms metal sulfide complexes when soluble metals are present. Metal sulfide complexes typically have exceedingly low solubility and are not detectable in the groundwater. Therefore, the reduction of sulfate concentration along the groundwater flow path suggests that sulfate reduction occurs. Sulfate was not detected in the sample collected within the source area (MW02) but was detected at a concentration of 33,000 µg/L in MW05 (side gradient well) to 210,000 µg/L in MW03 (most upgradient well). Based on the sulfate concentration change along the groundwater flow direction, sulfate reduction is likely occurring to degrade petroleum contaminants at the source area.

3.3 Dissolved Oxygen (DO) and Oxidation-Reduction Potential (ORP)

DO and ORP levels are key indicators of whether the aquifer is aerobic or anaerobic and oxidative or reductive. Oxygen is the most preferred electron acceptor for petroleum contaminant degradation; therefore, aerobic degradation using oxygen as the electron acceptor is the most efficient biodegradation pathway for petroleum contaminants. High DO and ORP indicate favorable conditions for natural attenuation of petroleum contaminants. Low levels of DO and a negative ORP observed during sampling indicates that anaerobic-reductive conditions are prevalent in the source area. ORP values close to zero were observed at the periphery of the source area in monitoring well MW26, and positive ORP values were observed in monitoring wells further from the source area including MW04, MW05, and MW24. The DO, ORP, and other electron acceptor results confirm that anaerobic degradation via iron reduction and sulfate reduction are likely the dominant natural attenuation processes within the source area.

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3.4 Alkalinity and pH

Alkalinity and pH measure the potential aquifer buffer capacity. The total alkalinity ranged from 244 mg calcium carbonate (CaCO_3)/L in MW05 to 570 mg CaCO_3 /L in MW02. The alkalinity levels are within a suitable range for biodegradation. Microbial degradation typically requires neutral conditions but tolerates a pH from 5 to 9. During the October and November 2018 groundwater sampling events, pH levels ranged from 6.61 in MW11 to 8.32 in MW03. The observed pH levels are within the suitable range required for biodegradation. Based on the observed pH and alkalinity levels, the aquifer has sufficient buffer capacity.

3.5 Biological Parameters

HPC measures the microbial population that can grow on a culture plate under aerobic conditions. Because HPC only measures a fraction of total microbes that are culturable under aerobic conditions, HPC values are typically significantly less than the total microbial population. However, HPC acts as an indicator of overall microbial health. The average HPC was 563 colony-forming units per milliliter (cfu/mL), a moderately low level. The HPC value suggests that aerobic microbes and aerobic degradation of petroleum contaminants do not likely control the plume attenuation.

3.6 Investigation Findings

In general, anaerobic and reductive conditions are prevalent in the subsurface. Active anaerobic degradation including metal (iron and manganese) and sulfate reduction are occurring. However, because of the elevated TOC, BOD, and COD within the source area, the demand and competition for electron acceptors are high; therefore, natural attenuation alone cannot rapidly reduce contaminant concentrations. Furthermore, the high TOC, BOD, COD, and contaminant concentration in the soils indicate that a single remediation technology, such as chemical oxidation, bioremediation, or physical sorption, would not effectively remediate the petroleum contamination at the source area.

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4.0 BENCH-SCALE TREATABILITY STUDY

The purpose of the bench-scale study was to evaluate the appropriate in situ remediation technology for the treatment of VOCs—primarily benzene, toluene, ethylbenzene, and xylenes (BTEX). The bench-scale study investigated three technologies, ISCO via alkaline activated persulfate, physical sorption via granular activated carbon (GAC), and a combined technology of ISCO and GAC sorption.

4.1 Technology Selection

To treat petroleum contaminants, chemical oxidation and biodegradation are commonly applied remedial technologies. Conventional biodegradation was not considered for further testing because the process requires an extended timeframe and would not meet the site remediation, development, and schedule requirements. ISCO treatment typically requires a few weeks to perform and was considered for the bench-scale study; however, the elevated levels of BTEX in the soil could prevent effective treatment, and the elevated BOD and COD could result in high oxidant demand. Chemical oxidation occurs in the aqueous phase, and the oxidant must make direct contact to effectively degrade the contaminant. When soil TOC and contaminant levels are both elevated, as observed within the site source area, the contaminants are likely sorbed to soil particles. Chemical oxidation reduces contaminant levels in the aqueous phase but does not effectively treat contaminants that are adsorbed on soil. After oxidant is completely consumed in the groundwater, additional contaminant can be released from the sorbed phase and increase groundwater concentrations. This phenomenon is referred to as rebound.

GAC sorption was considered during the bench-scale study because organic contaminant mass can be transferred from groundwater to GAC, resulting in the reduction of groundwater contaminant concentrations. GAC sorption was tested to determine the sorption efficiency and to determine whether GAC sorption would be an effective remedial technology for this site. GAC adsorbs both noncontaminant and contaminant organics. Soil TOC and the contaminant would compete for the sorption sites on the GAC. High doses of GAC were tested to overcome competition from the relatively high soil TOC.

Because of the high contaminant levels within the source area, the likelihood of rebound following ISCO implementation is high at the source area. GAC sorption was tested to identify the potential to mitigate rebound following ISCO. GAC can adsorb contaminant mass released from the soil following ISCO treatment to maintain low-level contaminant concentrations in groundwater. Additionally, the combined technologies promote effective and rapid biodegradation after ISCO. The biodegradation rate is determined by the concentrations of

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available electron donors (petroleum contaminants) and electron acceptors, and microbial population. Persulfate oxidation will generate sulfate as the end product of the reaction. Sulfate concentrations are commonly above 1,000 mg/L in groundwater following ISCO via activated persulfate. GAC acts to adsorb contaminants, and also enhances the formation of biofilms and increases the sulfate-reducing microbial population. As described in Section 3.2, the rate of sulfate reduction was insufficient to achieve rapid reduction of contaminants. However, when GAC is applied following ISCO, high levels of sulfate (electron acceptor) make contact with contaminants concentrated on the GAC surface. Because of the high availability of carbon and sulfate, sulfate-reducing biofilms form and act to degrade the organic compounds. These conditions are optimal for rapid biodegradation of the contaminants.

4.2 Treatability Sampling

Soil samples for the treatability study were collected concurrently with the SRI and predesign investigation on October 31 and November 1, 2018. In situ remediation typically targets permeable zones, so soil samples were collected from permeable layers (sand and sandy zones) with visual, olfactory, and instrumental (elevated PID readings) evidence of petroleum contamination. Soil was screened continuously to the boring termination depth for organic vapors with a PID equipped with a 10.6 eV lamp and for visual and olfactory evidence of environmental impacts (e.g., staining and odor). Two soil samples were collected to represent high- and low-contaminant soils, based on field observations and PID readings. The high-contaminant soil consisted of soil collected from boring WC14 between 12 and 28 feet bgs, and the low-contaminant soil consisted of homogenized soil collected from borings EB21 from 12 to 22 feet bgs and EB22 from 16 to 22 feet bgs. Boring WC14 was located within the source area (west-central part of the site) and EB21 and EB22 were located within the west-adjoint sidewalk (Figure 2).

Two groundwater samples were collected on November 6, 2018 to represent high-contaminant and low-contaminant conditions. High-contaminant groundwater samples were collected from MW02 within the source area, and low-contaminant groundwater samples were collected from MW05 along the perimeter of the source area.

The soil and groundwater samples for the treatability study were stored in containers without any headspace. All samples were shipped to the Langan treatability facility at the New Jersey Institute of Technology (NJIT). Upon receipt of the samples by the laboratory, the samples were stored in the refrigerator at approximately 4 degrees Celsius (°C).

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Sample locations are shown on Figure 2. Soil boring logs and groundwater sampling forms are provided in Appendices B and D, respectively.

4.3 Bench-Scale Testing

The treatability testing was performed at Langan's treatability facility between November 2018 and January 2019. The bench-scale study was implemented to support the remedial selection and design. The objectives of the treatability study were as follows:

- Determine the soil oxidant demand (SOD) of the site soil and groundwater at different contaminant levels;
- Evaluate the feasibility of ISCO and GAC treatment for the remediation of VOCs; and
- Determine the effective dosage of oxidant, alkaline reagent, and GAC for soil and groundwater with different contaminant levels.

The treatability test procedures consisted of sample homogenization, persulfate SOD testing, and effectiveness testing using persulfate and GAC. Safety data sheets for these reagents are provided in Appendix G.

The study lasted for nine weeks according to the timeline of the study shown below.

Week 1	Sample homogenization and characterization Titration test and SOD test setup
Week 2	SOD residual persulfate analysis
Week 3	SOD residual persulfate analysis ISCO test setup ISCO and GAC test setup
Week 5	ISCO analytical sampling
Week 7	GAC test setup GAC addition to ISCO and GAC test
Week 9	GAC analytical sampling ISCO and GAC test analytical sampling

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4.3.1 Sample Homogenization and Characterization

The soil and groundwater samples were homogenized—to the extent possible. Soil homogenization was performed in the chemical hood using a soil mixer. Cobbles or stones greater than 1 inch were removed, and the soil was repacked into the sample containers without any headspace. The groundwater was homogenized by agitating the groundwater collection bag. Measures (maintaining low temperature and avoiding long-time contact with air) were taken during homogenization to minimize VOC losses from the samples. The homogenized groundwater samples were analyzed for target analyte list (TAL) metals, and soil samples were analyzed for VOCs. The characterization after soil homogenization was performed to verify contaminant concentrations in the samples and to determine the soil homogenizing quality.

4.3.2 Soil Oxidant Demand Test

Soil oxidant demand (SOD) is a measure of total oxidant consumption by natural soil constituents and contaminants. SOD is the key design parameter for remedial design because the ISCO field implementation dosage is primarily determined by the SOD value. Treatments were prepared with groundwater, soil samples, and alkaline-activated persulfate in 500-milliliter (mL) polyethylene bottles.

An alkaline titration test was completed to determine the alkaline reagent dosage required to increase the groundwater and soil slurry pH to above 12.5. Sodium hydroxide (10 mole/liter) was used as the alkaline reagent for the titration.

The following treatment jars were prepared for both the high- and low-contaminant soil.

- Groundwater – Consisted of groundwater (both high- and low-contaminant), alkaline reagent, and persulfate to measure the persulfate consumed by groundwater only.
- High-contaminant (HC) and HC duplicate – Consisted of HC soil and groundwater amended with a high dosage of alkaline reagent and persulfate
- Low-contaminant (LC) and LC duplicate – Consisted of LC soil and groundwater amended with a low dosage of alkaline reagent and persulfate

The 14-day SOD test experimental setup, which began on November 15, 2018, is provided in Appendix I. Homogenized soil from WC14 (12 to 28 feet bgs) and groundwater from MW02 was used for the high-contaminant SOD test. Homogenized soil from EB21 (15 to 22 feet bgs) and EB22 (16 to 22 feet bgs) and groundwater from MW05 was used for the low-contaminant SOD test.

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The SOD jars were incubated at room temperature on a shaker at 35 revolutions per minute (rpm). Geochemical parameters (pH, ORP) and residual persulfate were measured on days 7 and 14 of the test.

4.3.3 ISCO Effectiveness Test

The ISCO effectiveness tests were conducted to determine the effectiveness of the proposed ISCO on contaminant mass reduction. The oxidant dosages for the oxidant effectiveness test were based on SOD, meaning that oxidant was amended at a similar level to the SOD. The ISCO effectiveness tests were set up in week 3 (Table 6).

- HC Control and duplicate – Consisted of 400 mL HC groundwater (MW02) and 300 grams (g) HC soil (WC14).
- LC Control and duplicate – Consisted of 400 mL LC groundwater (MW05) and 300 g LC soil (EB21 and EB22).
- HC and HC duplicate – Consisted of 400 mL HC groundwater (MW02) and 300 g HC soil (WC14) amended with a high dosage of alkaline reagent and persulfate (25 grams per kilogram [g/kg] wet soil)
- LC and LC duplicate – Consisted of 400 mL LC groundwater (MW05) and 300 g LC soil (EB21 and EB22) amended with low-dosage of alkaline reagent and persulfate (12.3 g/kg wet soil)

After two weeks of treatment with alkaline activated persulfate, the duplicate ISCO reactors were sacrificed for collecting analytical samples in week five. Groundwater samples were analyzed for VOCs, TOC, and TAL metals, and soil samples were analyzed for VOCs and SVOCs. Geochemical parameters (pH, ORP) and persulfate were measured using pH and ORP meters and a UV/Vis spectrophotometer at the Langan treatability facility.

4.3.4 GAC Effectiveness Test

The GAC effectiveness tests were conducted to determine the effectiveness of the proposed sorption on HC and LC soil and groundwater. The GAC effectiveness test was set up in week seven.

- HC Control and Duplicate – Consisted of 400 mL HC groundwater (MW02) and 300 g HC soil (WC14).
- LC Control and Duplicate – Consisted of 400 mL LC groundwater (MW05) and 300 g LC soil (EB21 and EB22).

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- HC and HC Duplicate High GAC – Consisted of 400 mL HC groundwater (MW02) and 300 g HC soil (WC14) amended with a high dosage of GAC (8 g/kg wet soil)
- LC and LC Duplicate High GAC – Consisted of 400 mL LC groundwater (MW05) and 300 g LC soil (EB21 and EB22) amended with a high dosage of GAC (4 g/kg wet soil)
- HC and HC Duplicate Low GAC – Consisted of 400 mL HC groundwater (MW02) and 300 g HC soil (WC14) amended with a low dosage of GAC (3 g/kg wet soil)
- LC and LC Duplicate Low GAC – Consisted of 400 mL LC groundwater (MW05) and 300 g LC soil (EB21 and EB22) amended with a low dosage of GAC (2 g/kg wet soil)

After two weeks of treatment, in week nine, groundwater samples were analyzed for VOCs and TOC and soil samples were analyzed for VOCs. During the sampling event, pH and ORP were measured using a pH/ORP meter.

4.3.5 ISCO and GAC Effectiveness Test

- The combined ISCO and GAC effectiveness tests were conducted to determine the effectiveness of the proposed combined ISCO and sorption on HC and LC soil and groundwater. The combined ISCO and GAC effectiveness test lasted six weeks. HC and HC duplicate high GAC – Consisted of 400 mL HC groundwater (MW02) and 300 g of HC soil (WC14) amended with a moderate dosage of persulfate (18.7 g/kg wet soil) and a high dosage of GAC (8 g/kg wet soil).
- HC and HC duplicate low GAC – Consisted of 400 mL HC groundwater (MW02) and 300 g of HC soil (WC14) amended with a moderate dosage of persulfate (18.7 g/kg wet soil) and low dosage of GAC (3 g/kg wet soil).
- LC and LC duplicate high GAC – Consisted of 400 mL LC groundwater (MW05) and 300 g of LC soil (EB21 and EB22) amended with a low -dosage of persulfate (9 g/kg wet soil) and high dosage of GAC (4 g/kg wet soil)
- LC and LC duplicate low GAC – Consisted of 400 mL LC groundwater (MW05) and 300 g of LC soil (EB21 and EB22) amended with a low dosage of persulfate (9 g/kg wet soil) and low dosage of GAC (2 g/kg wet soil).

The reactors were set up in week three by adding sodium persulfate and sodium hydroxide. Geochemical parameters (pH, ORP) and residual persulfate were analyzed in weeks five and seven. An alkaline pH would inhibit microbial growth, and residual persulfate would react with GAC to reduce the GAC sorption efficiency. Therefore, it was important to maintain a neutral pH and confirm the complete consumption of persulfate before adding GAC. In week seven,

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residual persulfate concentrations were less than 1 g/kg. To shorten the study duration, ascorbic acid was added into the reactors to quench the low level of remaining persulfate. After persulfate was quenched in week seven, GAC was added to each reactor (Table 6).

In week nine, after two weeks of treatment, the treated groundwater samples were analyzed for VOCs and TOC and soil samples were analyzed for VOCs. Geochemical parameters (pH and ORP) were measured using the pH and ORP meter.

4.4 Results and Discussion

The treatment results are presented for the initial soil characterization in Appendix H, SOD test in Appendix I, ISCO test in Appendix J, GAC test in Appendix K, and combined ISCO and GAC test in Appendix L. The laboratory analytical reports related to the treatability study are provided in Appendix M.

4.4.1 Soil Characterization Results

Tables H-1 and H-2 of Appendix H summarize the soil and groundwater characterization results, respectively. The soil and groundwater analytical results of high-contaminant and low-contaminant samples showed the following:

- High-contaminant soil contained approximately one order of magnitude higher VOC concentrations than did the low-contaminant soil.
- The concentration of EPH in the high-contaminant soil was approximately three times higher than in the low-contaminant soil.
- The percent difference between primary and duplicate samples was less than 20%, and confirmed that both high- and low-contaminant samples were well-homogenized.

4.4.2 SOD Test Results

Appendix I includes SOD test results consisting of the alkaline titration curve, SOD test setup, residual persulfate analysis, persulfate calibration curve, SOD calculation, and SOD results summary.

The titration test results recommended the addition of 2.151 mL of 10N NaOH to each persulfate treatment reactor to achieve a pH above 12.5. The SOD was estimated based on the comparison of the initial and residual oxidant concentrations during the SOD test. The measured SOD of the HC and LC soil was about 20 grams per kilogram (g/kg) and 9 g/kg wet soil, respectively. The SOD for the HC soil is considered to be relatively high-oxidant demand.

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4.4.3 ISCO Effectiveness Test

Appendix J includes ISCO test results summarized in Tables J-1 (SOD, pH, and ORP), J-2 (analytical results for HC) and J-3 (analytical results for LC). The SOD results during the ISCO effectiveness test were comparable with the results from the SOD test. The residual persulfate concentration was approximately 1 g/L and pH was about 10, suggesting that the persulfate and alkaline reagent dosages were appropriate for the contaminant level.

Tables J-2A and J-2B of Appendix J show the analytical results of high-contaminant samples for soil and groundwater, respectively. Tables J-3A and J-3B of Appendix J show the analytical results of low-contaminant samples for soil and groundwater, respectively. Tables 7 and 8 summarize the VOC mass removal efficiencies for the HC and LC samples, respectively. Figures 5 and 6 summarize total VOC mass (in both soil and groundwater) removal for the high and low contaminant, respectively. The ISCO effectiveness test showed average VOC mass reductions of 48% and 87% in the high- and low-contaminant treatments, respectively. Treatment of both samples (HC and LC) resulted in VOC mass reduction, but the LC samples showed more optimal treatment than did HC samples.

- After the high-contaminant test, the total VOCs in groundwater reduced by about 60% and the total VOCs in soil were reduced by about 30%. The lower percentage of reduction in soil is expected because contaminants adsorbed onto soil cannot effectively contact oxidants. In groundwater and soil, BTEX decreased by 59%, and benzene decreased by 70%. Trimethylbenzene isomers, which are among the most recalcitrant VOCs, only decreased by about 30%. Following treatment, 17 of the analyzed VOCs exceeded the NYSDEC SGVs in groundwater and four of the analyzed VOCs exceeded the UU SCOs in soil.
- After the low-contaminant test, the total VOCs in groundwater were reduced by 72%, while the total VOCs in soil were reduced by 86%. In both groundwater and soil, BTEX decreased by 92% and benzene decreased by 63%. Trimethylbenzene isomers decreased by about 85%. After treatment, 11 of the analyzed VOCs exceeded the NYSDEC SGVs in groundwater and no VOCs exceeded the UU SCOs in soil.

Metals are often mobilized during ISCO treatment because the oxidant increases ORP levels. Nine metals — barium, chromium, copper, lead, magnesium, manganese, nickel, sodium, and zinc — were detected in groundwater samples at concentrations exceeding the NYSDEC SGVs. Concentrations in the persulfate-treated samples (both the LC and HC treatments) were more than twice as high as those detected in the control samples (up to an order of magnitude higher). The increase in metals in groundwater after treatment with persulfate is likely related to several

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factors including changes in pH, ORP, dissolution of metal complexes, and desorption of metals from pH-dependent charged surfaces (May 2015 Guidance Document: Assessing the Potential for Metals Mobilization During the Application of In-Situ Chemical Oxidation Technologies). The metal that increased most was sodium, which is a component of both sodium persulfate and sodium hydroxide. Long-term metal concentrations in groundwater are controlled by the subsurface geochemical conditions, which typically return to baseline levels following treatment. During the implementation of ISCO in the field, mobilization of metals is typically temporary and localized, but monitoring of metals in groundwater will be included in the performance plan.

4.4.4 GAC Test Results

Appendix K includes the GAC test results summarized in Tables K-1 (pH and ORP), K-2 (analytical results for HC) and Table K-3 (analytical results for LC). Tables 9 and 10 summarize the VOC mass removal efficiencies for the HC and LC samples, respectively. Figures 7 and 8 summarize total VOC mass (in both groundwater and soil) removal for the high and low contaminant, respectively.

Testing was performed to determine the degree of groundwater treatment that could be achieved, but significant mass reduction was not expected. The observed reduction of total contaminant mass suggests that biodegradation may have been occurring in the reactors. Higher doses of GAC resulted in more effective treatment than lower doses of GAC in HC and LC samples.

- The HC effectiveness test showed average VOC mass reductions of about 37% and 16% in the high- and low-dosage treatments, respectively. The groundwater mass reductions were about 30% for high dosage and 23% for low dosage. Soil mass reductions were about 43% for high-dosage and 12% for low-dosage treatments. The groundwater concentration reduction was less than optimal, suggesting that the organics competing for GAC sorption likely reduced the GAC sorption efficiency.
- The LC effectiveness test showed average VOC mass reductions of about 28% and 0% in the high- and low-dosage treatments, respectively. The groundwater mass increased in both low- and high-dosage treatments, but the soil mass reduction was about 90% and 80%, respectively. The VOC increase in groundwater could be due to desorption induced by microbial activities, which were likely activated by GAC addition. Meanwhile, the GAC dosages (4 g/kg and 2 g/kg) were likely insufficient to overcome competition from organics.

The geochemical parameters pH and ORP provide further evidence for the potential enhancement of biodegradation during GAC treatment. The pH levels did not change between

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the control and GAC treatments. However, ORP decreased more than 100 mV in the GAC treatments at levels corresponding to the various GAC dosages. The ORP decreases reflected more active anaerobic degradation of petroleum contaminants and noncontaminant organics. Metal concentrations were not expected to increase in the GAC treatment reactors because GAC also sorbs dissolved metals (except for sodium). Additionally, metals tend to form insoluble minerals under strongly reduced (negative ORP) conditions.

4.4.5 ISCO and GAC Test Results

The combined ISCO and GAC effectiveness test was performed to determine the effect of a dual-phase treatment consisting of ISCO followed by chemical sorption. Appendix L includes the combined ISCO and GAC test results summarized in Tables L-1 (SOD, pH and ORP), L-2 (analytical results for HC) and Table L-3 (analytical results for LC). Tables 9 and 10 summarize the VOC mass removal efficiencies for the HC and LC samples, respectively. Figures 7 and 8 summarize total VOC mass (in both groundwater and soil) removal for the high and low contaminant, respectively.

The combined ISCO and GAC test showed the most optimal treatment results among the three technologies for the HC sample. The dosages of persulfate and alkaline reagents for the combined treatment were only 70% of the dosages for the ISCO-only effectiveness test. Therefore, less oxidant usage (and, in turn, less reagent use and cost) achieved better results than ISCO treatment alone. Significant reduction of VOC mass was achieved for both HC and LC samples, especially for the trimethylbenzene isomers.

- After the HC test, the total VOC reductions were about 71 % for the high-dosage and 67% for the low-dosage amendments. The total mass reductions were 50% better than the mass reduction of the ISCO-only treatment. BTEX showed similar reductions between ISCO and the combined treatment. Trimethylbenzene isomers were reduced by more than three times (more than 80%) during the combined treatment when compared with ISCO-only treatment results.
- Following the LC test, the total VOC mass reductions were about 78% for the high-dosage and 80% for the low-dosage amendments. The total mass reductions of the combined technologies were comparable with ISCO-only treatment results.

Aqueous phase pH and ORP were measured in all treatment reactors before GAC was amended in week seven and also after analytical samples were collected in week nine (Table L-1 of Appendix L). During the HC test, before GAC addition, pH levels were near 8 and ORP levels were about 300 mV. After GAC addition, pH decreased to less than 6.5 and ORP decreased to less than -200 mV. During the LC test, before GAC addition, pH levels were above 9 and ORP

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levels were about 300 mV. After GAC addition, pH decreased to less than 6.5 and ORP decreased to less than -100 mV. The pH and ORP decreases in the combined ISCO and GAC treatments were likely due to greater microbial activities.

4.4.6 Conclusion

All three technologies showed contaminant mass reduction for both HC and LC soil types. The remedial reagent dosages were moderate and suitable for in-situ implementation. For the HC soil, the combination of ISCO and GAC yielded optimal results. For the LC soil, both ISCO and the combination of ISCO and GAC yielded favorable results. Performing a combination of ISCO and GAC allowed the usage of lower dosages of oxidant and alkaline reagent. Biofilm formation, rather than sorption, likely enhanced the overall performance of GAC because of the high TOC at the site.

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5.0 REMEDIAL TECHNOLOGY RECOMMENDATION AND IMPLEMENTATION

The proposed site development will require excavation in the source area to at least el -5 (about 17 feet bgs) and site-wide dewatering. Excavation and dewatering will remove significant on-site sources of groundwater contamination and improve groundwater quality. Contaminant impacts were detected from el -2 to -13 (about 13 to 24 feet bgs). The proposed development-related excavation might not remove the entire source area. Remaining contamination will be addressed via a combination of over-excavation and off-site disposal or in-situ treatment. Confirmation soil samples will be collected following either over-excavation or in-situ treatment to confirm achievement of the Track 1 or Track 2 SCOs. To contain and stabilize the contaminant plume, on-site and off-site treatment of remaining groundwater contamination can be implemented. This section summarizes the groundwater remediation and contingent remedial measures that will be implemented to address groundwater contamination, if in-situ treatment is required.

5.1 On-Site Remediation

The targeted treatment areas are presented on Figure 9. The on-site impact area is divided into two areas, based on the degree of soil impacts. Area 1 is the source area and contains high concentrations of petroleum contaminants. Area 2 and the off-site area contain lower concentrations of petroleum contaminants, which will require treatment. Separate remediation technologies are proposed for the two areas. Before excavation to development depth begins (if over-excavation of source material is not feasible), an ISCO injection will target both areas below the proposed excavation depth from about 17 feet bgs (1 foot below the excavation depth) to 24 feet bgs. At least two months will be required between the completion of the ISCO injection and site-wide dewatering to allow for sufficient reaction time. After excavation reaches the anticipated development depth and before supporting piles are constructed, GAC will be mixed into the bottom of the excavation within the source area (Area 1).

5.1.1 Reagent Selection and Demand

Table 11A summarizes the on-site reagent dosage recommendations and demand estimations. Klozur® SP (the trade name of sodium persulfate) and 25% sodium hydroxide will be applied at the dosages listed in Table 11A and derived from the treatability study. Areas 1 and 2 are each about 2,500 square feet. Based on the dosages and treatment-area sizes, the total demand for sodium persulfate and sodium hydroxide is estimated at 46,750 pounds and 23,760 pounds, respectively (Table 11A).

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Based on the contaminant levels, only Area 1 is considered for the combined treatment. A GAC product, which is similar to the product tested during the treatability study and is supplied by a bulk chemical vendor, Evoqua Water Technology, LLC, can be used for the soil mixing. Based on the size of the treatment area, the total demand for GAC would be 6,875 pounds (Table 11A).

5.1.2 Field Implementation

Application of the activated persulfate will be via a direct-push drill rig across an about 5,000-square-foot treatment area. The remedial application will target the 17- to 24-foot-bgs depth interval where the targeted petroleum-related VOC concentrations were observed beginning 1 foot below the excavation depth. The injection points will be located in a rough grid pattern with a 10-foot injection radius of influence (ROI) to evenly spread chemicals across the treatment area. The injection volume and injection solution mixture are also listed in Table 11A.

Application of the GAC will be via soil mixing using an excavation bucket. GAC will be spread directly across the base of the excavation. The excavator bucket will mix GAC with soil 5 feet below the base of the excavation. The mixing activities will not require water addition, and thus should not interfere with structural piles or slab construction. GAC application and mixing will be performed in accordance with manufacturer recommendations and specifications.

5.2 Off-Site Remediation

The proposed off-site treatment area is approximately 2,550 square feet and extends about 170 feet along the west-adjointing Greenwich Street sidewalk. ISCO via alkaline-activated persulfate application will be implemented off site to reduce overall VOC concentrations. Furthermore, if the post-injection monitoring yields non-optimal results, especially with respect to trimethylbenzene isomers, a supplemental injection of powder activated carbon (PAC) less than 100 micrometers (μm) will be used to encourage sorption and enhance biodegradation.

5.2.1 Reagent Selection and Demand

Table 11B summarizes the off-site reagent dosage recommendations and demand estimations. Klozur[®] SP and 25% sodium hydroxide will be applied at the dosages listed in Table 11B. Based on the dosages and treatment area sizes, the total demand for sodium persulfate and sodium hydroxide is estimated at 42,000 pounds and 27,000 pounds, respectively.

A PAC product from a commercial bulk supplier (Evoqua) or a specialized remediation vendor (for example, BOS-200[®] from Remediation Products Inc.) will be used for the PAC injection, if required. Based on the size of the treatment area and off-site contaminant concentrations, the

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estimated demand for PAC is 16,830 pounds. The PAC dosage will be revised following groundwater monitoring results collected following ISCO implementation.

5.2.2 Field Implementation

Application of the activated persulfate will be performed via a direct-push drill rig. The remedial application will target the 10- to 25-foot bgs depth interval where the targeted petroleum-related VOC concentrations were identified. The injection points will be located in a row consisting of an 8-foot injection ROI and an approximately 2-foot overlap of ROI from the adjacent injection points. The overlap of ROI is required to ensure that the chemical reagents will be distributed without gaps to form a reactive barrier.

If necessary, application of PAC will also be performed via direct-push injections. PAC will be injected as a slurry, which requires constant agitation to keep the PAC suspended. The injection locations and volumes will be revised based on the site access and conditions prior to injections. The proposed injection volumes and injection solution mixtures for both off-site treatments are presented in Table 11B.

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6.0 PERFORMANCE MONITORING

Performance monitoring will consist of baseline and post-remedy monitoring. Groundwater samples will be collected from the three existing monitoring wells on the sidewalk adjacent to the site (MW21 through MW23). The baseline sampling will be conducted at the start of on-site dewatering operations, before ISCO implementation and will be performed quarterly thereafter. Off-site groundwater treatment will be performed following site-wide excavation of source material to the anticipated development depth.

Post-remedy sampling will be conducted quarterly during the first year following implementation of the in situ remedy, and twice a year during each subsequent year. The monitoring will include the collection of VOCs and geochemical parameters. Geochemical parameters will consist of TAL metals, TOC, sulfate, DO, ORP, specific conductivity, pH, temperature, turbidity, salinity and alkalinity.

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Table J-2A: High-Contaminant ISCO Effectiveness Test Soil Analytical Results

Table J-2B: High-Contaminant ISCO Effectiveness Test Groundwater Analytical Results

Table J-3A: Low-Contaminant ISCO Effectiveness Test Soil Analytical Results

Table J-3B: Low-Contaminant ISCO Effectiveness Test Groundwater Analytical Results

Appendix K – GAC Effectiveness Test Documentation

Table K-1: GAC Test Results – pH, ORP

Table K-2A: High-Contaminant GAC Effectiveness Test Soil Analytical Results

Table K-2B: High-Contaminant GAC Effectiveness Test Groundwater Analytical Results

Table K-3A: Low-Contaminant GAC Effectiveness Test Soil Analytical Results

Table K-3B: Low-Contaminant GAC Effectiveness Test Groundwater Analytical Results

Appendix L – ISCO and GAC Effectiveness Test Documentation

Table L-1: ISCO and GAC Test Results – pH, ORP

Table L-2A: High-Contaminant ISCO and GAC Effectiveness Test Soil Analytical Results

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Table L-3A: Low-Contaminant ISCO and GAC Effectiveness Test Soil Analytical Results

Table L-3B: Low-Contaminant ISCO and GAC Effectiveness Test Groundwater Analytical
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Appendix M – Laboratory Analytical Results – Treatability Study

TABLES

Table 1
Remedial Design Memorandum
Sample Collection Summary

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Boring(s)	Sample Name	Sample Depth (ft bgs)	Sample Date	Sample Type	Analytical Parameters
Soil Samples - Supplemental Remedial Investigation					
WC01	WC01_18-19	18-19	10/29/2018	Grab	Part 375/TCL VOCs
WC05	WC05_19-20	19-20	10/30/2018	Grab	
WC07	WC07_11-12	11-12	10/29/2018	Grab	
WC09	WC09_16-18	16-18	10/30/2018	Grab	
WC10	WC10_9-11	9-11	10/30/2018	Grab	
	WC10_16-18	16-18	10/30/2018	Grab	
	WC10_18-20	18-20	10/30/2018	Grab	
	WC10_20-22	20-22	10/30/2018	Grab	
	WC10_22-24	22-24	10/30/2018	Grab	
WC11	WC11_18-20	18-20	10/30/2018	Grab	
WC13	WC13_16-18	16-18	10/31/2018	Grab	
	WC13_18-20	18-20	10/31/2018	Grab	
	WC13_20-22	20-22	10/31/2018	Grab	
	WC13_22-24	22-24	10/31/2018	Grab	
WC14	WC14_14-16	14-16	10/31/12018	Grab	
	WC14_16-18	16-18	10/31/2018	Grab	
	WC14_18-20	18-20	10/31/2018	Grab	
	WC14_20-22	20-22	10/31/2018	Grab	
	WC14_22-24	22-24	10/31/2018	Grab	
WC15	WC15_12-14	12-14	10/31/2018	Grab	
WC18	WC18_13-15	13-15	11/1/2018	Grab	
EB21	EB21_9-11	9-11	11/1//2018	Grab	
EB22	EB22_12-14	12-14	11/1/2018	Grab	
	EB22_22-24	22-24	11/1/2018	Grab	
EB23	EB23_15-17	15-17	10/31/2018	Grab	
EB24	EB24_5-6	5-6	11/5/2018	Grab	
EB25	EB25_8-10	8-10	11/5/2018	Grab	
EB26	EB26_14-16	14-16	11/5/2018	Grab	
Soil Samples - Treatability Study					
WC14	WC14_12-16	12-16	10/31/2018	Grab	TOC, BOD, COD
	WC14_18-22	18-22	10/31/2018	Grab	
	WC14_24-28	24-28	10/31/2018	Grab	
	WC14_12-28	12-16	10/31/2018	Composite	Treatability Study
		18-22			
		24-28			
EB21	EB21_12-15	12-15	11/1/2018	Grab	TOC, BOD, COD
	EB21_15-22	15-22	11/1/2018	Grab	
	EB21_12-22	12-15	11/1/2018	Composite	Treatability Study
		15-22			
EB22	EB22_16-22	16-22	11/1/2018		
Soil Samples - QA/QC					
WC09	DUP02_GRAB_103018	16-18	10/30/2018	Duplicate	Part 375/TCL VOCs
WC13	DUP03_GRAB_103118	18-20	10/31/2018	Duplicate	
WC13	WC13_103118_MS	20-22	10/31/2018	MS/MSD	
WC13	WC13_103118_MSD	20-22	10/31/2018		
EB22	EB22_110118_MS	12-14	11/1/2018	MS/MSD	
EB22	EB22_110118_MSD	12-14	11/1/2018		

Notes:

1. All grab soil samples were collected using Terra Core sampler kits.

2. Part 375 = Title 6 of the official compilation of New York Codes, Rules and Regulations (NYCRR) Part 375

3. VOCs = Volatile organic compounds

4. TCL = Target Compound List

5. QA/QC = Quality assurance/quality control

6. ft bgs = feet below grade surface

7. PFAS = Per- and Polyfluoroalkyl Substances
8. TOC = Total Organic Carbon

9. COD = Chemical Oxygen Demand

10. BOD = Biologic Oxygen Demand

Table 1
Remedial Design Memorandum
Sample Collection Summary

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Well ID	Sample Name	Screened Interval (ft bgs)	Sample Date	Sample Type	Analytical Parameters
Groundwater Samples					
MW02	MW02_110618	13-22	11/6/2018	N/A	Emerging Contaminants - PFAS, 1,4-Dioxane
MW03	MW03_110618	10-20	11/6/2018	N/A	
MW04	MW04_110818	10-20	11/8/2018	N/A	
MW05	MW05_110718	10-20	11/7/2018	N/A	
MW06	MW06_110818	12-22	11/8/2018	N/A	
MW11	MW11_110818	8-18	11/8/2018	N/A	
MW15	MW15_110818	7-17	11/8/2018	N/A	
MW02	MW02_110618	13-22	11/6/2018	N/A	Part 375/TCL VOCs
MW05	MW05_110618	10-20	11/6/2018	N/A	
MW06	MW06_110818	12-22	11/8/2018	N/A	
MW11	MW11_110818	8-18	11/8/2018	N/A	
MW15	MW15_110818	7-17	11/8/2018	N/A	
MW21	MW21_110618	6-16	11/6/2018	N/A	
MW22	MW22_110718	6-18	11/7/2018	N/A	
MW23	MW23_110718	7-17	11/7/2018	N/A	
MW24	MW24_110718	8-18	11/7/2018	N/A	
MW25	MW25_110618	8-18	11/6/2018	N/A	
MW26	MW26_110718	8-18	11/7/2018	N/A	
Groundwater Samples - Treatability Study					
MW02	MW02_110618	13-22	11/6/2018	N/A	COD, BOD, TOC, Alkalinity, Sulfate, nitrate/nitrite, iron (total and dissolved), manganese (total and dissolved), Total Plate Count
	MW02_110618	13-22	11/6/2018	N/A	Treatability Study
MW03	MW03_110618	15-25	11/6/2018	N/A	COD, BOD, TOC, Alkalinity, Sulfate, nitrate/nitrite, iron (total and dissolved), manganese (total and dissolved), Total Plate Count
MW05	MW05_110618	10-20	11/6/2018	N/A	COD, BOD, TOC, Alkalinity, Sulfate, nitrate/nitrite, iron (total and dissolved), manganese (total and dissolved), Total Plate Count
	MW05_110618	10-20	11/6/2018	N/A	Treatability Study
MW26	MW26_110718	8-18	11/7/2018	N/A	COD, BOD, TOC, Alkalinity, Sulfate, nitrate/nitrite, iron (total and dissolved), manganese (total and dissolved), Total Plate Count
Groundwater Samples - QA/QC					
MW02	GWDUP01_110618	13-22	11/6/2018	Duplicate	Emerging Contaminants - PFAS, 1,4-Dioxane
MW06	GWDUP02_110818	12-22	11/8/2018	Duplicate	Part 375/TCL VOCs
MW11	MW11_110818_MS	8-18	11/8/2018	MS/MSD	
MW11	MW11_110818_MSD	8-18	11/8/2018	MS/MSD	
N/A	FIELD BLANK	N/A	10/30/2018	Field Blank	Part 375/TCL VOCs
N/A	FIELD BLANK	N/A	11/7/2018	Field Blank	PFAS, 1,4-Dioxane
N/A	FIELD BLANK	N/A	11/8/2018	Field Blank	

Notes:

1. All grab soil samples were collected using Terra Core sampler kits.

2. Part 375 = Title 6 of the official compilation of New York Codes, Rules and Regulations (NYCRR) Part 375

3. VOCs = Volatile organic compounds

4. TCL = Target Compound List

5. QA/QC = Quality assurance/quality control

6. ft bgs = feet below grade surface

7. PFAS = Per- and Polyfluoroalkyl Substances
8. TOC = Total Organic Carbon

9. COD = Chemical Oxygen Demand

10. BOD = Biologic Oxygen Demand

Table 2
Remedial Design Memorandum
Soil Sample Analytical Results

561 Greenwich Street
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Location			EB21		EB22		EB22		EB23		EB24		EB25		EB26		WC01		WC05	
Sample ID	NYSDEC Part	375 Restricted	EB21_9-11		EB22_12-14		EB22_23-24		EB23_15-17		EB24_5-6		EB25_8-10		EB26_14-16		WC01_18-19		WC05_19-20	
Laboratory ID	375 Unrestricted	Use -	L1844810-24		L1844810-19		L1844810-20		L1844582-16		L1845181-01		L1845181-02		L1845181-03		L1844138-08		L1844354-01	
Sample Date	Use SCOs	Commercial	11/1/2018		11/1/2018		11/1/2018		10/31/2018		11/5/2018		11/5/2018		11/5/2018		10/29/2018		10/30/2018	
Sample Depth (feet bgs)		SCOs	9-11		12-14		23-24		15-17		5-6		8-10		14-16		18-19		19-20	
Volatile Organic Compounds																				
1,2,3-Trichloropropane	~	~	0.24	U	3.5	U	0.0016	U	0.11	U	0.002	U	0.0019	U	0.0018	U	1.3	U	0.0021	U
1,2,4,5-Tetramethylbenzene	~	~	0.24	U	76		0.002		0.19		0.98		0.00056	J	0.0018	U	18		0.0039	
1,2,4-Trimethylbenzene	3.6	190	0.54		650		0.018		1.2		1.2		0.00062	J	0.0018	U	1.3	U	0.0021	U
1,3,5-Trimethylbenzene (Mesitylene)	8.4	190	0.16	J	220		0.0054		0.51		0.62		0.00029	J	0.0018	U	0.16	J	0.0021	U
1,4-Diethyl Benzene	~	~	0.058	J	230		0.0058		0.57		2.8		0.0019	U	0.0018	U	4.8		0.0013	J
4-Ethyltoluene	~	~	0.29		500		0.011		0.66		0.75		0.0019	U	0.0018	U	2.4		0.00068	J
Acetone	0.05	500	1.2	U	18	U	0.026		0.57	U	0.088		0.057		0.017		6.7	U	0.025	
Acrolein	~	~	3	U	44	U	0.02	U	1.4	U	0.025	U	0.023	U	0.022	U	18		0.026	UJ
Benzene	0.06	44	0.086		39		0.0017		0.028	U	0.00051	U	0.00047	U	0.00044	U	0.34	U	0.00046	J
Chlorobenzene	1.1	500	0.059	U	0.88	U	0.00041	U	0.028	U	0.00051	U	0.00047	U	0.00044	U	0.34	U	0.00052	U
Chloroform	0.37	350	0.18	U	2.6	U	0.0012	U	0.085	U	0.0015	U	0.0014	U	0.0013	U	1	U	0.0015	U
Cyclohexane	~	~	2.9		300		0.0069	J	0.77		0.01	U	0.0094	U	0.01		21		0.053	
Cymene	~	~	0.12	U	6		0.00012	J	0.042	J	0.02		0.00094	U	0.00088	U	1.3		0.00033	J
Ethylbenzene	1	390	0.47		190		0.005		0.4		0.00076	J	0.00094	U	0.00088	U	2.1		0.0028	
Isopropylbenzene (Cumene)	~	~	0.036	J	25		0.00058	J	0.088		0.0015		0.00094	U	0.00088	U	2.5		0.0013	
M,P-Xylene	~	~	1.3		900		0.02		1.3		0.017		0.0019	U	0.0018	U	1.3	U	0.00065	J
Methyl Acetate	~	~	0.47	U	7	U	0.0033	U	0.23	U	0.0041	U	0.0038	U	0.0035	U	2.7	U	0.0041	U
Methyl Ethyl Ketone (2-Butanone)	0.12	500	1.2	U	18	U	0.0082	U	0.57	U	0.007	J	0.0077	J	0.0088	U	6.7	U	0.01	U
Methylcyclohexane	~	~	4.4		380		0.012		2.3		0.0016	J	0.0038	U	0.0079		88		0.088	
Naphthalene	12	500	0.086	J	120		0.0059		0.24		0.11		0.00064	J	0.0035	U	2.7	U	0.0041	U
n-Butylbenzene	12	500	0.12	U	25		0.00067	J	0.074		0.001	U	0.00094	U	0.00088	U	6.6		0.0016	
n-Propylbenzene	3.9	500	0.089	J	90		0.0021		0.21		0.005		0.00094	U	0.00088	U	10		0.0042	
o-Xylene (1,2-Dimethylbenzene)	~	~	0.42		420		0.0098		0.18		0.0038		0.00094	U	0.00088	U	0.67	U	0.001	U
Sec-Butylbenzene	11	500	0.12	U	9.3		0.00028	J	0.036	J	0.001	U	0.00094	U	0.00088	U	1.7		0.0006	J
T-Butylbenzene	5.9	500	0.24	U	3.5	U	0.0016	U	0.11	U	0.002	U	0.0019	U	0.0018	U	0.15	J	0.0021	U
Tert-Butyl Alcohol	~	~	2.4	U	35	U	0.017		1.1	U	0.02	U	0.013	J	0.018	U	13	U	0.021	U
Tert-Butyl Methyl Ether	0.93	500	0.24	U	3.5	U	0.0002	J	0.11	U	0.002	U	0.0019	U	0.0018	U	1.3	U	0.0021	U
Tetrachloroethene (PCE)	1.3	150	0.032	J	0.88	U	0.00041	U	0.028	U	0.007		0.00047	U	0.00044	U	0.34	U	0.00052	U
Toluene	0.7	500	0.14		450		0.0091		0.057	U	0.0016		0.00094	U	0.00051	J	0.67	U	0.001	U
Total Xylenes	0.26	500	1.7		1,300		0.03		1.5		0.021		0.00094	U	0.00088	U	0.67	U	0.00065	J

Notes provided on Page 4.
Concentrations above Unrestricted Use SCOs are bolded.
Concentrations above Restricted Use - Restricted Residential SCOs are shaded.

Table 2
Remedial Design Memorandum
Soil Sample Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Location Sample ID Laboratory ID Sample Date Sample Depth (feet bgs)	NYSDEC Part 375 Unrestricted Use SCOs	NYSDEC Part 375 Restricted Use - Commercial SCOs	WC07 WC07_11-12 L1844138-09 10/29/2018 11-12	WC09 WC09_16-18 L1844354-20 10/30/2018 16-18	WC09 DUP02_GRAB_103018 L1844354-26 10/30/2018 16-18	WC10 WC10_9-11 L1844354-21 10/30/2018 9-11	WC10 WC10_16-18 L1844354-22 10/30/2018 16-18	WC10 WC10_18-20 L1844354-23 10/30/2018 18-20	WC10 WC10_20-22 L1844354-24 10/30/2018 20-22	WC10 WC10_22-24 L1844354-25 10/30/2018 22-24	WC11 WC11_18-20 L1844354-02 10/30/2018 18-20	WC13 WC13_16-18 L1844582-18 10/31/2018 16-18
Volatile Organic Compounds												
1,2,3-Trichloropropane	~	~	0.25 U	1.2 U	2.3 U	0.14 U	0.12 U	0.0024 U	0.0017 U	0.0026 U	0.002 U	2.5
1,2,4,5-Tetramethylbenzene	~	~	1.6	5.5 J	9.9 J	2.2	0.83	0.0013 J	0.0028	0.00042 J	0.0015 J	15
1,2,4-Trimethylbenzene	3.6	190	0.25 U	47 J	76 J	0.095 J	0.58	0.0024 U	0.0017 U	0.0026 U	0.002 U	140
1,3,5-Trimethylbenzene (Mesitylene)	8.4	190	0.25 U	19	31	0.068 J	0.23	0.0024 U	0.0017 U	0.0026 U	0.002 U	54
1,4-Diethyl Benzene	~	~	0.29	18 J	32 J	0.2	1	0.00022 J	0.00063 J	0.0003 J	0.00033 J	49
4-Ethyltoluene	~	~	0.25 U	37 J	61 J	0.14	0.43	0.0024 U	0.0017 U	0.0026 U	0.002 U	110
Acetone	0.05	500	1.2 U	5.9 U	11 U	0.73 U	0.61 U	0.026	0.024	0.018	0.018	11 U
Acrolein	~	~	3.1 U	15 U	28 U	1.8 U	1.5 U	0.03 UJ	0.022 UJ	0.032 U	0.025 UJ	28 U
Benzene	0.06	44	0.062 U	7.9	11	0.078	0.13	0.0058	0.0031	0.00064 U	0.014	26
Chlorobenzene	1.1	500	0.062 U	0.29 U	0.56 U	0.036 U	0.031 U	0.0006 U	0.00044 U	0.00064 U	0.0005 U	0.56 U
Chloroform	0.37	350	0.017 J	0.88 U	1.7 U	0.11 U	0.092 U	0.0018 U	0.0013 U	0.0019 U	0.0015 U	1.7 U
Cyclohexane	~	~	1.2 U	48	73	4.2	3.8	0.01 J	0.014	0.00094 J	0.016	120
Cymene	~	~	0.12 U	1.7	2.9	0.044 J	0.048 J	0.0012 U	0.00087 U	0.0013 U	0.00099 U	3.6
Ethylbenzene	1	390	0.12 U	16	26	0.24	0.91	0.0012 U	0.00012 J	0.0013 U	0.00099 U	51
Isopropylbenzene (Cumene)	~	~	0.02 J	3.4	5.9	0.4	0.19	0.00057 J	0.0012	0.0013 U	0.0015	8.2
M,P-Xylene	~	~	0.25 U	74	120	0.17	2	0.0024 U	0.0017 U	0.0026 U	0.002 U	260
Methyl Acetate	~	~	0.49 U	2.3 U	4.5 U	0.28 J	0.24 U	0.0048 U	0.0035 U	0.0051 U	0.004 U	4.5 U
Methyl Ethyl Ketone (2-Butanone)	0.12	500	1.2 U	5.9 U	11 U	0.73 U	0.61 U	0.012 U	0.0087 U	0.013 U	0.0099 U	11 U
Methylcyclohexane	~	~	0.49 U	130 J	210 J	9	9.2	0.015	0.026	0.0027 J	0.028	280
Naphthalene	12	500	1.1	8.5 J	15 J	0.65	0.52	0.0048 U	0.0035 U	0.0051 U	0.004 U	27
n-Butylbenzene	12	500	0.4	2.2	3.8	0.44	0.37	0.0012 U	0.00029 J	0.0013 U	0.00018 J	5.4
n-Propylbenzene	3.9	500	0.05 J	6.2	11	1.3	0.55	0.00076 J	0.0012	0.0013 U	0.0016	17
o-Xylene (1,2-Dimethylbenzene)	~	~	0.12 U	25	38	0.032 J	0.88	0.0012 U	0.00087 U	0.0013 U	0.00099 U	110
Sec-Butylbenzene	11	500	0.6	1.3	2.1	0.25	0.1	0.00044 J	0.0012	0.0013 U	0.00017 J	2.9
T-Butylbenzene	5.9	500	0.047 J	0.18 J	0.3 J	0.034 J	0.012 J	0.0024 U	0.00012 J	0.0026 U	0.002 U	0.42 J
Tert-Butyl Alcohol	~	~	2.5 U	12 U	23 U	1.4 U	1.2 U	0.017 J	0.017 U	0.026 U	0.02 U	22 U
Tert-Butyl Methyl Ether	0.93	500	0.25 U	1.2 U	2.3 U	0.14 U	0.12 U	0.0024 U	0.0017 U	0.0026 U	0.0026 U	2.2 U
Tetrachloroethene (PCE)	1.3	150	0.062 U	0.29 U	0.56 U	0.036 U	0.031 U	0.0006 U	0.00044 U	0.00064 U	0.0005 U	0.56 U
Toluene	0.7	500	0.12 U	14	22	0.043 J	0.062	0.0012 U	0.00087 U	0.0013 U	0.00064 J	130
Total Xylenes	0.26	500	0.12 U	99	160	0.2 J	2.9	0.0012 U	0.00087 U	0.0013 U	0.00099 U	370

Notes provided on Page 4.
Concentrations above Unrestricted Use SCOs are bolded.
Concentrations above Restricted Use - Restricted Residential SCOs are shaded.

Table 2
Remedial Design Memorandum
Soil Sample Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Location	NYSDEC Part	NYSDEC Part	WC13		WC13		WC13		WC14		WC14		WC14		WC14		WC14		WC14		WC15		WC18	
Sample ID	NYSDEC Part	375 Restricted	WC13_18-20		DUP03 GRAB_103118		WC13_20-22		WC14_14-16		WC14_16-18		WC14_18-20		WC14_20-22		WC14_22-24		WC14_22-24		WC15_12-14		WC18_13-15	
Laboratory ID	375 Unrestricted	Use -	L1844582-19		L1844582-29		L1844582-20		L1844582-27		L1844582-22		L1844582-23		L1844582-24		L1844582-25		L1844582-25		L1844582-26		L1844810-18	
Sample Date	Use SCOs	Commercial	10/31/2018		10/31/2018		10/31/2018		10/31/2018		10/31/2018		10/31/2018		10/31/2018		10/31/2018		10/31/2018		10/31/2018		11/1/2018	
Sample Depth (feet bgs)		SCOs	18-20		18-20		20-22		14-16		16-18		18-20		20-22		22-24		22-24		12-14		13-15	
Volatile Organic Compounds																								
1,2,3-Trichloropropane	~	~	3.1	U	0.11	U	1.7	U	0.0024	U	0.12	UJ	0.12	U	3.6	J	0.63	U	0.33	U	1.1	U	0.16	U
1,2,4,5-Tetramethylbenzene	~	~	17	J	0.16	J	9.6		0.001	J	30		0.033	J	21		8.7		2.6		7.8		0.28	
1,2,4-Trimethylbenzene	3.6	190	150	J	1.6	J	100		0.005		0.27	J	0.12		200		3		2.1		1.1	U	2.3	
1,3,5-Trimethylbenzene (Mesitylene)	8.4	190	52	J	0.54	J	34		0.0017	J	1.8	J	0.055	J	80		1.6		0.77		1.1	U	0.74	
1,4-Diethyl Benzene	~	~	54	J	0.55	J	31		0.0012	J	10	J	0.061	J	76		2.7		0.83		2.2		0.51	
4-Ethyltoluene	~	~	120	J	1.2	J	80		0.0032		12	J	0.084	J	160		6		2.2		0.44	J	0.12	J
Acetone	0.05	500	16	U	0.56	U	8.6	U	0.03	J	0.6	UJ	0.6	U	26	U	3.1	U	1.6	U	5.4	U	0.78	U
Acrolein	~	~	39	U	1.4	U	21	U	0.029	U	1.5	UJ	1.5	U	64	U	7.8	U	4.1	U	14	U	2	U
Benzene	0.06	44	29	J	2	J	14		0.019		0.35	J	0.9		41		0.65		1		0.27	U	0.068	
Chlorobenzene	1.1	500	0.78	U	0.028	U	0.43	U	0.00059	U	0.03	UJ	0.03	U	1.3	U	0.16	U	0.082	U	0.27	U	0.039	U
Chloroform	0.37	350	2.4	U	0.084	U	1.3	U	0.0018	U	0.09	UJ	0.089	U	3.9	U	0.47	U	0.25	U	0.81	U	0.12	U
Cyclohexane	~	~	120	J	0.43	J	7.2	J	0.0035	J	15	J	0.064	J	210		8.5		17		26		1.8	
Cymene	~	~	2.6	J	0.033	J	1.7		0.0012	U	8.4	J	0.0084	J	6.1		2.3		0.73		1.2		0.042	J
Ethylbenzene	1	390	52	J	0.65	J	34		0.0028		7.8	J	0.044	J	77		3.8		1.6		0.54	U	0.2	
Isopropylbenzene (Cumene)	~	~	6.9	J	0.073	J	4.8		0.0005	J	20		0.021	J	14		5.6		2.1		3.7		0.3	
M,P-Xylene	~	~	240	J	3	J	160		0.013		3.2	J	0.17		400		6.2		4.9		1.1	U	0.32	
Methyl Acetate	~	~	6.3	U	0.22	U	3.4	U	0.0047	U	0.24	UJ	0.24	U	10	U	1.2	U	0.66	U	2.2	U	0.34	
Methyl Ethyl Ketone (2-Butanone)	0.12	500	16	U	0.56	U	8.6	U	0.012	U	0.6	UJ	0.6	U	26	U	3.1	U	1.6	U	5.4	U	0.78	U
Methylcyclohexane	~	~	240	J	1.3	J	22		0.0031	J	130		0.24		490		52		54		120		4.1	
Naphthalene	12	500	30	J	0.48	J	26		0.0024	J	49		0.095	J	39		14		6.4		0.35	J	0.66	
n-Butylbenzene	12	500	5.8	J	0.055	J	3.2		0.00023	J	14	J	0.014	J	8.2		3.7		1.1		2.7		0.092	
n-Propylbenzene	3.9	500	20	J	0.2	J	13		0.00092	J	34		0.038	J	26		10		3.4		6.9		0.45	
o-Xylene (1,2-Dimethylbenzene)	~	~	120	J	1.6	J	80		0.0058		0.43	J	0.071		150		1.9		1		0.54	U	0.081	
Sec-Butylbenzene	11	500	2.6	J	0.027	J	1.6		0.0012	U	7.5	J	0.06	U	4.6		2		0.65		1.8		0.071	J
T-Butylbenzene	5.9	500	3.1	U	0.11	U	0.18	J	0.0024	U	1.2	J	0.12	U	0.63	J	0.31	J	0.1	J	0.31	J	0.017	J
Tert-Butyl Alcohol	~	~	31	U	1.1	U	17	U	0.024	U	1.2	UJ	1.2	U	52	U	6.3	U	3.3	U	11	U	1.6	U
Tert-Butyl Methyl Ether	0.93	500	3.1	U	0.11	U	1.7	U	0.00096	J	0.12	UJ	0.014	J	5.2	U	0.63	U	0.33	U	1.1	U	0.16	U
Tetrachloroethene (PCE)	1.3	150	0.78	U	0.028	U	0.43	U	0.00059	U	0.03	UJ	0.03	U	1.3	U	0.16	U	0.082	U	0.27	U	0.039	U
Toluene	0.7	500	170	J	4	J	100		0.012		0.33	J	0.12		190		1.6		1.1		0.54	U	0.078	U
Total Xylenes	0.26	500	360	J	4.6	J	240		0.019		3.6	J	0.24		550		8.1		5.9		0.54	U	0.4	

Notes provided on Page 4.
Concentrations above Unrestricted Use SCOs are bolded.
Concentrations above Restricted Use - Restricted Residential SCOs are shaded.

Table 2
Remedial Design Memorandum
Soil Sample Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Notes:

1. Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use and Restricted Use - Commercial Soil Cleanup Objectives (SCO).
2. Only detected analytes are shown in the table.
3. Analytes detected with concentrations above Unrestricted Use SCOs are bolded.
4. Analytes detected with concentrations above Restricted Use - Commercial SCOs are shaded.
5. Analytical results with reporting limits (RL) above the lowest applicable criteria are italicized.
6. Sample DUP02_GRAB_103018 is a duplicate sample of WC09_16-18, and sample DUP03_GRAB_103118 is a duplicate sample of WC13_18-20.
7. ~ = Regulatory limit for this analyte does not exist
8. bgs = below grade surface
9. mg/kg = milligrams per kilogram
10. NA = Not analyzed
11. ND = Not detected

Qualifiers:

- J – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Table 3
Remedial Design Memorandum
Groundwater Sample Analytical Results - VOCs

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Location Sample ID Laboratory ID Sample Date	NYSDEC SGVs	MW02 MW02_110618 L1845464-01 11/6/2018	MW05 MW05_110618 L1845464-03 11/6/2018	MW06 MW06_110818 L1845777-02 11/8/2018	MW06 GWDUP02_110818 L1845777-05 11/8/2018	MW11 MW11_110818 L1845777-03 11/8/2018	MW15 MW15_110818 L1845777-04 11/8/2018	MW21 MW21_110618 L1845464-02 11/6/2018	MW22 MW22_110718 L1845645-04 11/7/2018	MW23 MW23_110718 L1845645-05 11/7/2018	MW24 MW24_110718 L1845645-03 11/7/2018	MW25 MW25_110618 L1845645-02 11/6/2018	MW26 MW26_110718 L1845645-01 11/7/2018
Volatile Organic Compounds (VOC) (µg/L)													
1,2,4,5-Tetramethylbenzene	5	200 U	2 U	30 J	35 J	2 U	2 U	57	68 J	52 J	2	2 U	2 U
1,2,4-Trimethylbenzene	5	860	2.5 U	560	600	2.5 U	2.1 J	1,100	1,400 J	1,600 J	4.2	1.5 J	1 J
1,3,5-Trimethylbenzene (Mesitylene)	5	260	2.5 U	120	130	2.5 U	2.5 U	180	390 J	470 J	2.7	2.5 U	2.5 U
1,4-Diethyl Benzene	~	100 J	2 U	58	64	2 U	2 U	80	190 J	150	6	1.3 J	2 U
4-Ethyltoluene	~	590	2 U	230	240	2 U	0.85 J	240	1,000	930	2.7	0.76 J	2 U
Acetone	50	500 U	5 U	44 J	120 U	5 U	3.1 J	50 U	150 J	120 U	6.2	5.2	3.2 J
Benzene	1	6,700	0.18 J	2,300	2,200	0.5 U	19	140	2,200	22	0.5 U	0.17 J	0.33 J
Chloromethane	5	97 J	2.5 U	62 U	62 U	2.5 U	2.5 U	25 U	250 U	62 U	2.5 U	2.5 U	2.5 U
Cis-1,2-Dichloroethene	5	250 U	2.5 U	62 U	62 U	2.5 U	2.5 U	25 U	250 U	62 U	1.1 J	2.5 U	2.5 U
Ethylbenzene	5	790	2.5 U	450	470	2.5 U	2.7	690	920	950	2.5 U	2.5 U	0.72 J
Isopropylbenzene (Cumene)	5	250 U	2.5 U	26 J	28 J	2.5 U	2.5 U	38	250 U	93	2.5 U	2.5 U	2.5 U
M,P-Xylene	5	3,800	0.92 J	850	930	2.5 U	5.7	1,200	4,000	4,000	2 J	1.8 J	3.3
Naphthalene	10	320	2.5 U	250 J	310 J	2.5 U	1.7 J	310	360 J	440 J	2 J	0.94 J	1 J
n-Butylbenzene	5	250 U	2.5 U	62 U	62 U	2.5 U	2.5 U	8.8 J	250 U	62 U	2.5 U	2.5 U	2.5 U
n-Propylbenzene	5	77 J	2.5 U	56 J	60 J	2.5 U	2.5 U	96	140 J	150	2.5 U	2.5 U	2.5 U
o-Xylene (1,2-Dimethylbenzene)	5	2,000	2.5 U	490	560	2.5 U	3.8	69	2,200	700	1.4 J	0.7 J	2.2 J
Tert-Butyl Methyl Ether	10	250 U	2.5 U	62 U	62 U	2.5 U	2.5 U	25 U	250 U	62 U	3.8	0.73 J	1.4 J
Tetrachloroethene (PCE)	5	50 U	0.5 U	12 U	12 U	0.5 U	0.5 U	5 U	50 U	12 U	0.92	0.6	0.34 J
Toluene	5	10,000	2.5 U	1,000	1,100	2.5 U	9.3	89	8,000	300	1 J	0.71 J	2.8
Total 1,2-Dichloroethene (Cis and Trans)	~	250 U	2.5 U	62 U	62 U	2.5 U	2.5 U	25 U	250 U	62 U	1.1 J	2.5 U	2.5 U
Total Xylenes	5	5,800	0.92 J	1,300	1,500	2.5 U	9.5	1,300	6,200	4,700	3.4 J	2.5 J	5.5 J
Trichloroethene (TCE)	5	50 U	0.5 U	12 U	12 U	0.5 U	0.5 U	5 U	50 U	12 U	4	2.3	2.2

- Notes:**
- Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules and Regulations (NYCRR) Part 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water (NYSDEC SGVs)
 - Only detected analytes are shown in the table.
 - Analytes detected with concentrations above NYSDEC SGVs are bolded and
 - Analytical results with reporting limits (RL) above NYSDEC SGVs are
 - Sample GWDUP02_110818 is a duplicate sample of MW06_110818.
 - ~ = Regulatory limit for this analyte does not exist
 - µg/L = micrograms per liter
 - mg/L = milligrams per liter
 - NA = Not analyzed

Qualifiers:

J – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.

U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Table 4
Remedial Design Memorandum
Groundwater Sample Analytical Results - Emerging Contaminants

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Location	MW02	MW02	MW03	MW04	MW05	MW06	MW11	MW15
Sample ID	MW02_110618	GWDUP01_110618	MW03_110618	MW04_110818	MW05_110718	MW06_110818	MW11_110818	MW15_110818
Laboratory ID	L1845463-01	L1845463-03	L1845463-02	L1845777-01	L1845463-04	L1845777-02	L1845777-03	L1845777-04
Sample Date	11/6/2018	11/6/2018	11/6/2018	11/8/2018	11/7/2018	11/8/2018	11/8/2018	11/8/2018
Semivolatile Organic Compounds (µg/L)								
1,4-Dioxane (P-Dioxane)	0.15 U	0.153 U	0.144 U	0.144 U	0.144 U	0.15 U	0.144 U	0.147 U
Per and Polyfluoroalkyl Substances (µg/L)								
N-ethyl perfluorooctane- sulfonamidoacetic acid (NEtFOSAA)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00297	0.0018 U	0.000467 J
N-methyl perfluorooctane- sulfonamidoacetic acid (NMeFOS)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00112 J	0.0018 U	0.00185 U
Perfluorobutanesulfonic Acid (PFBS)	0.00397	0.00429	0.00403	0.00421	0.01	0.00528	0.00978	0.00259
Perfluorobutanoic acid (PFBA)	0.0101	0.0104	0.00583	0.011	0.0295	0.0133	0.0102	0.00498
Perfluorodecanesulfonic acid (PFDS)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U
Perfluorodecanoic acid (PFDA)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.000827 J	0.00211
Perfluorododecanoic Acid (PFDoA)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U
Perfluoroheptanesulfonic acid (PFHpS)	0.00184 U	0.00183 U	0.00155 J	0.00182 U	0.000726 J	0.000618 J	0.00167 J	0.00185 U
Perfluoroheptanoic acid (PFHpA)	0.0128	0.0129	0.00182 J	0.0105	0.00804	0.0073	0.00959	0.00571
Perfluorohexanesulfonic Acid (PFHxS)	0.0046	0.00391	0.00441	0.00346	0.00608	0.0056	0.0115	0.00163 J
Perfluorohexanoic Acid (PFHxA)	0.00998	0.0102	0.00194	0.0115	0.00912	0.02	0.00692	0.00489
Perfluorononanoic Acid (PFNA)	0.00161 J	0.0016 J	0.00174 J	0.00108 J	0.00299	0.00144 J	0.00362	0.00395
Perfluorooctanesulfonamide (FOSA)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U
Perfluorooctanesulfonic acid (PFOS)	0.00882	0.0094	0.0861	0.00741	0.0283	0.0295	0.146	0.0258
Perfluorooctanoic Acid (PFOA)	0.0984	0.104	0.0176	0.0915	0.064	0.0463	0.112	0.049
Perfluoropentanoic Acid (PFPeA)	0.0125	0.0128	0.00289	0.0164 J	0.0153	0.0277 J	0.0109 J	0.00468 J
Perfluorotetradecanoic Acid (PFTA)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U
Perfluorotridecanoic Acid (PFTrDA)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U
Perfluoroundecanoic Acid (PFUnA)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U
Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) (8:2FT)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U
Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) (6:2FT)	0.00184 U	0.00183 U	0.00186 U	0.00182 U	0.00187 U	0.00182 U	0.0018 U	0.00185 U

Notes:

1. Sample GWDUP01_110618 is a duplicate sample of MW02_110618.
2. µg/L = micrograms per liter

Qualifiers:

- J – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Table 5
Remedial Design Memorandum
Geochemical Remediation Parameters

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Groundwater Samples				
Sample ID	MW02_110618	MW03_110618	MW05_110618	MW26_110718
Sampling Date	11/6/2018	11/6/2018	11/6/2018	11/7/2018
Laboratory Sample ID	L1845465-01	L1845465-02	L1845465-03	L1845526-01
Parameters (ug/L)				
Alkalinity, Total (mg CaCO ₃ /L)	570	494	244	296
Biologic Oxygen Demand, 5 day	29000	2600	2000 U	2000 U
Chemical Oxygen Demand	170000	46000	21000	120000
Heterotrophic Plate Count (CFU/mL)	560	620	>738	510
Iron, Dissolved	7020	1400	125	69 J
Iron, Total	6370	1120	110	1150
Manganese, Dissolved	3450	380.2	560.3	1284
Manganese, Total	3477	365.2	528.8	1201
Nitrogen, Nitrate/Nitrite	100 U	260	100 U	3900
Sulfate	10000 U	210000	33000	94000
Total Organic Carbon	160000	11000	3700	2400

Soil Samples					
Sample ID	EB21_12-15	EB21_15-22	WC14_12-16	WC14_18-22	WC14_24-28
Sampling Date	11/1/2018	11/1/2018	10/31/2018	10/31/2018	10/31/2018
Laboratory Sample ID	L1844810-21	L1844810-22	L1844582-38	L1844582-39	L1844582-40
Parameters (ug/kg)					
Biologic Oxygen Demand (mg/kg)	77	140	280	260	130
Chemical Oxygen Demand	7330000	6050000	13600000	6280000	4960000
Solids, Total (%)	78.8	87.4	71.3	80.6	87.4
Total Organic Carbon (Average)	11800000	1470000	15800000	952000	564000
Total Organic Carbon (Rep1)	10700000	1520000	16200000	922000	538000
Total Organic Carbon (Rep2)	13000000	1420000	15500000	983000	590000

Notes:

1. ug/kg = microgram per kilogram
2. ug/L = microgram per liter
3. mg/kg = milligram per kilogram

Qualifiers:

J = The analyte was detected above the Method Detection Limit (MDL), but below the Reporting Limit (RL); therefore, the result is an estimated concentration.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the RL; the value shown in the table is the RL.

Table 6
Remedial Design Memorandum
ISCO Effectiveness Test Setup

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number	Treatment Jar ID	Groundwater	Soil	Added Persulfate	Added Persulfate Dose	Added Alkaline Reagent	Groundwater					Soil		
		mL	g	g	g/kg wet soil	mL	pH/ORP	Residual Oxidant	VOCs + TICs	TOC	Metals	VOCs + TICs	SVOCs + TICs	TOC
Control														
1	HC_Control	400	300	-	-	-	X	-	X	X	X	X	X	X
2	HC_Control_DUP	400	300	-	-	-	X	-	X	X	X	X	X	X
9	LC_Control	400	300	-	-	-	X	-	X	X	X	X	X	X
10	LC_Control_DUP	400	300	-	-	-	X	-	X	X	X	X	X	X
X1	LC_Control_12.19.18	400	300	-	-	-	X	-	-	-	-	-	-	-
X2	LC_Control_DUP_12.19.18	400	300	-	-	-	X	-	-	-	-	-	-	-
Alkaline-Activated Persulfate														
3	HC_PS	400	300	7.5	25.0	7.5	X	X	X	X	X	X	X	X
4	HC_PS_DUP	400	300	7.5	25.0	7.5	X	X	X	X	X	X	X	X
11	LC_PS	400	300	3.7	12.3	4.5	X	X	X	X	X	X	X	X
12	LC_PS_DUP	400	300	3.7	12.3	4.5	X	X	X	X	X	X	X	X
Alkaline-Activated Persulfate + GAC														
5	HC_P+GAC_High	400	300	5.6	18.7	5.25	X	X	-	-	-	-	-	-
6	HC_P+GAC_High_DUP	400	300	5.6	18.7	5.25	X	X	-	-	-	-	-	-
7	HC_P+GAC_Low	400	300	5.6	18.7	5.25	X	X	-	-	-	-	-	-
8	HC_P+GAC_Low_DUP	400	300	5.6	18.7	5.25	X	X	-	-	-	-	-	-
13	LC_P+GAC_High	400	300	2.7	9.0	3	X	X	-	-	-	-	-	-
14	LC_P+GAC_High_DUP	400	300	2.7	9.0	3	X	X	-	-	-	-	-	-
X3	LC_P+GAC_High_12.19.18	400	300	2.7	9.0	3	X	X	-	-	-	-	-	-
X4	LC_P+GAC_High_DUP_12.19.18	400	300	2.7	9.0	3	X	X	-	-	-	-	-	-
15	LC_P+GAC_Low	400	300	2.7	9.0	3	X	X	-	-	-	-	-	-
16	LC_P+GAC_Low_DUP	400	300	2.7	9.0	3	X	X	-	-	-	-	-	-

Notes:

-	N/A
	Jar was removed from experiment

mL: milliliter

g/kg: gram per kilogram

g: gram

HC: High Contaminant

LC: Low Contaminant

ORP: Oxidation-Reduction Potential

1. Homogenized soil from WC-14 (12'-28') and groundwater from MW-02 was used for the High Contaminant test.

2. Homogenized soil from EB-21 (15'-22') and EB-22 (16'-22') and groundwater from MW-05 was used for the Low Contaminant test.

3. Control jars were treated with 1 g of sodium azide (a biocide) to prevent contaminant loss due to biodegradation.

4. pH, ORP, and Residual Oxidant (alkaline activated persulfate) analyses were performed at NJIT.

5. VOC, SVOC, TOC, and Metals analyses were performed by York Analytical Lab

6. Jars X3 and X4 are replacement jars for Jars 13 and 14. Jars X1 and X2 are control jars for Jars X3 and X4.

7. Jars 5, 6, 7, X3, X4, 15, and 16 were amended with persulfate for the ISCO Effectiveness Test and then amended with GAC for the GAC Effectiveness Test.

e

Table 7
Remedial Design Memorandum
High Contaminant ISCO Effectiveness Test Mass Reduction Summary

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Type	Contaminant	Contaminant Groundwater Mass (µg)	Contaminant Soil Mass (µg)	Contaminant Total Mass (µg)	Percent Total Mass Reduction (%)	Total VOC Mass Reduction (%)
Control	Benzene	2,160	555	2,715	-	-
	Toluene	1,300	975	2,275	-	
	Ethyl Benzene	210	390	600	-	
	Xylenes	1,360	2,520	3,880	-	
	1,2,4-Trimethylbenzene	354	2,325	2,679	-	
	1,3,5-Trimethylbenzene	56	1,035	1,091	-	
	Isopropylbenzene	44	228	272	-	
	Methyl tert-butyl ether (MTBE)	16	92	108	-	
	Methylene chloride	3	183	186	-	
	n-Butylbenzene	6	221	227	-	
	n-Propylbenzene	62	465	527	-	
	p-Isopropyltoluene	8	144	152	-	
	sec-Butylbenzene	6	117	123	-	
Sodium Persulfate	Benzene	640	198	838	69%	48%
	Toluene	296	390	686	70%	
	Ethyl Benzene	88	246	334	44%	
	Xylenes	440	1,590	2,030	48%	
	1,2,4-Trimethylbenzene	128	1,710	1,838	31%	
	1,3,5-Trimethylbenzene	44	750	794	27%	
	Isopropylbenzene	25	171	196	28%	
	Methyl tert-butyl ether (MTBE)	8	90	98	10%	
	Methylene chloride	3	180	183	2%	
	n-Butylbenzene	4	171	175	23%	
	n-Propylbenzene	38	360	398	24%	
	p-Isopropyltoluene	5	111	116	24%	
	sec-Butylbenzene	4	96	100	18%	

Notes:

µg - microgram

1. The VOCs included in the calculation are the VOCs with groundwater exceedances in the Control jars, with the exception of acetone, 2-Butanone, and 2-Hexanone.
2. The VOC mass in the groundwater is calculated as the product of the groundwater concentration and the groundwater volume.
3. The VOC mass in the soil is calculated as the product of the soil concentration and the soil volume.
4. Total VOC mass is calculated as the sum of the VOC mass in the soil and the VOC mass in the groundwater.
5. The average concentrations from duplicate jars were used for the calculations.
6. Weight of Soil in Treatability Study Jars: 0.300 kg
7. Volume of Groundwater in Treatability Study Jars: 0.400 L

Table 8
Remedial Design Memorandum
Low Contaminant ISCO Effectiveness Test Mass Reduction Summary

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Type	Contaminant	Contaminant Groundwater Mass (µg)	Contaminant Soil Mass (µg)	Contaminant Total Mass (µg)	Percent Total Mass Reduction (%)	Total VOC Mass Reduction (%)
Control	Benzene	4	0.87	5	-	-
	Toluene	32	7.6	40	-	
	Ethyl Benzene	60	32	92	-	
	Xylenes	220	149	369	-	
	1,2,4-Trimethylbenzene	422	294	716	-	
	1,3,5-Trimethylbenzene	72	77	149	-	
	Isopropylbenzene	10	7.7	17	-	
	n-Butylbenzene	4	2.7	6.8	-	
	n-Propylbenzene	29	25.2	54	-	
	p-Isopropyltoluene	2	2.7	5	-	
Sodium Persulfate	Benzene	0.82	0.89	1.7	63%	87%
	Toluene	0.92	0.89	1.8	95%	
	Ethyl Benzene	7	2.0	9.0	90%	
	Xylenes	21	6.5	27	93%	
	1,2,4-Trimethylbenzene	64	45	109	85%	
	1,3,5-Trimethylbenzene	11	7.7	18	88%	
	Isopropylbenzene	2.6	1.2	3.8	78%	
	n-Butylbenzene	3.1	5.2	8.3	0%	
	n-Propylbenzene	9	4.7	14	75%	
	p-Isopropyltoluene	1.2	0.9	2.1	58%	

Notes:

µg - microgram

1. The VOCs included in the calculation are the VOCs with groundwater exceedances in the Control jars, with the exception of acetone, 2-Butanone, and 2-Hexanone.
2. The VOC mass in the groundwater is calculated as the product of the groundwater concentration and the groundwater volume.
3. The VOC mass in the soil is calculated as the product of the soil concentration and the soil volume.
4. Total VOC mass is calculated as the sum of the VOC mass in the soil and the VOC mass in the groundwater.
5. The average concentrations from duplicate jars were used for the calculations.
6. Weight of Soil in Treatability Study Jars: 0.300 kg
7. Volume of Groundwater in Treatability Study Jars: 0.400 L

Table 9
Remedial Design Memorandum
High Contaminant GAC Effectiveness Test Mass Reduction Summary

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Type	Contaminant	Contaminant Groundwater Mass (µg)	Contaminant Soil Mass (µg)	Contaminant Total Mass (µg)	Percent Total Mass Reduction (%)	Total VOC Mass Reduction (%)
Control (From GAC Test)	Benzene	1,856	242	2,098	-	-
	Toluene	1,156	705	1,861	-	
	Ethyl Benzene	127	299	426	-	
	Xylenes	888	2,280	3,168	-	
	1,2,4-Trimethylbenzene	247	1,755	2,002	-	
	1,3,5-Trimethylbenzene	89	705	794	-	
	Isopropylbenzene	25	165	190	-	
	Methyl tert-butyl ether (MTBE)	13	59	71	-	
	Methylene chloride	5	120	125	-	
	n-Butylbenzene	6	200	206	-	
	n-Propylbenzene	41	342	383	-	
	p-Isopropyltoluene	6	122	127	-	
	sec-Butylbenzene	4	90	94	-	
	Trichloroethylene	3	59	62	-	
GAC High Dose	Benzene	1,154	735	1,889	10%	37%
	Toluene	770	870	1,640	12%	
	Ethyl Benzene	99	273	372	13%	
	Xylenes	732	1,050	1,782	44%	
	1,2,4-Trimethylbenzene	216	284	499	75%	
	1,3,5-Trimethylbenzene	80	194	274	66%	
	Isopropylbenzene	24	125	149	22%	
	Methyl tert-butyl ether (MTBE)	9	65	73	0%	
	Methylene chloride	4	129	133	0%	
	n-Butylbenzene	6	65	71	66%	
	n-Propylbenzene	37	143	179	53%	
	p-Isopropyltoluene	6	65	71	44%	
	sec-Butylbenzene	4	64.5	68.78	27%	
	Trichloroethylene	1	64.5	65.3	0%	
GAC Low Dose	Benzene	1256	541.5	1798	14%	16%
	Toluene	884	960	1844	1%	
	Ethyl Benzene	86	345	431	0%	
	Xylenes	820	2010	2830	11%	
	1,2,4-Trimethylbenzene	221	1005	1226	39%	
	1,3,5-Trimethylbenzene	81	453	534	33%	
	Isopropylbenzene	21	169.5	191	0%	
	Methyl tert-butyl ether (MTBE)	8.72	57	66	8%	
	Methylene chloride	3.0	114	117	7%	
	n-Butylbenzene	5.4	120	125	39%	
	n-Propylbenzene	27.3	282	309	19%	
	p-Isopropyltoluene	6.3	91.5	98	23%	
	sec-Butylbenzene	3.6	72	76	19%	
	Trichloroethylene	1.4	57	58	6%	
Control (From ISCO Test)	Benzene	2,160	555	2,715	-	-
	Toluene	1,300	975	2,275	-	
	Ethyl Benzene	210	390	600	-	
	Xylenes	1,360	2,520	3,880	-	
	1,2,4-Trimethylbenzene	354	2,325	2,679	-	
	1,3,5-Trimethylbenzene	56	1,035	1,091	-	
	Isopropylbenzene	44	228	272	-	
	Methyl tert-butyl ether (MTBE)	16	92	108	-	
	Methylene chloride	3	183	186	-	
	n-Butylbenzene	6	221	227	-	
	n-Propylbenzene	62	465	527	-	
	p-Isopropyltoluene	8	144	152	-	
	sec-Butylbenzene	6	117	123	-	
Sodium Persulfate + High GAC Dose	Benzene	409	420	829	69%	71%
	Toluene	285	465	750	67%	
	Ethyl Benzene	65	186	251	58%	
	Xylenes	397	765	1,162	70%	
	1,2,4-Trimethylbenzene	114	282	396	85%	
	1,3,5-Trimethylbenzene	43	156	199	82%	
	Isopropylbenzene	23	116	139	49%	
	Methyl tert-butyl ether (MTBE)	4.3	62	66	39%	
	Methylene chloride	0.9	123	124	33%	
	n-Butylbenzene	5.2	68	73	68%	
	n-Propylbenzene	34	150	184	65%	
	p-Isopropyltoluene	4.6	62	66	57%	
	sec-Butylbenzene	3.5	62	65	47%	
Sodium Persulfate + Low GAC Dose	Benzene	548	237	785	71%	67%
	Toluene	320	420	740	67%	
	Ethyl Benzene	69.2	219	288	52%	
	Xylenes	412	1,020	1,432	63%	
	1,2,4-Trimethylbenzene	112	420	532	80%	
	1,3,5-Trimethylbenzene	42.8	228	271	75%	
	Isopropylbenzene	26.0	159	185	32%	
	Methyl tert-butyl ether (MTBE)	4.96	66	71	34%	
	Methylene chloride	1.156	129	130	30%	
	n-Butylbenzene	5.72	96	102	55%	
	n-Propylbenzene	37.3	231	268	49%	
	p-Isopropyltoluene	5.32	78	83	45%	
	sec-Butylbenzene	4.16	66	70	43%	

Notes:
µg - microgram
1. The VOCs included in the calculation are the VOCs with groundwater exceedances in the Control jars, with the exception of acetone, 2-Butanone, and 2-Hexanone.
2. The VOC mass in the groundwater is calculated as the product of the groundwater concentration and the groundwater volume.
3. The VOC mass in the soil is calculated as the product of the soil concentration and the soil volume.
4. Total VOC mass is calculated as the sum of the VOC mass in the soil and the VOC mass in the groundwater.
5. The average concentrations from duplicate jars were used for the calculations.
6. Weight of Soil in Treatability Study Jars: 0.300 kg
7. Volume of Groundwater in Treatability Study Jars: 0.400 L
8. GAC jars were compared to the Control jars set up with the GAC test, and Persulfate + GAC jars were compared to the Control jars set up with the ISCO test.

Table 10
Remedial Design Memorandum
Low Contaminant GAC Effectiveness Test Mass Reduction Summary

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Type	Contaminant	Contaminant Groundwater Mass (µg)	Contaminant Soil Mass (µg)	Contaminant Total Mass (µg)	Percent Total Mass Reduction (%)	Total VOC Mass Reduction (%)
Control (From GAC Test)	Benzene	0.3	0.7	0.9	-	-
	Toluene	2.3	0.8	3	-	
	Ethyl Benzene	8.1	3.3	11	-	
	Xylenes, Total	47	19.5	66	-	
	1,2,4-Trimethylbenzene	107	121.5	229	-	
	1,3,5-Trimethylbenzene	32	31.2	63	-	
	Isopropylbenzene	1.9	1.7	4	-	
	Methylene chloride	2.4	1.4	4	-	
	n-Butylbenzene	2.8	4.2	7	-	
	n-Propylbenzene	6.3	6.3	13	-	
	Trichloroethylene	2.5	0.7	3	-	
GAC High Dose	Benzene	0.2	0.6	0.8	18%	28%
	Toluene	5	0.6	5	0%	
	Ethyl Benzene	10	0.6	11	4%	
	Xylenes, Total	90	1.7	92	0%	
	1,2,4-Trimethylbenzene	110	9.0	119	48%	
	1,3,5-Trimethylbenzene	42	3.8	46	27%	
	Isopropylbenzene	2	0.6	2	34%	
	Methylene chloride	1	1.1	2	50%	
	n-Butylbenzene	3	1.4	4	41%	
	n-Propylbenzene	6	0.7	6	49%	
	Trichloroethylene	0.5	0.6	1	68%	
GAC Low Dose	Benzene	0.3	0.6	0.9	0%	0%
	Toluene	6.9	0.6	7.6	0%	
	Ethyl Benzene	15	0.9	16	0%	
	Xylenes, Total	114	4.9	119	0%	
	1,2,4-Trimethylbenzene	174	20.0	194	15%	
	1,3,5-Trimethylbenzene	49	7.1	56	11%	
	Isopropylbenzene	2	0.6	2.6	28%	
	Methylene chloride	1.0	1.3	2.3	38%	
	n-Butylbenzene	3.3	1.5	4.8	31%	
	n-Propylbenzene	5.9	1.1	6.9	45%	
	Trichloroethylene	0.8	0.6	1.5	53%	
Control (From ISCO Test)	Benzene	4	0.9	4.6	-	-
	Toluene	32	7.6	40.0	-	
	Ethyl Benzene	60	32.4	92.4	-	
	Xylenes	220	148.5	368.5	-	
	1,2,4-Trimethylbenzene	422	294.0	716.0	-	
	1,3,5-Trimethylbenzene	72	76.5	148.5	-	
	Isopropylbenzene	10	7.7	17.3	-	
	n-Butylbenzene	4	2.7	6.8	-	
	n-Propylbenzene	29	25.2	54.2	-	
Sodium Persulfate + High GAC Dose	Benzene	0.4	0.7	1.1	76%	78%
	Toluene	3	0.7	4.0	90%	
	Ethyl Benzene	13	2.0	15	84%	
	Xylenes, Total	66	8.5	75	80%	
	1,2,4-Trimethylbenzene	99	42.0	141	80%	
	1,3,5-Trimethylbenzene	30	14.6	45	70%	
	Isopropylbenzene	3	1.7	5.1	70%	
	n-Butylbenzene	3.7	5.9	9.6	0%	
	n-Propylbenzene	12.0	6.4	18.4	66%	
Sodium Persulfate + Low GAC Dose	Benzene	0.5	0.5	1	77%	80%
	Toluene	1.97	0.6	3	94%	
	Ethyl Benzene	8.04	2.6	11	88%	
	Xylenes, Total	31.8	11	43	88%	
	1,2,4-Trimethylbenzene	71	84	155	78%	
	1,3,5-Trimethylbenzene	16.6	23	40	73%	
	Isopropylbenzene	1.9	3	4	74%	
	n-Butylbenzene	2.15	10.5	13	0%	
	n-Propylbenzene	6.86	10.4	17	68%	

- Notes:**
µg - microgram
1. The VOCs included in the calculation are the VOCs with groundwater exceedances in the Control jars, with the exception of acetone, 2-Butanone, and 2-Hexanone.
2. The VOC mass in the groundwater is calculated as the product of the groundwater concentration and the groundwater volume.
3. The VOC mass in the soil is calculated as the product of the soil concentration and the soil volume.
4. Total VOC mass is calculated as the sum of the VOC mass in the soil and the VOC mass in the groundwater.
5. The average concentrations from duplicate jars were used for the calculations.
6. Weight of Soil in Treatability Study Jars: 0.300 kg

Table 11A
Remedial Design Memorandum
On-Site Remedial Design Parameters

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

On-Site Remedial Design		Area 1	Area 2
Persulfate Injection Design			
Area	ft ²	2,500	2,500
Depth Interval	ft-bgs	17-24	17-20
Intervals	ft	7	3
Treatment Volume	cu ft	17,500	7,500
Soil Density	lb/cu ft	110	110
Treatment Soil Mass	lb	1,925,000	825,000
Persulfate Dosage	g/kg	20	10
NaOH Dosage	g/kg	2.4	1.6
Persulfate Demand	lb	38,500	8,250
25% NaOH Demand	lb	18,480	5,280
Injection ROI	ft	10	10
% Pore Saturation		30%	20%
Injection Point #		7	7
Volume Per Point	gallon	1,480	423
Injection Volume		10,360	2,961
Persulfate in Injection Solution	wt/wt	34%	26%
NaOH in Injection Solution	wt/wt	17%	16%
GAC Mixing Design			
GAC Dosage	g/kg	5	
Target Depth	ft-bgs	17-21	
Intervals	ft	5	
Soil Density	lb/cu ft	110	
Treatment Soil Mass	lb	1,375,000	
GAC Demand	lb	6,875	

Note:

ft - Feet

ft² - square feet

ft - bgs - feet below ground surface

lb - pound

cu ft - cubic feet

g/kg - gram per kilogram

wt/wt- weight over weight

Table 11B
Remedial Design Memorandum
Off-Site Remedial Design Parameters

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Off-Site Remedial Design		Area 1
Persulfate Injection Design		
Area	ft ²	2,550
Depth Interval	ft-bgs	10-25
Intervals	ft	15
Treatment Volume	cu ft	38,250
Soil Density	lb/cu ft	110
Treatment Soil Mass	lb	4,207,500
Persulfate Dosage	g/kg	10
NaOH Dosage	g/kg	1.6
Persulfate Demand	lb	42,075
25% NaOH Demand	lb	26,928
Injection ROI	ft	8
% Pore Saturation		20%
Injection Point #		12
Volume Per Point	gallons	1,353
Injection Volume		16,236
Persulfate in Injection Solution	wt/wt	24%
NaOH in Injection Solution	wt/wt	15%
PAC or GAC Injection Design		
GAC Dosage	g/kg	4
Target Depth	ft-bgs	10-25
Intervals	ft	15
Soil Density	lb/cu ft	110
Treatment Soil Mass	lb	4,207,500
GAC Demand	lb	16,830
Injection Duration		5
Injection Point #		12
Volume Per Point	gallon	677
Injection Volume	gallons	8,118

Note:

ft - Feet

ft² - square feet

ft - bgs - feet below ground surface

lb - pound

cu ft - cubic feet

g/kg - gram per kilogram

wt/wt- weight over weight

FIGURES

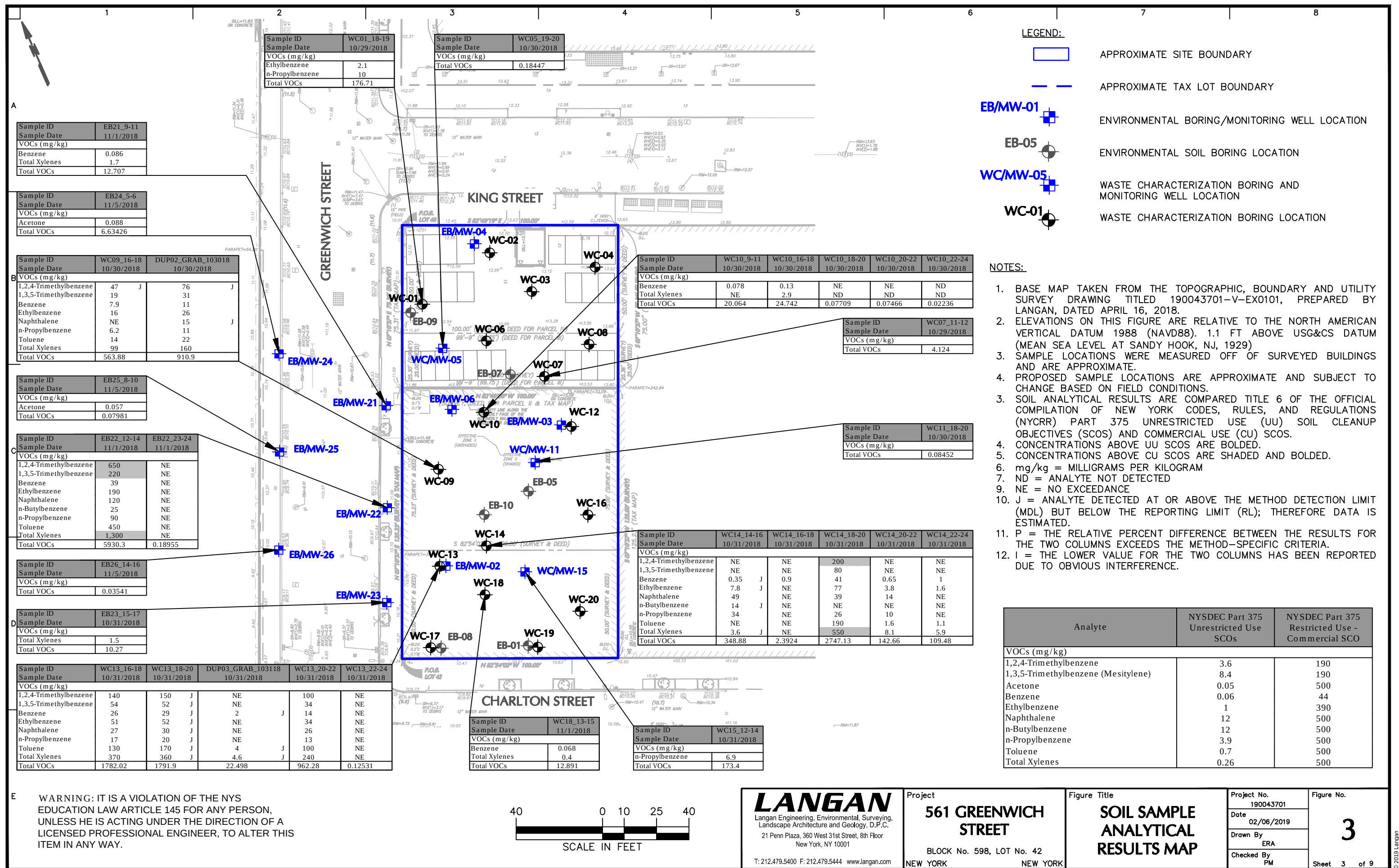


Figure 5
Remedial Design Memorandum
ISCO High Contaminant VOC Mass

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

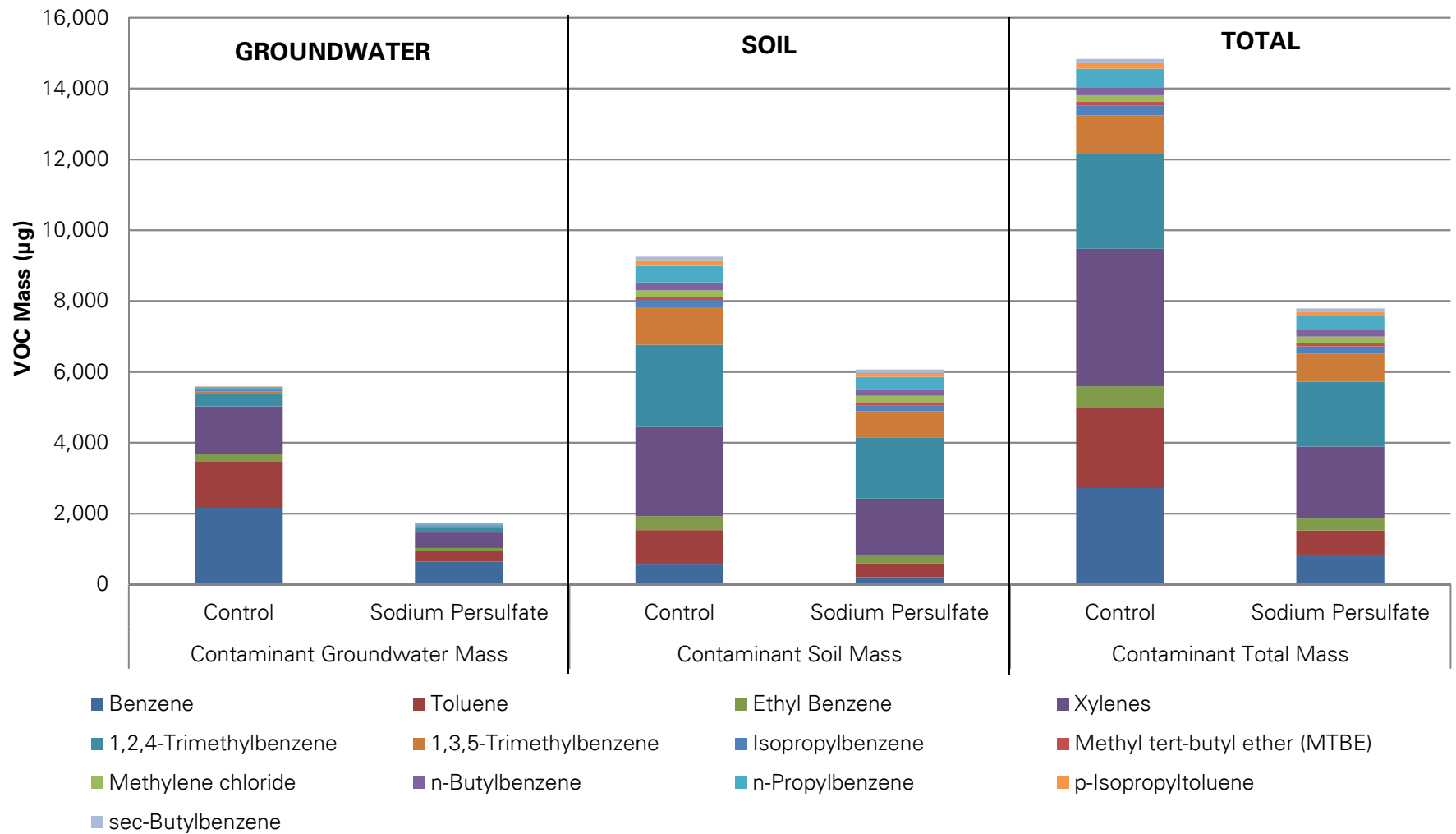


Figure 6
Remedial Design Memorandum
ISCO Low Contaminant VOC Mass

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

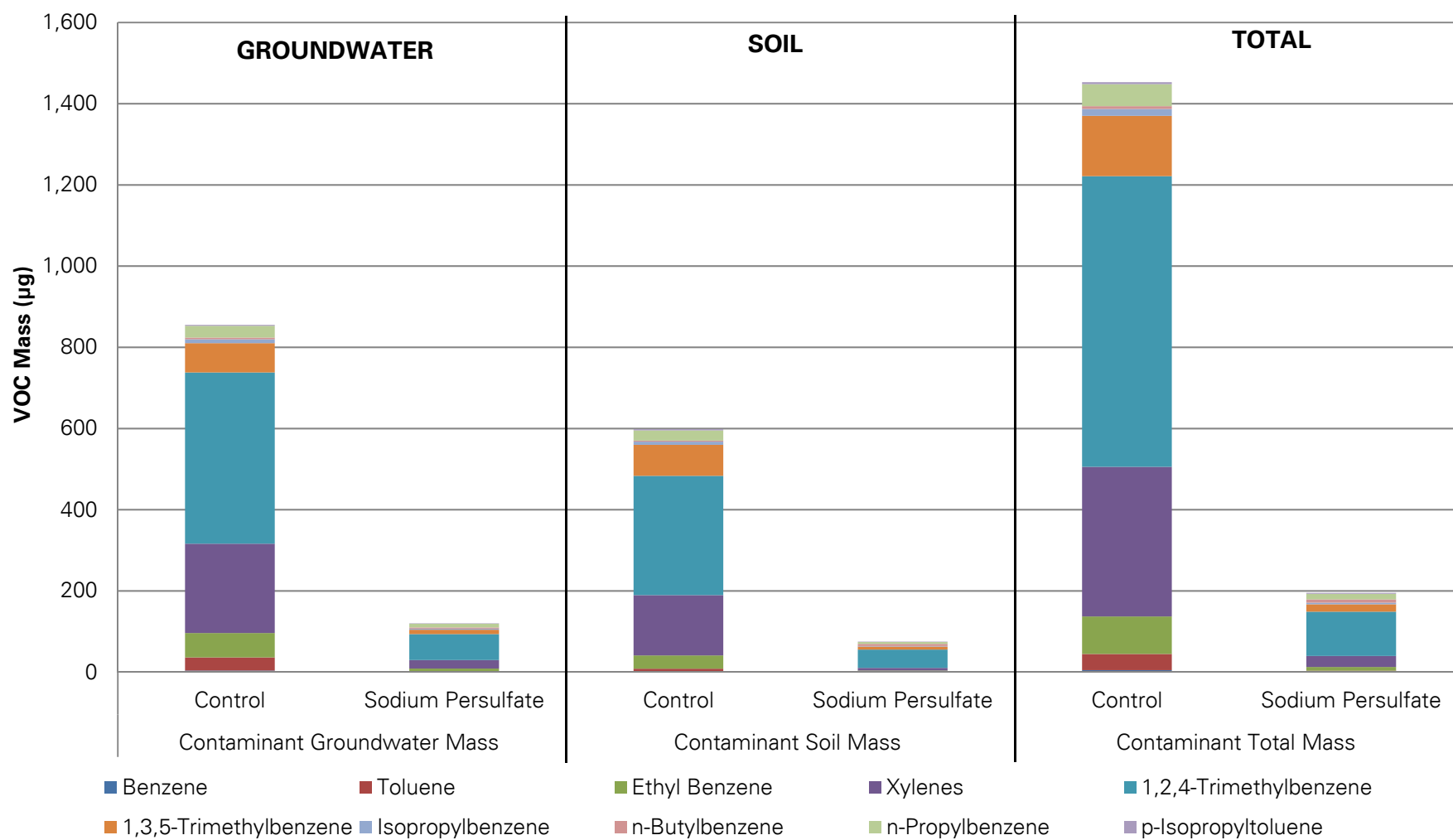


Figure 7
Remedial Design Memorandum
GAC Test High Contaminant VOC Mass

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

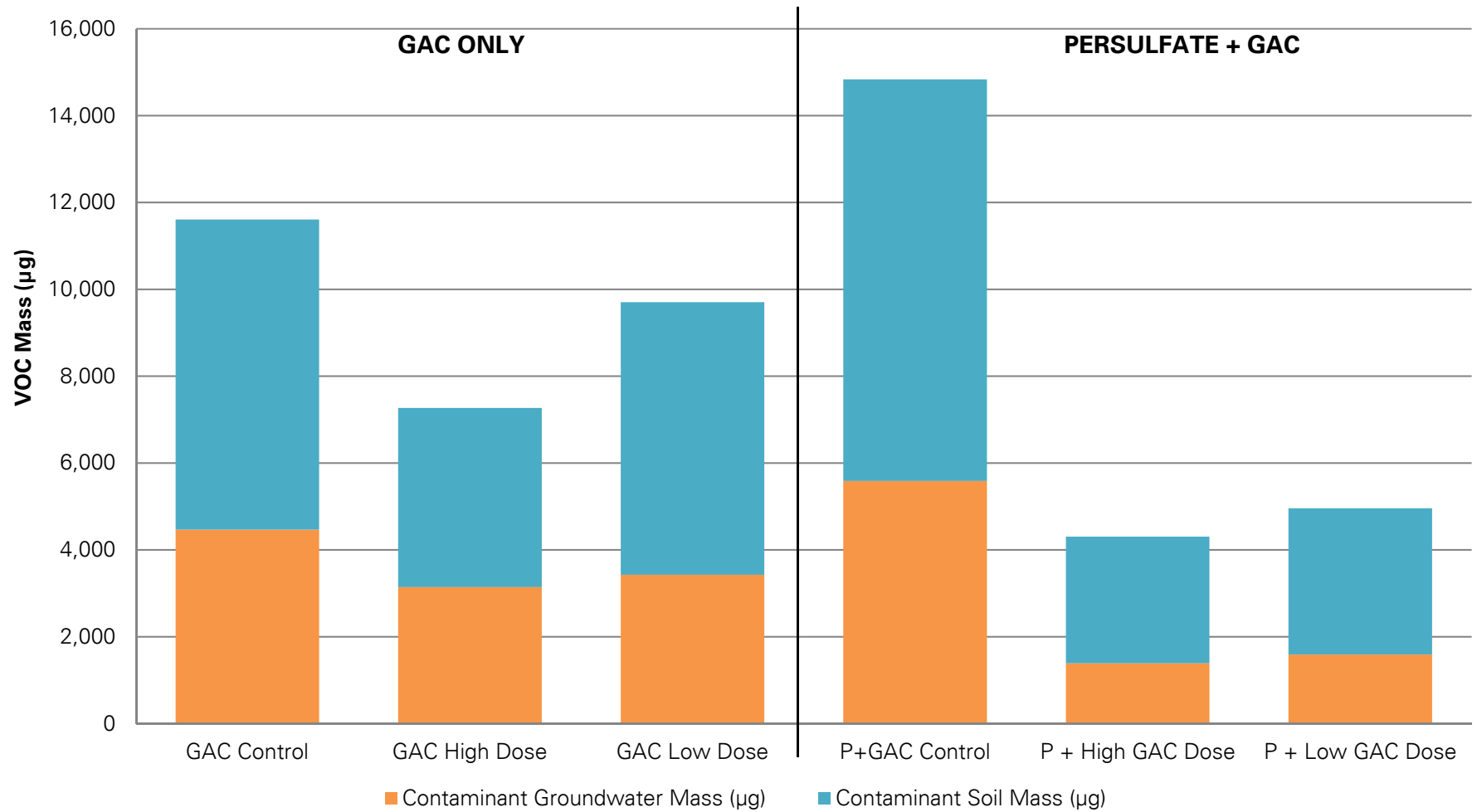
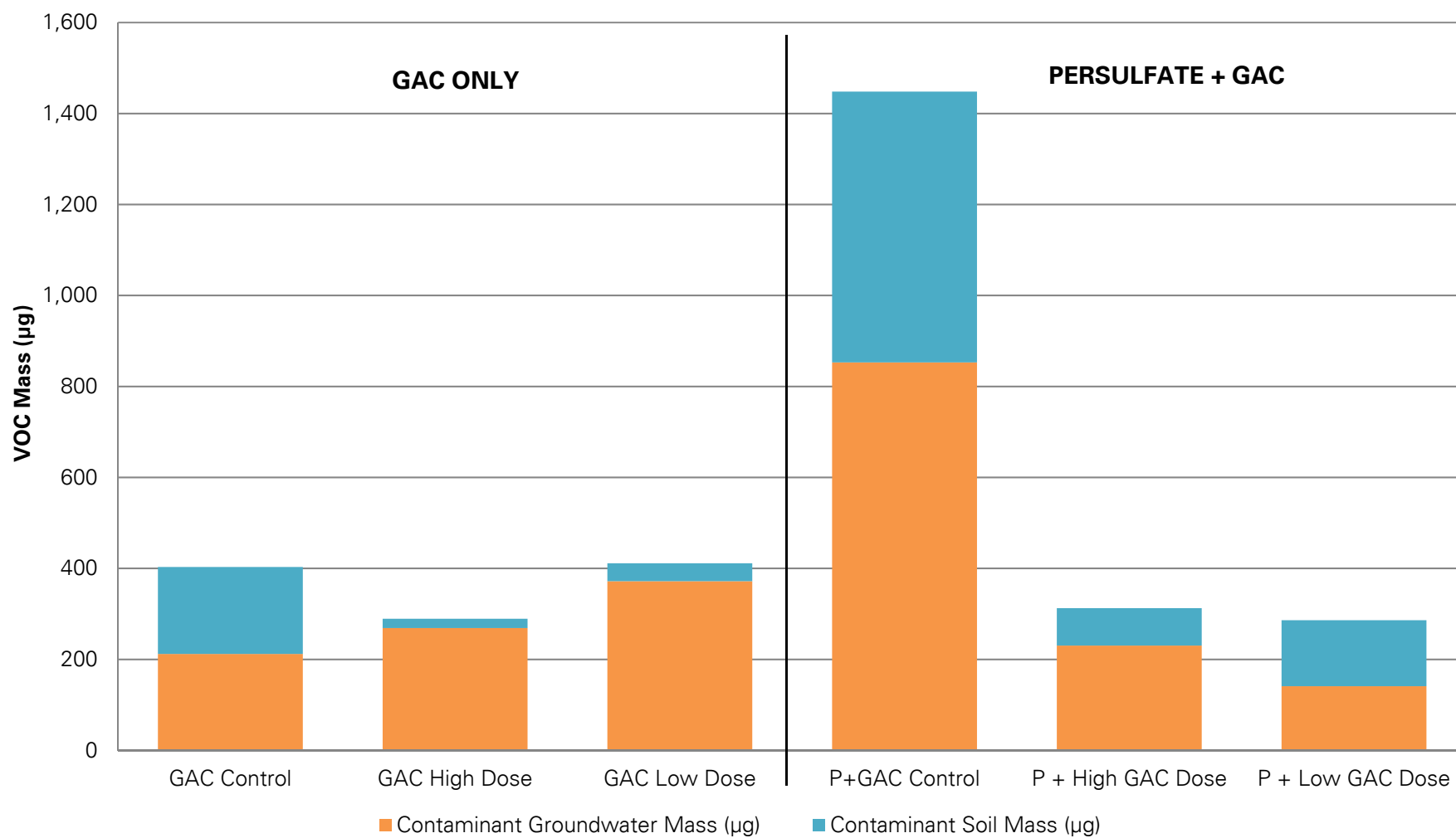


Figure 8
Remedial Design Memorandum
GAC Test Low Contaminant VOC Mass

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701



APPENDIX A

Remedial Investigation Report

APPENDIX B

Soil Boring Logs

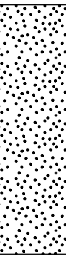
Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 12 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	10/29/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	10/29/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	20 ft
Casing Diameter (in)	N/A	Number of Samples	5
Casing Depth (ft)	N/A	Disturbed	5
Casing Hammer	N/A	First	12
Weight (lbs)	N/A	Completion	N/A
Drop (in)	N/A	24 HR.	N/A
Sampler	2-inch diameter acetate liner	Drilling Foreman	Tim Kelly
Sampler Hammer	N/A	Field Engineer	Dina Palazzolo
Weight (lbs)	N/A		
Drop (in)	N/A		

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	+12.0	R1a (0-10") Black ASPHALT	0						
	+11.2	R1b (10-37") Tan fine SAND, some red gravel, with asphalt (dry) [FILL]	1					0.0	
			2	R1	MACROCORE	37/48		0.0	
			3					0.0	
			4					0.0	
		R2 (0-35") Purplish-gray fine SAND, some red gravel, with asphalt (dry) [FILL]	5					0.0	
			6	R2	MACROCORE	35/48		0.0	
			7					0.0	
			8					0.0	
		R3a (0-15") Purplish-gray fine SAND, trace red gravel, trace fine gravel, with asphalt [FILL] (dry)	9					0.0	
	+2.6	R3b (15-40") Reddish-brown to tan fine SAND, some silt, trace clay (moist to wet)	10					0.0	
			11	R3	MACROCORE	46/48		0.0	
		R3c (40-46") Gray fine SAND, some silt (wet)	12					0.0	
		R4a (0-9") Light brown fine SAND, some silt (wet)	13					0.0	
	-0.8	R4b (9-24") Dark gray SILT, some clay (wet)	14					0.0	
			15	R4	MACROCORE	48/48		0.0	
		R4c (24-36") Gray to tan SILT, trace clay, trace fine sand (wet)	16					0.0	
	-3.0		17					0.0	
		R4d (36-48") Purplish-gray medium to fine SAND, trace fine gravel	18					4.0	
	-5.2		19					68.2	
	-5.4	R5a (0-3") Reddish-brown SILT (wet)	20					994	
		R5b (3-34") Reddish-brown coarse SAND, trace fine sand		R5	MACROCORE	34/48		1532	Sample collected WC01_18-19
								13.5	Petroleum-like odors
								0.5	End of boring, backfilled to grade with clean sand and capped with asphalt

Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 12.5 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	10/30/19
Drilling Equipment	Geoprobe 7822DT	Date Finished	10/30/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	24 ft
Casing Diameter (in)	N/A	Number of Samples	6
Casing Depth (ft)	N/A	Disturbed	6
Casing Hammer	N/A	Undisturbed	N/A
Weight (lbs)	N/A	Core	N/A
Drop (in)	N/A	Water Level (ft.)	First 10
Sampler	2-inch diameter acetate liner	Completion	N/A
Sampler Hammer	N/A	24 HR.	N/A
Weight (lbs)	N/A	Drilling Foreman	Adam Hutchinson
Drop (in)	N/A	Field Engineer	Dina Palazzolo

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist BLU/in	PID Reading (ppm)	
	+12.5	R1a (0-20") Whitish-gray GRAVEL (dry) [FILL]	0					0.0	
			1					0.0	
		R1b (20-26") Loose reddish-brown fine SAND, red medium gravel (moist) [FILL]	2	R1	MACROCORE	26/48		0.2	
			3					0.3	
			4						
		R2a (0-21") Loose reddish-brown fine SAND, trace medium sand, trace red medium gravel, with wood (moist) [FILL]	5	R2	MACROCORE	24/48			
			6						
		R2b (21-24") Loose grayish brown fine SAND, some medium sand, trace fine gravel (moist) [FILL]	7					0.0	
			8					0.2	
		R3a (0-16") Reddish brown to purplish gray fine SAND, trace red fine gravel, some medium sand (moist) [FILL]	9					0.5	
			10						Coal-like material
			11						
	+3.1	R3b (16-18") Gray GRAVEL	12	R3	MACROCORE	47/48		0.0	
	+2.9	R3c (18-28") Brown fine SAND, trace silt (moist to wet)	13					0.1	
	+2.1	R3d (28-34") Gray SILT, trace clay (wet)	14					0.0	
		R3e (34-47") Dark brown to black SILT, lenticular peat lenses (wet)	15					0.0	
	+0.2	R4a (0-4") Brown SILT, some clay, trace fine sand (wet)	16	R4	MACROCORE	48/48		0.2	
		R4b (4-11") Dark gray CLAY, some silt (wet)	17					0.0	
		R4c (11-15") Black lenticular PEAT lenses (moist)	18					0.0	
		R4d (15-26") Dark gray to black CLAY, some silt (moist)	19					0.0	Sample collected WC05_12-14
	-1.7	R4e (26-48") Gray SILT, trace clay (wet)	20					0.1	
			21					0.0	
			22					0.2	
			23					0.0	
	-4.2	R5a (0-8") Brown SILT, some clay, some fine gravel (wet)	24	R5	MACROCORE	48/48		24.8	
		R5b (8-20") Gray to brown fine SAND, some silt, trace fine gravel (wet)	25					26.9	
		R5c (20-48") Brown medium to fine SAND, trace coarse sand (wet)	26					79.2	
			27					248	Sample collected WC05_19-20

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Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 12.5 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-7.5	R6 (0-48") Brown to black medium fine SAND, trace coarse sand, trace silt (wet)	20	R6	MACROCORE	48/48		111	Staining Permanent well constructed, well screen set from 10-20ft. Finished with a J-plug and manhole cover. End of boring
	21		44.7						
	22		145						
	23		163						
	24		97.2						
	25		38						
	26		5.1						
	27		2.8						
	28		0.9						
	29								
	-11.5		30						
	31								
	32								
	33								
	34								
	35								
	36								
	37								
	38								
	39								
	40								
	41								
	42								
	43								
	44								
	45								

Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 13.5 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	10/29/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	10/29/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	20 ft
Casing Diameter (in)	N/A	Number of Samples	5
Casing Depth (ft)	N/A	Disturbed	5
Casing Hammer	N/A	Undisturbed	N/A
Weight (lbs)	N/A	Core	N/A
Drop (in)	N/A	Water Level (ft.)	First 11.8
Sampler	2-inch diameter acetate liner	Completion	N/A
Sampler Hammer	N/A	24 HR.	N/A
Weight (lbs)	N/A	Drilling Foreman	Tim Kelly
Drop (in)	N/A	Field Engineer	Dina Palazzolo

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist BLU/in	PID Reading (ppm)	
	+13.5	R1a (0-10") Black ASPHALT	0						
	+12.7	R1b (10-20") Black medium to fine SAND, some gray fine gravel (dry) [FILL]	1					0.0	
		R1c (20-30") Red GRAVEL, trace gray fine sand (dry) [FILL]	2	R1	MACROCORE	30/48		0.0	
			3						
			4						
			5						
		R2 (0-15") Red GRAVEL, trace tan fine sand (dry) [FILL]	6	R2	MACROCORE	15/48		0.0	
			7					0.0	
			8					0.0	
		R3a (0-10") Gray GRAVEL, trace red gravel (dry) [FILL]	9					0.0	
		R3b (10-22") Brown fine SAND, trace gravel, trace red gravel (dry) [FILL]	10	R3	MACROCORE	45/48		0.0	
	+3.4	R3c (22-45") Purplish fine SAND, trace fine gravel, some coarse sand (moist to wet)	11					0.0	
			12					4.5	
			13					35.5	Sample collected WC07_11-12
		R4a (0-14") Purplish-tan fine SAND, some red gravel, trace coarse sand (wet)	14	R4	MACROCORE	48/48		58.6	Petroleum-like odor.
	+0.3	R4b (14-34") Dark gray SILT, some fine sand, some clay, some red gravel (wet)	15					0.0	
			16					0.0	
		R4c (34-48") Gray SILT, some fine sand (wet)	17	R5	MACROCORE	44/48		0.0	
	-2.8	R5a (0-31") Purplish-tan medium to fine SAND, some red gravel, trace dark gray fine gravel (wet)	18					0.0	
			19					0.0	
	-5.4	R5b (31-44") Dark brown SILT, some fine sand, lenticular peat lenses (wet)	20					0.0	Bog-like odor
	-6.5							0.0	End of boring. Backfilled with clean sand and capped with asphalt

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Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 11 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	10/30/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	10/30/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	24 ft
Casing Diameter (in)	N/A	Number of Samples	6
Casing Depth (ft)	N/A	Disturbed	6
Casing Hammer	N/A	First	9
Weight (lbs)	N/A	Completion	N/A
Drop (in)	N/A	24 HR.	N/A
Sampler	2-inch diameter acetate liner	Drilling Foreman	Adam Hutchinson
Sampler Hammer	N/A	Field Engineer	Dina Palazzolo
Weight (lbs)	N/A		
Drop (in)	N/A		

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL6/in	PID Reading (ppm)	
	+11.0	R1a (0-9") CONCRETE	0	R1	MACROCORE	31/48		0.0	Sample collected WC09_6-8
	+10.3	R1b (9-15") Brown fine SAND, trace fine gravel (dry) [FILL]	1					0.1	
		R1c (15-26") Red GRAVEL, some fine red sand (dry) [FILL]	2					1.1	
		R1d (26-31") Brown fine SAND, trace coarse sand (dry) [FILL]	3					0.0	
			4	R2	MACROCORE	34/48		0.2	
			5					0.0	
			6					1.2	
			7					0.3	
			8	R3	MACROCORE	47/48		0.0	
			9					4.5	
			10					2.8	
			11					3.7	
	+2.5	R3a (0-5") Red fine GRAVEL, some fine red sand (moist) [FILL]	12	R4	MACROCORE	48/48		29.1	
		R3b (5-9") Reddish-brown medium to fine SAND, trace fine gravel, trace fine sand (moist to wet)	13					58	
		R3c (9-20") Dark brown fine SAND (wet)	14					2270	
		R3d (20-27") Black fine SAND, some silt (wet)	15					197.4	
		R3e (27-30") Black medium to fine SAND (wet)	16	R5	MACROCORE	46/48		114.4	
		R3f (30-35") Black fine SAND, some silt (wet)	17					93.4	
		R3g (35-47") Dark brown to black fine SAND, some lenticular peat lenses	18					5860	
			19					396	
	-1.0	R4a (0-35") Brown SILT, some fine sand, trace medium gravel, trace fine gravel (wet)	20	R5	MACROCORE	46/48		697	
			21					4792	
			22					915	
			23					398	
	-3.9	R4b (35-44") Gray CLAY, some silt, some fine sand (wet)	24	R5	MACROCORE	46/48		117	
			25					104	
			26					1634	
			27					2192	
	-4.7	R4c (44-48") Gray fine SAND, some silt, trace clay (wet)	28	R5	MACROCORE	46/48		772	
		R5a (0-12") Dark gray fine SAND, trace silt, trace coarse sand (wet)	29					544.7	
		R5b (12-20") Gray fine SAND, some silt, trace clay (wet)	30					630	
		R5c (20-36") Gray fine SAND, some clay, trace silt	31					696	
	-8.2		32	R5	MACROCORE	46/48		267	
			33						
			34						
			35						
			36	R5	MACROCORE	46/48			
			37						
			38						
			39						
			40	R5	MACROCORE	46/48			
			41						
			42						
			43						
			44	R5	MACROCORE	46/48			
			45						
			46						
			47						
			48	R5	MACROCORE	46/48			
			49						
			50						
			51						
			52	R5	MACROCORE	46/48			
			53						
			54						
			55						
			56	R5	MACROCORE	46/48			
			57						
			58						
			59						
			60	R5	MACROCORE	46/48			
			61						
			62						
			63						
			64	R5	MACROCORE	46/48			
			65						
			66						
			67						
			68	R5	MACROCORE	46/48			
			69						
			70						
			71						
			72	R5	MACROCORE	46/48			
			73						
			74						
			75						
			76	R5	MACROCORE	46/48			
			77						
			78						
			79						
			80	R5	MACROCORE	46/48			
			81						
			82						
			83						
			84	R5	MACROCORE	46/48			
			85						
			86						
			87						
			88	R5	MACROCORE	46/48			
			89						
			90						
			91						
			92	R5	MACROCORE	46/48			
			93						
			94						
			95						
			96	R5	MACROCORE	46/48			
			97						
			98						
			99						
			100	R5	MACROCORE	46/48			
			101						
			102						
			103						
			104	R5	MACROCORE	46/48			
			105						
			106						
			107						
			108	R5	MACROCORE	46/48			
			109						
			110						
			111						
			112	R5	MACROCORE	46/48			
			113						
			114						
			115						
			116	R5	MACROCORE	46/48			
			117						
			118						
			119						
			120	R5	MACROCORE	46/48			
			121						
			122						
			123						
			124	R5	MACROCORE	46/48			
			125						
			126						
			127						
			128	R5	MACROCORE	46/48			
			129						
			130						
			131						
			132	R5	MACROCORE	46/48			
			133						
			134						
			135						
			136	R5	MACROCORE	46/48			
			137						
			138						
			139						
			140	R5	MACROCORE	46/48			
			141						
			142						
			143						
			144	R5	MACROCORE	46/48			
			145						
			146						
			147						
			148	R5	MACROCORE	46/48			
			149						
			150						
			151						
			152	R5	MACROCORE	46/48			
			153						
			154						
			155						
			156	R5	MACROCORE	46/48			
			157						
			158						
			159						
			160	R5	MACROCORE	46/48			
			161						
			162						
			163						
			164	R5	MACROCORE	46/48			
			165						
			166						
			167						
			168	R5	MACROCORE	46/48			
			169						
			170						
			171						
			172	R5	MACROCORE	46/48			
			173						
			174						
			175						
			176	R5	MACROCORE	46/48			
			177						
			178						
			179						
			180	R5	MACROCORE	46/48			
			181						
			182						
			183						
			184	R5	MACROCORE	46/48			
			185						
			186						
			187						
			188	R5	MACROCORE	46/48			
			189						
			190						
			191						
			192	R5	MACROCORE	46/48			
			193						
			194						
			195						
			196	R5	MACROCORE	46/48			
			197						
			198						
			199						
			200	R5	MACROCORE	46/48			
			201						
			202						
			203						
			204	R5	MACROCORE	46/48			
			205						
			206						
			207						
			208	R5	MACROCORE	46/48			
			209						
			210						
			211						
			212	R5	MACROCORE	46/48			
			213						
			214						
			215						
			216	R5	MACROCORE	46/48			
			217						
			218						
			219						
			220	R5	MACROCORE	46/48			
			221						
			222						
			223						
			224	R5	MACROCORE	46/48			
			225						
			226						
			227						
			228	R5	MACROCORE	46/48			
			229						
			230						
			231						
			232	R5	MACROCORE	46/48			
			233						
			234						
			235						
			236	R5	MACROCORE	46/48			
			237						
			238						
			239						

Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-9.0		20					162	End of boring. Backfilled with clean sand and capped with concrete
			21						
	-11.0	R6a (0-10") Purplish-gray fine clayey SAND (wet)	22	R6	MACROCORE	24/48		169.5	
		R6b (10-17") Purplish-gray coarse SAND, some clay (wet)	23					104.3	
	R6c (17-24") Purplish-gray fine SAND, trace silt (wet)	24					27.8		
-13.0		25					27.7		
		26					5.8		
		27							
		28							
		29							
		30							
		31							
		32							
		33							
		34							
		35							
		36							
		37							
		38							
		39							
		40							
		41							
		42							
		43							
		44							
		45							

End of boring. Backfilled with clean sand and capped with concrete

Project 561 Greenwich				Project No. 190043701					
Location New York, NY				Elevation and Datum Approx. El 11.5 (NAVD88)					
Drilling Company AARCO Environmental Services Corp.				Date Started 10/30/18		Date Finished 10/30/18			
Drilling Equipment Geoprobe 7822DT				Completion Depth 24 ft		Rock Depth			
Size and Type of Bit 4' Macrocore 2 1/4" Diameter				Number of Samples	Disturbed 6	Undisturbed N/A	Core N/A		
Casing Diameter (in) N/A			Casing Depth (ft) N/A	Water Level (ft.) First 10	Completion N/A	24 HR. N/A	N/A		
Casing Hammer N/A	Weight (lbs) N/A	Drop (in) N/A		Drilling Foreman Adam Hutchinson					
Sampler 2-inch diameter acetate liner				Field Engineer Dina Palazzolo					
Sampler Hammer N/A		Weight (lbs) N/A	Drop (in) N/A						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	+11.5	R1a (0-15") ASPHALT and CONCRETE	0	R1	MACROCORE	15/48		0.0	
	+10.3	VOID SPACE	1					0.0	
			2					0.0	
			3						
			4	R2	MACROCORE	24/48			
			5						
	+5.5	R2a (0-17") Reddish-brown fine SAND, trace silt, trace red gravel (moist) [FILL]	6					0.0	
			7					0.0	
		R2b (17-19") Dark gray to black fine GRAVEL, some medium to fine sand (moist) [FILL]	8					0.0	
	+2.7	R2c (19-24") Brown fine SAND, trace silt, trace fine to medium gravel [FILL]		R3	MACROCORE	38/48		0.2	Sample collected WC10_9-11 PID reading exceeds limit
	+2.3	R3a (0-5") Brown to dark gray fine SAND, some silt, trace clay (moist to wet)	9					48.2	
	+2.0	R3b (5-8") Black SILT, some fine sand, trace clay (wet)	10					8165	
	+1.3	R3c (8-16") Dark brown to black medium to fine SAND, trace fine gravel (wet)	11					4444	
	+1.0	R3d (16-20") Dark gray SILT, some clay, trace fine sand (wet)	12					4716	Bog-like odor
	+0.5	R3e (20-26") Dark gray CLAY, some silt, trace fine sand (wet)	13					15000	
		R3f (26-38") Black fine SAND, lenticular peat lenses	14					1226	
			15					682	
			16	R4	MACROCORE	40/48		180	Petroleum-like odor and staining from 12-16ft
		R4a (0-10") Black medium to fine SAND, some silt, trace clay (wet)	17					617	
	-2.7	R4b (10-32") Grayish brown SILT, trace fine sand, trace clay (wet)	18					1327	
			19					2217	
	-4.5	R5a (0-8") Brown CLAY, some silt, some fine sand (wet)		R5	MACROCORE	48/48		91	Sample collected WC10_16-18
	-5.2	R5b (8-20") Gray fine SAND, some silt, trace clay (wet)	20					170	
								16.5	
	-6.2	R5c (20-43") Gray CLAY, some silt (wet)						27	
								36	Petroleum-like odors from 16-18ft
	-8.1	R5d (43-48") Purplish gray fine SAND (wet)						64.2	

Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11.5 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-8.5	R6a (0-6") Gray fine SAND, trace silt (wet)	20	R6	MACROCORE	48/48		15.9 2.0 1.3 12.4 2.4 4.3	Sample collected WC10_20-22
	-9.0	R6b (6-16") Brown SILT, some clay (wet)	21						
	-9.8	R6c (16-21") Brown CLAY, some silt (wet)	22						
	-11.3	R6d (21-33") Brown CLAY, trace silt (wet)	23						
	-12.5	R6e (33-48") Brown medium to fine SAND, trace silt (wet)	24						
			24						End of boring. Backfilled with clean sand and capped with concrete
			25						
			26						
			27						
			28						
			29						
			30						
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

Project 561 Greenwich				Project No. 190043701				
Location New York, NY				Elevation and Datum Approx. El 11 (NAVD88)				
Drilling Company AARCO Environmental Services Corp.				Date Started 10/30/18		Date Finished 10/30/18		
Drilling Equipment Geoprobe 7822DT				Completion Depth 24 ft		Rock Depth		
Size and Type of Bit 4' Macrocore 2 1/4" Diameter				Number of Samples 6		Disturbed N/A		
Casing Diameter (in) N/A				Casing Depth (ft) N/A		Core N/A		
Casing Hammer N/A				Weight (lbs) N/A		Drop (in) N/A		
Sampler 2-inch diameter acetate liner				Drilling Foreman Adam Hutchinson				
Sampler Hammer N/A				Field Engineer Dina Palazzolo				
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BLU/in	
	+11.0	R1a (0-14") CONCRETE	0					
	+9.8	R1b (14-16") Dark brown fine SAND, some fine gravel, trace red gravel (dry) [FILL]	1					
			2	R1	MACROCORE	17/48		
			3					
			4					
		R2a (0-16") Purplish-gray fine SAND, some fine gravel (moist) [FILL]	5					0.0
			6	R2	MACROCORE	35/48		0.0
		R2b (16-20") Red fine GRAVEL, some fine red sand, trace coarse gravel, trace concrete (moist) [FILL]	7					0.0
		R2c (20-25") Black medium to fine SAND, angular, with coal (moist) [FILL]	8					0.0
		R2d (25-35") Purplish-gray to brown fine SAND, trace coarse sand, trace silt (moist)	9					0.0
	+1.3	R3a (0-14") Purple to gray fine SAND, trace coarse sand, trace fine gravel (moist to wet) [FILL]	10					0.0
		R3b (14-30") Gray to dark gray CLAY, some silt, trace fine sand (wet)	11	R3	MACROCORE	48/48		0.0
	0.0	R5b (10-21") Brown fine SAND, some silt (wet)	12					0.2
		R3c (30-37") Dark brown fine SAND, trace lenticular peat lenses (wet)	13					5.9
		R3d (37-42") Dark brown fine SAND, some silt (wet)	14					4.6
	-2.4	R4a (0-26") Gray SILT, some clay, trace fine sand (wet)	15	R4	MACROCORE	31/48		0.0
			16					2.5
		R4b (26-31") Gray fine SAND, some silt, trace clay (wet)	17					2.8
		R5a (0-10") Brown medium to fine SAND, trace silt (wet)	18					1.6
			19	R5	MACROCORE	46/48		1.5
			20					0.6
	-4.6							6.9
		R5c (21-32") Gray CLAY, trace silt (wet)						12.5
								2.2
	-6.9							3.5
								2.6
	-7.9	R5d (33-46") Gray fine SAND, trace silt (wet)						13.8
								7.3
								3.2

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Sample collected WC11_6-8 and DUP01_Grab

Bog-like odor

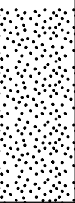
Sample collected WC11_18-20

Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-11.2	R6a (0-13") Purplish-gray medium to coarse SAND, trace fine sand (wet)	20	R6	MACROCORE	46/48		1.1	End of boring. Permanent well constructed, well screen set from 8-18ft. Finished with a J-plug and manhole cover. See well construction log for details.
		21	1.8						
		22	11.9						
		23	2.1						
	-12.5	R6c (24-40") Purple SILT, trace clay (wet)	24					1.8	
		25	0.3						
	-13.0	R6d (40-46") Purplish fine SAND, some silt (wet)	26					0.9	
			27						
		28							
		29							
		30							
		31							
		32							
		33							
		34							
		35							
		36							
		37							
		38							
		39							
		40							
		41							
		42							
		43							
		44							
		45							

Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 11 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	10/31/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	10/31/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	24 ft
Casing Diameter (in)	N/A	Number of Samples	6
Casing Depth (ft)	N/A	Disturbed	6
Casing Hammer	N/A	First	11
Weight (lbs)	N/A	Completion	N/A
Drop (in)	N/A	24 HR.	N/A
Drilling Foreman	Daybi Parheco		
Field Engineer	Dina Palazzolo		

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BLU6in	PID Reading (ppm)	
	+11.0	R1a (0-10") CONCRETE	0						
	+10.2	R1b (10-16") Black fine SAND, trace fine gravel (dry) [FILL]	1					3.2	
		R1c (16-22") White coarse SAND, some fine gravel (dry) [FILL]	2					2.6	
		R1d (22-40") Light brown fine SAND, trace silt, trace coarse sand (dry) [FILL]	3					0.3	
			4					5.6	
			5					4.6	
			6						
			7						
			8						
			9						
			10						
	+0.7	R2a (0-8") Purplish-gray fine SAND, and red gravel, some fine gravel (dry) [FILL]	11						
		R2b (8-16") Brown fine SAND, some coarse sand, trace fine gravel (dry) [FILL]	12						
			13						
			14						
			15						
			16						
			17						
			18						
			19						
			20						

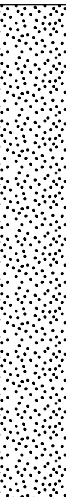
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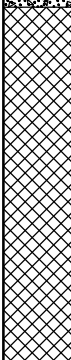
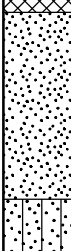
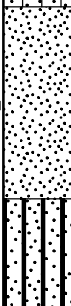
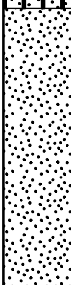
Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-9.0	R6a (0-21") Gray fine SAND, some silt, trace clay (wet)	20	R6	MACROCORE	46/48		1373	Sample collected WC13_20-22 and MS/MSD Sample collected WC13_22-24
			21					12973	
		R6b (21-31") Gray fine SAND, trace coarse sand, trace silt (wet)	22					6180	
			23					2020	
		R6c (31-46") Purplish-gray medium SAND, some fine sand, trace silt (wet)	24					127.3	
			25					254	
			26					234.7	
			27						
			28						
			29						
	-13.0		30						End of boring. Backfilled with clean sand and capped with concrete
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

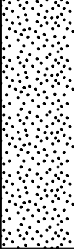
Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 11 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	10/31/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	10/31/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	28 ft
Casing Diameter (in)	N/A	Number of Samples	7
Casing Depth (ft)	N/A	Disturbed	7
Casing Hammer	N/A	Undisturbed	N/A
Weight (lbs)	N/A	Core	N/A
Drop (in)	N/A	Water Level (ft.)	First 12.5
Sampler	2-inch diameter acetate liner	Completion	N/A
Sampler Hammer	N/A	24 HR.	N/A
Weight (lbs)	N/A	Drilling Foreman	Daybi Parheco
Drop (in)	N/A	Field Engineer	Dina Palazzolo

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist BLU6in	PID Reading (ppm)	
	+11.0	R1a (0-7") CONCRETE	0						
	+10.4	R1b (7-11") Asphalt	1					0.0	
	+10.1	R1c (11-29") Brown fine SAND, some fine gravel, some red gravel, trace coarse gravel (dry) [FILL]	2	R1	MACROCORE	32/48		1.5	
		R1d (29-32") Red fine GRAVEL, some red fine sand (dry) [FILL]	3					0.3	
			4					4.3	
			5	R2	MACROCORE	20/48			
		R2a (0-15") Purplish brown fine SAND, some fine gravel (moist) [FILL]	6					1.2	
			7					0.8	
		R2b (15-20") Black fine SAND, some coarse sand and fine gravel, trace coal [FILL]	8					1.6	
	+2.8	R3a (0-12") Purplish dark gray fine SAND, some fine gravel (moist)	9	R3	MACROCORE	45/48		3.8	Petroleum-like odors throughout to 12ft
		R3b (12-31") Purplish dark gray fine SAND, some silt, trace fine gravel (moist)	10					9.9	
			11					5090	
	+0.2	R3c (31-39") Dark gray SILT, some fine sand, trace clay (moist)	12					4151	
	-0.5	R3d (39-45") Black fine SAND, some silt, some organics (moist)	13					270.1	
		R4a (0-11") Purplish dark gray fine SAND, some fine gravel, trace silt (wet)	14	R4	MACROCORE	46/48		96.0	Petroleum-like odors and staining throughout the rest of boring
	-2.1	R4b (11-17") Black SILT, trace fine sand, trace clay (wet)	15					115.3	
	-2.6	R4c (17-23") Black fine SAND, some silt, trace clay (wet)	16					217.2	
	-3.1	R4d (23-31") Black SILT, trace clay (wet)	17					259.4	
	-3.8	R4e (31-46") Black to gray CLAY, some silt, trace fine sand (wet)	18					352.3	
			19					7175	
	-5.0	R5a (0-18") Gray to dark gray fine SAND, trace silt (wet)	20	R5	MACROCORE	46/48		15000	Sample collected WC13_16-18
								15000	
		R5b (18-35") Gray fine SAND, some silt, trace clay (wet)						191.7	
								177.7	
								958	
	-8.1	R5c (35-43") Gray CLAY (wet)						4891	
	-8.8							5185	
								1500	Sample collected WC13_18-20
								1500	

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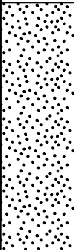
Project			561 Greenwich			Project No.			190043701		
Location			New York, NY			Elevation and Datum			Approx. El 11 (NAVD88)		
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)		
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)			
	-9.0	R5d (43-46") Gray fine SAND, trace silt (wet)	20	R6	MACROCORE	24/48			Sample collected WC13_20-22		
		R6a (0-12") Purplish gray medium fine SAND, some silt (wet)	21							275.2	
		R6b (12-24") Purplish gray medium fine SAND, trace coarse sand (wet)	22							398.3	
		R7a (0-24") Purplish gray coarse SAND, trace fine sand, trace silt (wet)	23							476.3	
		R7b (24-46") Purplish gray fine SAND, some silt (wet)	24	3117	Sample collected WC13_22-24						
			25	285.7							
			26	34.7							
			27	90.6							
			28	343.9							
			29	1852							
	30	958.2									
	31	1018	End of boring. Backfilled with sand, capped with concrete								
	32										
	33										
	34										
	35										
	36										
	37										
	38										
	39										
	40										
	41										
	42										
	43										
	44										
	45										

Project					Project No.									
561 Greenwich					190043701									
Location					Elevation and Datum									
New York, NY					Approx. EI 11 (NAVD88)									
Drilling Company					Date Started		Date Finished							
AARCO Environmental Services Corp.					10/31/18		10/31/18							
Drilling Equipment					Completion Depth		Rock Depth							
Geoprobe 7822DT					24 ft									
Size and Type of Bit					Number of Samples		Disturbed		Undisturbed	Core				
4' Macrocore 2 1/4" Diameter							6		N/A	N/A				
Casing Diameter (in)				Casing Depth (ft)	Water Level (ft.)		First	Completion	24 HR.					
N/A				N/A	10		10	N/A	N/A					
Casing Hammer			Weight (lbs)		Drop (in)	Drilling Foreman								
N/A			N/A		N/A	Daybi Parheco								
Sampler					Field Engineer									
2-inch diameter acetate liner					Dina Palazzolo									
Sampler Hammer			Weight (lbs)		Drop (in)									
N/A			N/A		N/A									
MATERIAL SYMBOL	Elev. (ft)	Sample Description			Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)			
						Number	Type	Recov. (in)	Penetr. resist	BLU/in		PID Reading (ppm)		
	+11.0	R1a (0-10") Concrete			0	R1	MACROCORE	34/48			27.4	Sample collected WC15_1-3		
	+10.2	R1b (10-14") Black medium fine SAND (dry) [FILL] R1c (14-34") Tan to pink fine SAND, some fine gravel, glass (dry) [FILL]			1						35.8			
					2						9.8			
					3						19.1			
		R2a (0-15") Purplish-brown SAND, some fine gravel, trace silt, coal (dry) [FILL]			4	R2	MACROCORE	22/48			20.3			
					5									
					6									
					7									
	+4.3	R2b (15-22") Brown fine SAND, some silt, trace medium fine gravel (moist) [FILL] R3a (0-11") Dark brown to black SILT, some fine SAND (moist to wet)			8	R3	MACROCORE	33/48			51.6		Petroleum-like odors	
					9						51.0			
					10						18.2			
					11									
	+1.3	R3b (11-16") Dark purplish-black medium fine SAND (wet) R3c (16-27") Dark grayish-brown silty fine SAND with organics (wet)			12	R4	MACROCORE	46/48			28.0	Petroleum-like odors		
	+0.4	R3d (27-33") Black fine SAND, some silt, some lenticular peat lenses			13						193.5			
		R4a (0-18") Black fine SAND, trace silt (wet)			14						2342			
					15						154.6			
	-2.7	R4b (18-40") Grayish-olive SILT, some fine sand (wet)			16	R5	MACROCORE	40/48			264.4			Sample collected WC15_12-14
					17						2175			
					18						1434			
					19						1786			
	-4.5	R4c (40-46") Grayish-olive fine SAND, trace silt (wet) R5a (0-9") Purplish-gray fine SAND, trace coarse sand, trace red fine gravel (wet) R5b (9-40") Gray fine SAND, trace silt (wet)			20						30.2			
					21						23.2			
					22						58.8			
					23						14.9			
					24	62.3								
					25	59.2								
					26	54.2								
					27	26.7								
					28	4.7								

Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-9.0	R6a (0-31") Gray fine SAND, trace silt (wet)	20	R6	MACROCORE	46/48		10.5	Sample collected WC15_20-22
		21	6.4						
	-13.0	R6b (31-46") Gray fine SAND, some medium fine sand (wet)	22					7.1	End of boring. Permanent well constructed, well screen set from 7-17ft. Finished with a J-plug and manhole cover. See well construction log for details.
		23	5.7						
			24					3.5	
		25	11.3						
			26						
		27							
			28						
		29							
			30						
		31							
			32						
		33							
			34						
		35							
			36						
		37							
			38						
		39							
			40						
		41							
			42						
		43							
			44						
		45							

Project 561 Greenwich				Project No. 190043701				
Location New York, NY				Elevation and Datum Approx. El 11 (NAVD88)				
Drilling Company AARCO Environmental Services Corp.				Date Started 11/1/18		Date Finished 11/1/18		
Drilling Equipment Geoprobe 7822DT				Completion Depth 24 ft		Rock Depth		
Size and Type of Bit 4' Macrocore 2 1/4" Diameter				Number of Samples 6		Disturbed N/A		
Casing Diameter (in) N/A				Casing Depth (ft) N/A		Core N/A		
Casing Hammer N/A				Weight (lbs) N/A		Drop (in) N/A		
Sampler 2-inch diameter acetate liner				Drilling Foreman Adam Hutchinson				
Sampler Hammer N/A				Field Engineer Dina Palazzolo				
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BLU/in	
	+11.0	R1a (0-8") Concrete	0					
	+10.3	R1b (8-18") Brown to black fine SAND, trace medium fine sand, trace coarse sand, trace fine gravel, trace red gravel (moist) [FILL]	1	R1	MACROCORE	18/48		0.0
			2					0.0
			3					0.0
			4					
		R2a (0-16") Purplish/reddish brown fine SAND, some fine gravel, with brick (moist) [FILL]	5	R2	MACROCORE	27/48		0.0
			6					0.0
		R2b (16-18) Black fine SAND, some coarse sand, trace concrete and coal (moist) [FILL]	7					0.0
		R2c (18-27) Brown fine SAND, trace silt (moist to wet) [FILL]	8					0.0
		R3a (0-14") Reddish-brown fine SAND, some fine gravel, trace coarse sand (moist) [FILL]	9	R3	MACROCORE	40/47		0.0
			10					0.0
		R3b (14-30") Brown fine SAND, some gravel, trace fine gravel, trace silt (moist) [FILL]	11					0.0
	-0.2	R3c (30-40") Black fine SAND, some silt, some lenticular peat lenses (moist)	12					0.7
			13					5.3
		R4a (0-17") Dark brown fine SAND, some fine gravel, some coarse sand, trace silt (wet)	14	R4	MACROCORE	46/48		36.7
	-2.6		15					17.0
		R4b (17-26") Dark brown SILT, some fine sand, trace coarse sand (wet)	16					26.4
	-3.3		17					27.8
		R4c (26-33") Brownish-olive fine SAND, some silt (wet)	18					9.4
	-3.9		19					1.2
		R4d (33-40") Olive SILT, some fine sand (wet)	20					10.7
	-4.5							0.4
		R4e (40-46") Olive fine SAND (wet)						0.0
								0.6
		R5a (0-14") Brown medium fine SAND, some coarse sand, trace fine gravel (wet)		R5	MACROCORE	39/48		5.6
								1.6
		R5b (14-39") Olive gray fine SAND, trace silt (wet)						1.4
								4.9
								0.5
								0.0

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Project			Project No.							
561 Greenwich			190043701							
Location			Elevation and Datum							
New York, NY			Approx. El 11 (NAVD88)							
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)		
	-9.0	R6 Gray fine SAND, trace silt (wet)	20	R6	MACROCORE	40/48			0.0	End of boring. Backfilled with clean sand and capped with concrete
			21						0.0	
			22						0.2	
			23						0.0	
			24						0.8	
			25						5.3	
			26						2.2	
			27						0.0	
			28							
			29							
	-13.0		30							
			31							
			32							
			33							
			34							
			35							
			36							
			37							
			38							
			39							
			40							
			41							
			42							
			43							
			44							
			45							

Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 11 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	11/1/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	11/1/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	20 ft
Casing Diameter (in)	N/A	Number of Samples	5
Casing Depth (ft)	N/A	Disturbed	5
Casing Hammer	N/A	Undisturbed	N/A
Weight (lbs)	N/A	Core	N/A
Drop (in)	N/A	Water Level (ft.)	First 13.5
Sampler	2-inch diameter acetate liner	Completion	N/A
Sampler Hammer	N/A	24 HR.	N/A
Weight (lbs)	N/A	Drilling Foreman	Adam Hutchinson
Drop (in)	N/A	Field Engineer	Dina Palazzolo

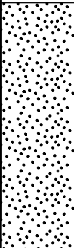
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	+11.0	R1a (0-9") Concrete	0						
	+10.3	R1b (9-14") Black fine SAND, trace fine gravel (dry) [FILL]	1					0.0	
		R1c (14-17") White medium GRAVEL [FILL]	2					0.1	
		R1d (17-26") Purplish brown fine SAND, trace coarse sand (moist) [FILL]	3					0.0	
			4					0.0	
			5						
		R2a (0-5") Black medium SAND, some fine angular gravel (moist) [FILL]	6					0.0	
		R2b (5-19") Purplish light brown fine SAND, some fine gravel (moist) [FILL]	7					0.0	
		R2c (19-21") Dark brown fine SAND, some silt, trace clay with coal (moist) [FILL]	8					0.0	
			9						
		R3a (0-4") Brown silty fine SAND (moist) [FILL]	10						
		R3b (4-6") Purplish light brown fine SAND, trace fine gravel (moist) [FILL]	11					0.0	
		R3c (6-21") Purplish brown fine SAND, some red fine gravel, some gray gravel, trace silt (moist) [FILL]	12					0.0	
			13					0.0	
		R4a (0-8") Brownish dark gray fine SAND, trace silt, trace coarse sand (moist to wet) [FILL]	14					0.2	
	-3.0	R4b (8-15") Dark gray fine SAND (wet)	15					0.0	
	-3.8	R4c (15-18") Dark gray fine SAND with wood (wet)	16					13.1	
		R4d (18-32") Dark gray to olive fine sandy SILT (wet)	17					3.2	
			18					1.4	
	-5.8	R5a (0-19") Gray fine SAND (wet)	19					1.1	
			20					0.1	
		R5b (19-22") Gray fine SAND, trace silt (wet)						0.8	
		R5c (22-27") Purplish gray medium SAND, trace fine sand (wet)						0.1	
		R5d (27-39") Gray fine SAND, trace silt (wet)						0.0	

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Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 11.5 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	11/1/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	11/1/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	24 ft
Casing Diameter (in)	N/A	Number of Samples	6
Casing Depth (ft)	N/A	Disturbed	6
Casing Hammer	N/A	Undisturbed	N/A
Weight (lbs)	N/A	Core	N/A
Drop (in)	N/A	Water Level (ft.)	First 7.5
Sampler	2-inch diameter acetate liner	Completion	N/A
Sampler Hammer	N/A	24 HR.	N/A
Weight (lbs)	N/A	Drilling Foreman	Adam Hutchinson
Drop (in)	N/A	Field Engineer	Dina Palazzolo

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist BLU6in	PID Reading (ppm)	
	+11.5	R1 Hand clear Brown fine SAND, some coarse sand, trace fine gravel, trace silt (moist) [FILL]	0	R1	HA			0.0	
			1						
			2						
			3					0.0	
			4						
		R2a (0-3") Brown fine SAND, trace silt (wet) [FILL]	5	R2	MACROCORE	30/48		0.0	
			6					0.0	
			7					0.0	
		R2b (3-36") Purplish-brown fine SAND, trace coarse sand (moist) [FILL]	8					5.1	
			9					4.8	
	+2.2	R3a (0-23") Dark gray fine SAND, trace silt (wet)	10	R3	MACROCORE	32/48		5.8	Sample collected EB21_9-11
			11					20.9	Slight petroleum-like odors
			12					64.2	
		R3b (23-32") Black SILT, some fine sand, some lenticular peat lenses, some organics (moist)	13					24.9	Bog-like odor
			14					31.8	
	+0.3	R4a (0-10") Dark brown to black SILT, trace clay, trace sand (wet)	15	R4	MACROCORE	46/48		13.1	
			16					16.2	
		R4b (10-27") Gray to light olive fine SAND, trace silt, trace clay (wet)	17					9.4	
			18					10.5	
		R4c (27-46") Gray to purplish-gray fine SAND, trace silt, trace coarse sand (wet)	19					18.2	Petroleum-like odors throughout to 21ft
	-1.5		20	R5	MACROCORE	45/48		24.5	
								744.6	
		R5a (0-7") Purplish-gray fine SAND (wet)						658	
		R5b (7-21") Purplish-gray medium SAND, trace coarse sand, trace fine sand (wet)						6.2	
								516.6	
				R5	MACROCORE	45/48		816.8	
								3345	
								734.5	
		R5c (21-33") Purplish-gray fine SAND, some gravel, trace coarse sand (wet)						416	
								257.2	
				R5	MACROCORE	45/48		70.2	

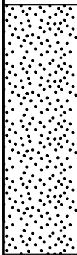
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Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11.5 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-8.5	R6a (0-37") Black medium SAND, trace fine sand (wet)	20	R6	MACROCORE	46/48		79.1	End of boring. Permanent well constructed, well screen set from 6-16ft. Finished with a J-plug and manhole cover. See well construction log for details.
			21					68.2	
			22					110.4	
			23					26.2	
			24					3.4	
			25					20.1	
			26					7.1	
			27					11.7	
			28						
			29						
	-12.5	R6b (37-46") Brown medium SAND, some coarse sand, trace fine sand (wet)	30						
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 11 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	11/1/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	11/1/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	24 ft
Casing Diameter (in)	N/A	Number of Samples	6
Casing Depth (ft)	N/A	Disturbed	6
Casing Hammer	N/A	Undisturbed	N/A
Weight (lbs)	N/A	Core	N/A
Drop (in)	N/A	Water Level (ft.)	First 7.5
Sampler	2-inch diameter acetate liner	Completion	N/A
Sampler Hammer	N/A	24 HR.	N/A
Weight (lbs)	N/A	Drilling Foreman	Adam Hutchinson
Drop (in)	N/A	Field Engineer	Dina Palazzolo

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BLU/in	PID Reading (ppm)	
	+11.0	R1 Brown fine SAND, trace silt, trace coarse sand (moist) [FILL]	0					0.0	
			1					25.2	
			2	R1	MACROCORE	23/48		125	
			3					334	
		R2a (0-35") Purplish brown fine SAND, trace coarse sand (moist to wet) [FILL]	4						
			5	R2	MACROCORE	39/48		60.5	
			6					17.8	
			7					15.2	
	+3.3	R2b (35-39") Black fine SAND, trace silt (moist to wet)	8					146	Petroleum-like staining and odors at groundwater interface
	+2.4	R3a (0-25") Dark gray to black olive SILT, trace fine SAND (wet)	9	R3	MACROCORE	41/48		28.9	
			10					1081	
			11					1030	
	+0.3	R3b (25-39") Black fine SAND, some silt, some lenticular peat lenses, some organics (wet)	12					949	Petroleum-like odors
	-1.2	R3c (39-41") Dark brown fine SAND, trace silt, trace organics (wet)	13	R4	MACROCORE	46/48		1274	
	-1.6	R4a (0-5") Black SILT, some clay (wet)	14					3328	
		R4b (5-8") Purplish fine SAND (wet)	15					201	
		R4c (8-46") Olive to gray fine SAND, trace silt (wet)	16					850	
			17	R5	MACROCORE	46/48		2521	
			18					1862	
			19					3169	
		R5a (0-32") Gray fine SAND, trace silt (wet)	20					3906	Sample collected EB22_12-14 and MS/MSD
								358	Petroleum-like odors throughout to 21ft
								388	
								1247	
		R5b (32"-46") Gray to purplish black fine SAND, some medium sand, trace coarse sand (wet)						2518	
								1710	
								83.2	
								30.1	
								18.2	

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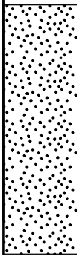
Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-9.0	R6 Purplish gray to brown medium SAND, trace coarse sand, trace fine gravel (poorly sorted) (wet)	20	R6	MACROCORE	46/48		1050	Sample collected EB22_23-24
			21					39.0	
			22					23.5	
			23					32.7	
	-13.0		24					4.0	End of boring. Permanent well constructed, well screen set from 6-16ft. Finished with a J-plug and manhole cover. See well construction log for details.
			25						
			26						
			27						
			28						
			29						
			30						
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
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			40						
			41						
			42						
			43						
			44						
			45						

Project 561 Greenwich				Project No. 190043701																																																																																																																																				
Location New York, NY				Elevation and Datum Approx. El 11 (NAVD88)																																																																																																																																				
Drilling Company AARCO Environmental Services Corp.				Date Started 10/31/18		Date Finished 10/31/18																																																																																																																																		
Drilling Equipment Geoprobe 7822DT				Completion Depth 25 ft		Rock Depth																																																																																																																																		
Size and Type of Bit 4' Macrocore 2 1/4" Diameter				Number of Samples 6		Undisturbed N/A																																																																																																																																		
Casing Diameter (in) N/A		Casing Depth (ft) N/A		Water Level (ft.) First ∇ 13.3		Completion ∇ N/A																																																																																																																																		
Casing Hammer N/A		Weight (lbs) N/A		Drop (in) N/A		24 HR. ∇ N/A																																																																																																																																		
Sampler 2-inch diameter acetate liner				Drilling Foreman Daybi Parheco																																																																																																																																				
Sampler Hammer N/A				Field Engineer Dina Palazzolo																																																																																																																																				
<table border="1"> <thead> <tr> <th rowspan="2">MATERIAL SYMBOL</th> <th rowspan="2">Elev. (ft)</th> <th rowspan="2">Sample Description</th> <th rowspan="2">Depth Scale</th> <th colspan="5">Sample Data</th> <th rowspan="2">Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)</th> </tr> <tr> <th>Number</th> <th>Type</th> <th>Recov. (in)</th> <th>Penetr. resist</th> <th>PID Reading (ppm)</th> </tr> </thead> <tbody> <tr> <td rowspan="5"></td> <td>+11.0</td> <td>R1 Hand clear Brown fine SAND, some coarse sand, trace fine gravel, trace silt (moist) [FILL]</td> <td>0</td> <td rowspan="5">R1</td> <td rowspan="5">HA</td> <td rowspan="5"></td> <td rowspan="5"></td> <td rowspan="5"></td> <td rowspan="5"></td> </tr> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>3</td></tr> <tr><td>4</td></tr> <tr> <td rowspan="5"></td> <td></td> <td>R2a (0-7") Brown fine SAND, some silt, trace coarse sand, trace clay (dry) [FILL] R2b (7-35") Reddish-brown fine to medium SAND, trace coarse sand, trace silt, trace clay (dry) [FILL]</td> <td>5</td> <td rowspan="5">R2</td> <td rowspan="5">MACROCORE</td> <td rowspan="5">37/48</td> <td rowspan="5"></td> <td rowspan="5"></td> <td rowspan="5">0.0 0.2 0.1 0.3 0.0</td> </tr> <tr><td>6</td></tr> <tr><td>7</td></tr> <tr><td>8</td></tr> <tr><td>9</td></tr> <tr> <td></td> <td>+2.2</td> <td>R2c (35-37") Reddish-brown clayey SILT</td> <td>9</td> <td rowspan="5">R3</td> <td rowspan="5">MACROCORE</td> <td rowspan="5">37/48</td> <td rowspan="5"></td> <td rowspan="5"></td> <td rowspan="5">0.2 0.2 0.0 16.5 54.2</td> </tr> <tr> <td></td> <td>+1.1</td> <td>R3a (0-16") Reddish-brown fine SAND, some silt, trace fine gravel (moist)</td> <td>10</td> </tr> <tr> <td></td> <td>-0.3</td> <td>R3b (16-25") Dark grayish brown SILT, trace fine sand (moist)</td> <td>11</td> </tr> <tr> <td></td> <td>-1.0</td> <td>R3c (25-31") Black to dark brown fine SAND, some silt, some lenticular peat lenses, some organics (moist)</td> <td>12</td> </tr> <tr> <td></td> <td>-1.5</td> <td>R3d (31-37") Dak brown clayey SILT (moist)</td> <td>13</td> </tr> <tr> <td></td> <td>-3.0</td> <td>R4a (0-11") Dark brown to black SILT, trace fine sand (moist)</td> <td>14</td> <td rowspan="3">R4</td> <td rowspan="3">MACROCORE</td> <td rowspan="3">36/48</td> <td rowspan="3"></td> <td rowspan="3"></td> <td rowspan="3">3339 4144 322.1</td> </tr> <tr> <td></td> <td>-3.9</td> <td>R4b (11-36") Gray fine SAND, trace silt, trace clay (moist to wet)</td> <td>15</td> </tr> <tr> <td></td> <td></td> <td></td> <td>16</td> </tr> <tr> <td rowspan="3"></td> <td></td> <td>R5 Gray fine SAND, trace silt, trace clay (wet)</td> <td>17</td> <td rowspan="3">R5</td> <td rowspan="3">MACROCORE</td> <td rowspan="3">37/48</td> <td rowspan="3"></td> <td rowspan="3"></td> <td rowspan="3">269.2 114.0 33.5</td> </tr> <tr><td></td></tr> <tr><td></td></tr> <tr> <td></td> <td></td> <td></td> <td>18</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>55.2</td> </tr> <tr> <td></td> <td></td> <td></td> <td>19</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>33.3</td> </tr> <tr> <td></td> <td></td> <td></td> <td>20</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>								MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	Number	Type	Recov. (in)	Penetr. resist	PID Reading (ppm)		+11.0	R1 Hand clear Brown fine SAND, some coarse sand, trace fine gravel, trace silt (moist) [FILL]	0	R1	HA					1	2	3	4			R2a (0-7") Brown fine SAND, some silt, trace coarse sand, trace clay (dry) [FILL] R2b (7-35") Reddish-brown fine to medium SAND, trace coarse sand, trace silt, trace clay (dry) [FILL]	5	R2	MACROCORE	37/48			0.0 0.2 0.1 0.3 0.0	6	7	8	9		+2.2	R2c (35-37") Reddish-brown clayey SILT	9	R3	MACROCORE	37/48			0.2 0.2 0.0 16.5 54.2		+1.1	R3a (0-16") Reddish-brown fine SAND, some silt, trace fine gravel (moist)	10		-0.3	R3b (16-25") Dark grayish brown SILT, trace fine sand (moist)	11		-1.0	R3c (25-31") Black to dark brown fine SAND, some silt, some lenticular peat lenses, some organics (moist)	12		-1.5	R3d (31-37") Dak brown clayey SILT (moist)	13		-3.0	R4a (0-11") Dark brown to black SILT, trace fine sand (moist)	14	R4	MACROCORE	36/48			3339 4144 322.1		-3.9	R4b (11-36") Gray fine SAND, trace silt, trace clay (moist to wet)	15				16			R5 Gray fine SAND, trace silt, trace clay (wet)	17	R5	MACROCORE	37/48			269.2 114.0 33.5						18						55.2				19						33.3				20						
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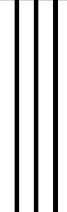
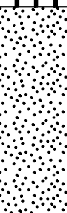
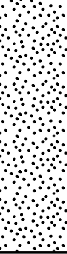
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Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 11 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-9.0		20	R5		37/48			
			21					15.9	
	-11.3	R6a (0-12") Gray SILT, some fine sand, trace clay (wet)	22	R6	MACROCORE	32/48		26.7	
			23						
	-12.3	R6b (12-32") Gray coarse SAND, trace fine sand, trace silt (wet)	24					14.0	
			25					33.2	
	-14.0		26						End of boring. Permanent well constructed, well screen set from 7-17ft. Finished with a J-plug and manhole cover. See well construction log for details.
			27						
			28						
			29						
			30						
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

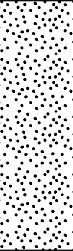
Project					Project No.						
561 Greenwich					190043701						
Location					Elevation and Datum						
New York, NY					Approx. El 10.5 (NAVD88)						
Drilling Company					Date Started			Date Finished			
AARCO Environmental Services Corp.					11/5/18			11/5/18			
Drilling Equipment					Completion Depth			Rock Depth			
Geoprobe 7822DT					24 ft						
Size and Type of Bit					Number of Samples		Disturbed		Undisturbed	Core	
4' Macrocore 2 1/4" Diameter							6		N/A	N/A	
Casing Diameter (in)				Casing Depth (ft)	Water Level (ft.)		First	Completion	24 HR.		
N/A				N/A	▽		9	▼	N/A	▼	
Casing Hammer			Weight (lbs)		Drop (in)	Drilling Foreman					
N/A			N/A		N/A	Daybi Parheco					
Sampler					Field Engineer						
2-inch diameter acetate liner					Dina Palazzolo						
Sampler Hammer			Weight (lbs)		Drop (in)						
N/A			N/A		N/A						
MATERIAL SYMBOL	Elev. (ft)	Sample Description			Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
						Number	Type	Recov. (in)	Penetr. resist BL/6in	PID Reading (ppm)	
	+10.5	Brown fine SAND, trace coarse sand, trace fine gravel [FILL]			0	R1	HA				
	1										
	2										
	3										
	4										
	5	R2	MACROCORE	30/48		20.5					
	R2a (0-11") Gray medium SAND, some fine sand, some fine gravel (moist) [FILL]						6				
	R2b (11-22") Brown medium SAND, trace fine sand (moist) [FILL]						7				
	+2.7	R2c (22-30") Brown fine sandy SILT, trace clay with wood (moist)			8	R3	MACROCORE	28/48		1.3	
	9										
	R3a (0-17") Brown fine SAND, some silt, trace clay, trace fine gravel (poorly sorted) (moist to wet)			10							
	+0.8	R3b (17-28") Reddish-brown medium SAND, tracefine sand, trace fine gravel - rounded (wet)			11	R4	MACROCORE	28/48		0.1	
	12										
	R4a (0-20") Reddish-brown medium SAND, some fine sand, trace fine gravel, slag [FILL] (wet)			13							
	-4.8	R4b (20-24") Tan fine GRAVEL, trace fine sand (wet) [FILL]			14	R5	MACROCORE	46/48		0.0	
	-5.2	R4c (24-28") Reddish-brown medium SAND, some fine sand, trace fine gravel, trace silt (wet)			15						
	R5a (0-33") Reddish-brown coarse SAND, some medium sand, trace fine gravel, trace fine sand (wet)			16							
		R5b (33-46") Black to dark reddish-brown angular coarse SAND, some fine gravel, trace fine sand (wet)			17					0.0	
					18					0.0	
					19					0.0	
				20							

Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 10.5 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-9.5	R6a (0-34") Reddish-brown to dark brown coarse SAND, some fine sand, some medium sand, trace fine gravel (wet)	20	R6	MACROCORE	46/48		0.0	End of boring. Permanent well constructed, well screen set from 8-18ft. Finished with a J-plug and manhole cover. See well construction log for details.
			21					0.0	
			22					0.0	
			23					0.0	
			24					0.0	
	-13.5	R6b (34-46") Brown fine SAND (wet)	24						
			25						
			26						
			27						
			28						
			29						
			30						
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 10 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	11/5/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	11/5/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	24 ft
Casing Diameter (in)	N/A	Number of Samples	6
Casing Depth (ft)	N/A	Disturbed	6
Casing Hammer	N/A	Undisturbed	N/A
Weight (lbs)	N/A	Core	N/A
Drop (in)	N/A	Water Level (ft.)	First 9.5
Sampler	2-inch diameter acetate liner	Completion	N/A
Sampler Hammer	N/A	24 HR.	N/A
Weight (lbs)	N/A	Drilling Foreman	Daybi Parheco
Drop (in)	N/A	Field Engineer	Dina Palazzolo

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist BLU6in	PID Reading (ppm)	
	+10.0	Reddish-brown fine SAND, some coarse sand, trace silt (dry) [FILL]	0	R1	MACROCORE				
			1						
			2						
			3						
			4						
		R2a (0-17") Reddish-brown fine SAND, trace silt (moist) [FILL]	5	R2	MACROCORE			0.0	
			6					0.0	
			7			31/48		0.0	
			8					0.1	
			9						
	+0.8	R3a (0-18") Brownish-gray SILT, trace fine sand (moist to wet) 	10	R3	MACROCORE			0.0	
			11					0.1	
			12					0.0	
			13					0.0	
			14					0.0	
	-2.7	R4a (0-10") Brown fine SAND, some silt, trace medium and coarse sand (wet)	15	R4	MACROCORE			0.0	
			16					0.0	
			17					0.0	
			18					0.0	
			19					0.0	
		R4b (10-40") Brown medium SAND, some fine sand, trace coarse sand (wet)	20	R5	MACROCORE			0.0	
								0.0	
								0.0	
								0.0	
								0.0	
		R5a (0-10") Brownish red fine SAND (wet)		R5	MACROCORE			0.0	
								0.2	
								0.0	
								0.1	
								0.0	
		R5b (10-24") Reddish-brown medium SAND, some coarse sand, trace fine sand, trace fine gravel (wet)		R5	MACROCORE			0.0	
								0.1	
								0.0	
								0.0	
								0.0	
		R5c (25-41") Reddish-brown medium SAND, trace fine sand (wet)		R5	MACROCORE			0.0	
								0.0	
								0.0	
								0.0	
								0.0	

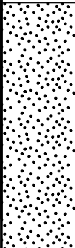
Sample collected EB25_8-10

Project 561 Greenwich		Project No. 190043701							
Location New York, NY		Elevation and Datum Approx. El 10 (NAVD88)							
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data				Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)	
				Number	Type	Recov. (in)	Penetr. resist. BL/6in		PID Reading (ppm)
	-10.0	R6 (0-43") Reddish-brown fine SAND, trace medium sand (wet)	20	R6	MACROCORE	43/48		0.0	
	21		0.0						
	22		0.0						
	23		0.0						
	-14.0		24						End of boring. Permanent well constructed, well screen set from 8-18ft. Finished with a J-plug and manhole cover. See well construction log for details.
		25							
		26							
		27							
		28							
		29							
		30							
		31							
		32							
		33							
		34							
		35							
		36							
		37							
		38							
		39							
		40							
		41							
		42							
		43							
		44							
		45							

Project	561 Greenwich	Project No.	190043701
Location	New York, NY	Elevation and Datum	Approx. El 9.5 (NAVD88)
Drilling Company	AARCO Environmental Services Corp.	Date Started	11/5/18
Drilling Equipment	Geoprobe 7822DT	Date Finished	11/5/18
Size and Type of Bit	4' Macrocore 2 1/4" Diameter	Completion Depth	24 ft
Casing Diameter (in)	N/A	Number of Samples	6
Casing Depth (ft)	N/A	Disturbed	6
Casing Hammer	N/A	First	8.5
Weight (lbs)	N/A	Completion	N/A
Drop (in)	N/A	24 HR.	N/A
Sampler	2-inch diameter acetate liner	Drilling Foreman	Daybi Parheco
Sampler Hammer	N/A	Field Engineer	Dina Palazzolo
Weight (lbs)	N/A		
Drop (in)	N/A		

MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist BLU/in	PID Reading (ppm)	
	+9.5	R1a (0-14") Brown fine SAND, some gray fine gravel (moist) [FILL]	0	R1	MACROCORE	30/48		0.1	Sample collected EB26_14-16
		R1b (14-30") Brown fine SAND, some fine gravel, some coarse sand (moist) [FILL]	1					0.0	
			2					0.0	
			3					0.0	
		R2a (0-9") Light tan to brown fine SAND, some medium SAND, trace silt (moist) [FILL]	4	R2	MACROCORE	24/48		0.0	
		R2b (9-12") Black fine GRAVEL, some coarse sand with coal (moist) [FILL]	5					0.0	
		R2c (12-24") Brown fine SAND (moist) [FILL]	6					0.0	
		R3a (0-13") Dark brown fine SAND, some fine gravel, trace red coarse sand (moist to wet) [FILL]	7					0.0	
	-0.2	R3b (13-18") Brown fine SAND, some coarse sand (wet) [FILL]	8	R3	MACROCORE	46/48		0.0	
	-0.8	R3c (18-26") Gray fine SAND, some silt (wet)	9					0.0	
	-1.3	R3d (26-32") Grayish-olive CLAY, some silt (wet)	10					0.0	
		R3e (32-46") Grayish-olive silty fine SAND (wet)	11					0.0	
		R4a (0-20") Grayish-brown silty fine SAND (wet)	12	R4	MACROCORE	43/48		0.0	
	-4.6	R4b (20-28") Grayish-brown SILT, trace fine sand (wet)	13					0.0	
		R4c (28-43") Grayish-brown SILT, some fine sand, trace fine rounded gravel (wet)	14					0.3	
	-6.7	R5a (0-12") Reddish-brown medium SAND, some coarse sand, some fine gravel, trace fine sand (wet)	15					11.5	
		R5b (12-30") Brown medium SAND, some silt (wet)	16	R5	MACROCORE	46/48		0.0	
			17					0.0	
			18					0.0	
		R5c (30-46") Brown medium SAND, some fine sand (wet)	19					0.0	
			20					0.2	

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Project			Project No.						
561 Greenwich			190043701						
Location			Elevation and Datum						
New York, NY			Approx. El 9.5 (NAVD88)						
MATERIAL SYMBOL	Elev. (ft)	Sample Description	Depth Scale	Sample Data					Remarks (Drilling Fluid, Depth of Casing, Fluid Loss, Drilling Resistance, etc.)
				Number	Type	Recov. (in)	Penetr. resist. BL/6in	PID Reading (ppm)	
	-10.5	R6a (0-26") Brown medium SAND, some fine sand, some coarse sand, trace fine gravel (wet)	20	R6	MACROCORE	44/48		0.1	End of boring. Permanent well constructed, well screen set from 8-18ft. Finished with a J-plug and manhole cover. See well construction log for details.
		21	0.0						
		22	0.0						
		23	0.0						
		24	0.0						
		25	0.3						
		26	0.0						
		27							
		28							
		29							
	-14.5	R6b (26-44") Reddish-brown fine SAND, trace silt (wet)	30						
			31						
			32						
			33						
			34						
			35						
			36						
			37						
			38						
			39						
			40						
			41						
			42						
			43						
			44						
			45						

APPENDIX C

Groundwater Monitoring Construction Logs

WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

MW05

PROJECT		PROJECT NO.	
561 Greenwich Street		190043701	
LOCATION		ELEVATION AND DATUM	
Manhattan, New York		e.l. NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		10/30/2018	10/30/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Adam Hutchinson	
SIZE AND TYPE OF BIT		INSPECTOR	
4-inch Direct Push		Dina Palazzolo	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2-1/4 inch		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2-inch	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 10 Slot	2-inch	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
AARCO advanced MW05 to a completion depth of 19.69 feet below grade surface (ft bgs) with a 2-inch diameter packed PVC casing which consisted of 10 ft of No. 10 slot (0.010-inch) well screen and a solid 2" PVC riser. The well screen was installed from approximately 9.69 to 19.69 ft bgs with riser from 9.69 ft bgs to surface grade. The monitoring well was finished with a J-plug and concrete box.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Peristaltic
DRILLER OR LANGAN	Driller	MAX PUMP RATE	1 LPM
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	5 gal
DEVELOPMENT CONFIRMATION	Well developed on 11/1/2018 from 7:50am to 8:10am until purged groundwater was no longer turbid		
TOP OF CASING	ELEVATION	DEPTH (ft)	The diagram illustrates the well construction. It shows a vertical casing with a riser pipe. A bentonite seal is located at 6 feet depth. A PVC screen is installed from 9.69 feet to 19.69 feet depth. The groundwater level is shown at 14.61 feet (11/6/2018) and 14.7 feet (11/7/2018). The ground surface is at 0 feet.
	NAVD88	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
	NA	6	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
	NA	8	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
	NA	9.69	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
	NA	19.69	
SCREEN LENGTH	9.69 feet		6
SLOT SIZE	0.01-inch		8
			9.69
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
	11/6/2018	14.61 ft	
ELEVATION	DATE	DEPTH TO WATER	
	11/7/2018	14.7 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
			19.69
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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

MW11

PROJECT			PROJECT NO.			
561 Greenwich Street			190043701			
LOCATION			ELEVATION AND DATUM			
Manhattan, New York			e.l. NAVD88			
DRILLING AGENCY			DATE STARTED		DATE FINISHED	
AARCO Environmental Services, Corp.			10/30/2018		10/30/2018	
DRILLING EQUIPMENT			DRILLER			
Geoprobe® 7822 DT			Adam Hutchinson			
SIZE AND TYPE OF BIT			INSPECTOR			
4-inch Direct Push			Dina Palazzolo			
BOREHOLE DIAMETER			TYPE OF WELL (OVERBURDEN / BEDROCK)			
2-1/4 inch			Overburden			
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL				
PVC	2-inch	No. 2 Sand				
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL			
PVC No. 10 Slot	2-inch	No. 2 Sand	Bentonite			
METHOD OF INSTALLATION						
AARCO advanced MW11 to a completion depth of 17.38 feet below grade surface (ft bgs) with a 2-inch diameter packed PVC casing which consisted of 10 ft of No. 10 slot (0.010-inch) well screen and a solid 2" PVC riser. The well screen was installed from approximately 7.38 to 17.38 ft bgs with riser from 7.38 ft bgs to surface grade. The monitoring well was finished with a J-plug and concrete box.						
WELL DEVELOPMENT DATA						
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Peristaltic	DEVELOPMENT CONFIRMATION		
DRILLER OR LANGAN	Driller	MAX PUMP RATE	1 LPM	Well developed on 11/1/2018 from 8:45am to 9:00am until purged groundwater was no longer turbid		
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	5 gal			
TOP OF CASING	ELEVATION	DEPTH (ft)	WELL DETAILS		SUMMARY SOIL CLASSIFICATION	
	NAVD88	0			DEPTH (FT)	
TOP OF SEAL	ELEVATION	DEPTH (ft)			Ground surface	0
	NA	5				
TOP OF FILTER	ELEVATION	DEPTH (ft)				
	NA	6				
TOP OF SCREEN	ELEVATION	DEPTH (ft)				
	NA	7.38				
BOTTOM OF BORING	ELEVATION	DEPTH (ft)				
	NA	17.38				
SCREEN LENGTH		10 feet				
SLOT SIZE		0.01-inch				
GROUNDWATER ELEVATIONS						
ELEVATION	DATE	DEPTH TO WATER				
	11/8/2018	8.48 ft				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				
LANGAN Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C.						
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York						

Well No. MW15

MW15

PROJECT			PROJECT NO.				
561 Greenwich Street			190043701				
LOCATION			ELEVATION AND DATUM				
Manhattan, New York			el. NAVD88				
DRILLING AGENCY			DATE STARTED		DATE FINISHED		
AARCO Environmental Services, Corp.			10/30/2018		10/30/2018		
DRILLING EQUIPMENT			DRILLER				
Geoprobe® 7822 DT			Daybi Perheco				
SIZE AND TYPE OF BIT			INSPECTOR				
4-inch Direct Push			Dina Palazzolo				
BOREHOLE DIAMETER			TYPE OF WELL (OVERBURDEN / BEDROCK)				
2-1/4 inch			Overburden				
RISER MATERIAL		DIAMETER	TYPE OF BACKFILL MATERIAL				
PVC		2-inch	No. 2 Sand				
TYPE OF SCREEN		DIAMETER	TYPE OF WELL PACK		TYPE OF SEAL MATERIAL		
PVC No. 10 Slot		2-inch	No. 2 Sand		Bentonite		
METHOD OF INSTALLATION							
AARCO advanced MW15 to a completion depth of 17.5 feet below grade surface (ft bgs) with a 2-inch diameter packed PVC casing which consisted of 10 ft of No. 10 slot (0.010-inch) well screen and a solid 2" PVC riser. The well screen was installed from approximately 7.5 to 17.5 ft bgs with riser from 7.5 ft bgs to surface grade. The monitoring well was finished with a J-plug and concrete box.							
WELL DEVELOPMENT DATA							
SURGE BLOCK DIAMETER		N/A	TYPE PUMP		Peristaltic		
DRILLER OR LANGAN		Driller	MAX PUMP RATE		1 LPM		
NUMBER OF SURGE CYCLES		N/A	TOTAL VOLUME		5 gal		
DEVELOPMENT CONFIRMATION							
Well developed on 11/1/2018 from 8:20am to 8:40am until purged groundwater was no longer turbid							
TOP OF CASING		ELEVATION	DEPTH (ft)		WELL DETAILS Cover Riser PVC Screen Sand Bentonite Seal	SUMMARY SOIL CLASSIFICATION	DEPTH (FT)
NAVD88		0		Ground surface		0	
TOP OF SEAL		ELEVATION	DEPTH (ft)				
NA		3					
TOP OF FILTER		ELEVATION	DEPTH (ft)				
NA		5					
TOP OF SCREEN		ELEVATION	DEPTH (ft)				
NA		7.5					
BOTTOM OF BORING		ELEVATION	DEPTH (ft)				
NA		17.5					
SCREEN LENGTH		10 feet					
SLOT SIZE		0.01-inch					
GROUNDWATER ELEVATIONS							
ELEVATION	DATE	DEPTH TO WATER					
	11/8/2018	11.62 ft					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					
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ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE						

MW21

PROJECT			PROJECT NO.		
561 Greenwich Street			190043701		
LOCATION			ELEVATION AND DATUM		
Manhattan, New York			el. NAVD88		
DRILLING AGENCY			DATE STARTED		DATE FINISHED
AARCO Environmental Services, Corp.			11/1/2018		11/1/2018
DRILLING EQUIPMENT			DRILLER		
Geoprobe® 7822 DT			Adam Hutchinson		
SIZE AND TYPE OF BIT			INSPECTOR		
4-inch Direct Push			Dina Palazzolo		
BOREHOLE DIAMETER			TYPE OF WELL (OVERBURDEN / BEDROCK)		
2-1/4 inch			Overburden		
RISER MATERIAL		DIAMETER	TYPE OF BACKFILL MATERIAL		
PVC		2-inch	No. 2 Sand		
TYPE OF SCREEN		DIAMETER	TYPE OF WELL PACK		TYPE OF SEAL MATERIAL
PVC No. 10 Slot		2-inch	No. 2 Sand		Bentonite
METHOD OF INSTALLATION					
AARCO advanced MW21 to a completion depth of 15.80 feet below grade surface (ft bgs) with a 2-inch diameter packed PVC casing which consisted of 10 ft of No. 10 slot (0.010-inch) well screen and a solid 2" PVC riser. The well screen was installed from approximately 5.8 to 15.8 ft bgs with riser from 5.8 ft bgs to surface grade. The monitoring well was finished with a J-plug and concrete box.					
WELL DEVELOPMENT DATA					
SURGE BLOCK DIAMETER		N/A	TYPE PUMP		Peristaltic
DRILLER OR LANGAN		Driller	MAX PUMP RATE		0.2 LPM
NUMBER OF SURGE CYCLES		N/A	TOTAL VOLUME		0.5 gal
Well developed on 11/5/2018 until well ran dry					
TOP OF CASING			ELEVATION		DEPTH (ft)
			NAVD88		0
TOP OF SEAL			ELEVATION		DEPTH (ft)
			NA		3
TOP OF FILTER			ELEVATION		DEPTH (ft)
			NA		4
TOP OF SCREEN			ELEVATION		DEPTH (ft)
			NA		5.8
BOTTOM OF BORING			ELEVATION		DEPTH (ft)
			NA		15.8
SCREEN LENGTH			10 feet		
SLOT SIZE			0.01-inch		
GROUNDWATER ELEVATIONS					
ELEVATION	DATE	DEPTH TO WATER			
	11/6/2018	13.26 ft			
ELEVATION	DATE	DEPTH TO WATER			
ELEVATION	DATE	DEPTH TO WATER			
ELEVATION	DATE	DEPTH TO WATER			
ELEVATION	DATE	DEPTH TO WATER			
ELEVATION	DATE	DEPTH TO WATER			
ELEVATION	DATE	DEPTH TO WATER			
ELEVATION	DATE	DEPTH TO WATER			

The diagram illustrates a monitoring well. It shows a vertical cross-section with the following components from top to bottom: a cover, a riser pipe, a bentonite seal, a filter, and a screen. The casing is labeled 'Cover' and 'Riser'. The seal is labeled 'Bentonite Seal'. The filter and screen are labeled 'PVC' and 'Screen'. The diagram also shows the ground surface, sand, and the well's depth relative to the ground surface and the water table. The water table is indicated by a dashed line at a depth of 13.26 feet from the ground surface.

WELL DETAILS		SUMMARY SOIL CLASSIFICATION	DEPTH (FT)
TOP OF CASING	ELEVATION	NAVD88	0
TOP OF SEAL	ELEVATION	NA	3
TOP OF FILTER	ELEVATION	NA	4
TOP OF SCREEN	ELEVATION	NA	5.8
BOTTOM OF BORING	ELEVATION	NA	15.8
SCREEN LENGTH		10 feet	
SLOT SIZE		0.01-inch	
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
	11/6/2018	13.26 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

MW22

PROJECT			PROJECT NO.				
561 Greenwich Street			190043701				
LOCATION			ELEVATION AND DATUM				
Manhattan, New York			e.l. NAVD88				
DRILLING AGENCY			DATE STARTED		DATE FINISHED		
AARCO Environmental Services, Corp.			11/1/2018		11/1/2018		
DRILLING EQUIPMENT			DRILLER				
Geoprobe® 7822 DT			Adam Hutchinson				
SIZE AND TYPE OF BIT			INSPECTOR				
4-inch Direct Push			Dina Palazzolo				
BOREHOLE DIAMETER			TYPE OF WELL (OVERBURDEN / BEDROCK)				
2-1/4 inch			Overburden				
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL					
PVC	2-inch	No. 2 Sand					
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL				
PVC No. 10 Slot	2-inch	No. 2 Sand	Bentonite				
METHOD OF INSTALLATION							
AARCO advanced MW22 to a completion depth of 18 feet below grade surface (ft bgs) with a 2-inch diameter packed PVC casing which consisted of 12 ft of No. 10 slot (0.010-inch) well screen and a solid 2" PVC riser. The well screen was installed from approximately 6 to 18 ft bgs with riser from 6 ft bgs to surface grade. The monitoring well was finished with a J-plug and concrete box.							
WELL DEVELOPMENT DATA							
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Peristaltic	DEVELOPMENT CONFIRMATION			
DRILLER OR LANGAN	Driller	MAX PUMP RATE	0.40 LPM	Well developed on 11/5/2018 until well ran dry			
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	1 gal				
TOP OF CASING	ELEVATION	DEPTH (ft)	The diagram illustrates the well construction. It shows a vertical cross-section with labels: 'Cover' at the top, 'Riser' for the upper section, 'Sand' for the backfill, and 'Bentonite Seal' at the bottom. The 'PVC Screen' is shown at the bottom of the well. The depth scale on the right indicates 0, 4, 6.00, and 18.00 feet.		SUMMARY SOIL CLASSIFICATION	DEPTH (FT)	
	NAVD88	0				Ground surface	0
TOP OF SEAL	ELEVATION	DEPTH (ft)					
	NA	3					
TOP OF FILTER	ELEVATION	DEPTH (ft)					
	NA	4					
TOP OF SCREEN	ELEVATION	DEPTH (ft)					
	NA	6.0					
BOTTOM OF BORING	ELEVATION	DEPTH (ft)					
	NA	18					
SCREEN LENGTH	12 feet						
SLOT SIZE	0.01-inch						
GROUNDWATER ELEVATIONS							
ELEVATION	DATE	DEPTH TO WATER					
	11/7/2018	12.79 ft					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					
ELEVATION	DATE	DEPTH TO WATER					

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WELL CONSTRUCTION AND DEVELOPMENT SUMMARY

Well No.

MW23

PROJECT		PROJECT NO.	
561 Greenwich Street		190043701	
LOCATION		ELEVATION AND DATUM	
Manhattan, New York		e.l. NAVD88	
DRILLING AGENCY		DATE STARTED	DATE FINISHED
AARCO Environmental Services, Corp.		10/31/2018	10/31/2018
DRILLING EQUIPMENT		DRILLER	
Geoprobe® 7822 DT		Daybi Parhaco	
SIZE AND TYPE OF BIT		INSPECTOR	
4-inch Direct Push		Dina Palazzolo	
BOREHOLE DIAMETER		TYPE OF WELL (OVERBURDEN / BEDROCK)	
2-1/4 inch		Overburden	
RISER MATERIAL	DIAMETER	TYPE OF BACKFILL MATERIAL	
PVC	2-inch	No. 2 Sand	
TYPE OF SCREEN	DIAMETER	TYPE OF WELL PACK	TYPE OF SEAL MATERIAL
PVC No. 10 Slot	2-inch	No. 2 Sand	Bentonite
METHOD OF INSTALLATION			
AARCO advanced MW23 to a completion depth of 17 feet below grade surface (ft bgs) with a 2-inch diameter packed PVC casing which consisted of 10 ft of No. 10 slot (0.010-inch) well screen and a solid 2" PVC riser. The well screen was installed from approximately 7 to 17 ft bgs with riser from 7 ft bgs to surface grade. The monitoring well was finished with a J-plug and concrete box.			
WELL DEVELOPMENT DATA			
SURGE BLOCK DIAMETER	N/A	TYPE PUMP	Peristaltic
DRILLER OR LANGAN	Driller	MAX PUMP RATE	0.80 LPM
NUMBER OF SURGE CYCLES	N/A	TOTAL VOLUME	2 gal
Well developed on 11/5/2018 until well ran dry			
TOP OF CASING	ELEVATION	DEPTH (ft)	The diagram illustrates the well construction. It shows a vertical cross-section with labels: 'Cover' at the top, 'Riser' pointing to the upper casing, 'Sand' pointing to the backfill, and 'Bentonite Seal' pointing to the seal at the bottom of the casing. The 'PVC Screen' is shown at the bottom of the well. The depth scale on the right indicates 0, 5, 7.00, and 17.00 feet.
	NAVD88	0	
TOP OF SEAL	ELEVATION	DEPTH (ft)	
	NA	3	
TOP OF FILTER	ELEVATION	DEPTH (ft)	
	NA	5	
TOP OF SCREEN	ELEVATION	DEPTH (ft)	
	NA	7.0	
BOTTOM OF BORING	ELEVATION	DEPTH (ft)	
	NA	17	
SCREEN LENGTH	10 feet		
SLOT SIZE	0.01-inch		
GROUNDWATER ELEVATIONS			
ELEVATION	DATE	DEPTH TO WATER	
	11/7/2018	12.35 ft	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	
ELEVATION	DATE	DEPTH TO WATER	

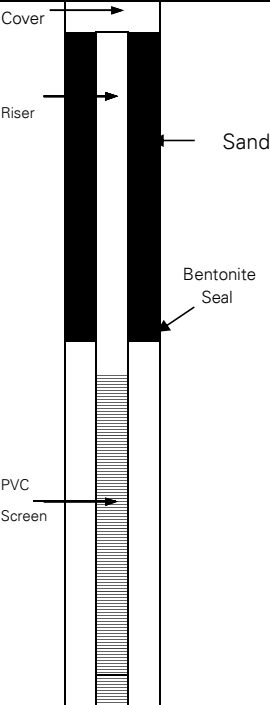
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21 Penn Plaza, 360 West 31st Street, 8th Floor, New York

MW24

[illegible]

MW25

PROJECT			PROJECT NO.			
561 Greenwich Street			190043701			
LOCATION			ELEVATION AND DATUM			
Manhattan, New York			el. NAVD88			
DRILLING AGENCY			DATE STARTED		DATE FINISHED	
AARCO Environmental Services, Corp.			11/5/2018		11/5/2018	
DRILLING EQUIPMENT			DRILLER			
Geoprobe® 7822 DT			Daybi Parheco			
SIZE AND TYPE OF BIT			INSPECTOR			
4-inch Direct Push			Dina Palazzolo			
BOREHOLE DIAMETER			TYPE OF WELL (OVERBURDEN / BEDROCK)			
2-1/4 inch			Overburden			
RISER MATERIAL	DIAMETER		TYPE OF BACKFILL MATERIAL			
PVC	2-inch		No. 2 Sand			
TYPE OF SCREEN	DIAMETER		TYPE OF WELL PACK		TYPE OF SEAL MATERIAL	
PVC No. 10 Slot	2-inch		No. 2 Sand		Bentonite	
METHOD OF INSTALLATION						
AARCO advanced MW25 to a completion depth of 17.96 feet below grade surface (ft bgs) with a 2-inch diameter packed PVC casing which consisted of 10 ft of No. 10 slot (0.010-inch) well screen and a solid 2" PVC riser. The well screen was installed from approximately 7.96 to 17.96 ft bgs with riser from 7.96 ft bgs to surface grade. The monitoring well was finished with a J-plug and concrete box.						
WELL DEVELOPMENT DATA						
SURGE BLOCK DIAMETER		N/A	TYPE PUMP		Peristaltic	
DRILLER OR LANGAN		Langan	MAX PUMP RATE		0.625 LPM	
NUMBER OF SURGE CYCLES		N/A	TOTAL VOLUME		2.5 gal	
DEVELOPMENT CONFIRMATION						
Well developed on 11/6/2018 from 14:20pm to 14:50pm until purged groundwater was stabilized						
TOP OF CASING	ELEVATION	DEPTH (ft)			SUMMARY SOIL CLASSIFICATION	DEPTH (FT)
	NAVD88	0			Ground surface	0
TOP OF SEAL	ELEVATION	DEPTH (ft)				
	NA	4				
TOP OF FILTER	ELEVATION	DEPTH (ft)				
	NA	6				
TOP OF SCREEN	ELEVATION	DEPTH (ft)				
	NA	7.96				
BOTTOM OF BORING	ELEVATION	DEPTH (ft)				
	NA	17.96				
SCREEN LENGTH						
10 feet						
SLOT SIZE						
0.01-inch						
GROUNDWATER ELEVATIONS						
ELEVATION	DATE	DEPTH TO WATER				
	11/6/2019	12.50 ft				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				
ELEVATION	DATE	DEPTH TO WATER				

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MW26

[illegible]

APPENDIX D

Groundwater Monitoring Well Sampling Logs

GROUND WATER SAMPLE FIELD INFORMATION FORM

[illegible]

GROUND WATER SAMPLE FIELD INFORMATION FORM

[illegible]

GROUND WATER SAMPLE FIELD INFORMATION FORM

[illegible]

GROUND WATER SAMPLE FIELD INFORMATION FORM

[illegible]

GROUND WATER SAMPLE FIELD INFORMATION FORM

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GROUND WATER SAMPLE FIELD INFORMATION FORM

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APPENDIX E

Data Usability Summary Reports

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Elizabeth Adkins, Langan Senior Staff Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 10, 2019

Re: Data Usability Summary Report
For 561 Greenwich St.
Soil Samples Collected October and November 2018
Langan Project No.: 190043701

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of soil samples collected on October 29, October 30, October 31, November 1, and November 5, 2018 by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. ("Langan") at the 561 Greenwich Street site ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOCs) and percent moisture by the methods specified below.

- VOCs by SW-846 Method 8260C
- Toxic Characteristic Leaching Procedure (TCLP) by USEPA Method 1311
- Percent Solids (%S) by SM 2540G

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1845181	L1845181-01	EB24_5-6	11/05/18	VOCs, %S
L1845181	L1845181-02	EB25_8-10	11/05/18	VOCs, %S
L1845181	L1845181-03	EB26_14-16	11/05/18	VOCs, %S
L1844810	L1844810-23	WC18_16-18	11/01/18	TCLP VOCs
L1844810	L1844810-05	WC20_6-8	11/01/18	VOCs, %S
L1844810	L1844810-02	WC20_18-20	11/01/18	VOCs, %S
L1844810	L1844810-09	WC18_6-8	11/01/18	VOCs, %S

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SDG	Lab Sample ID	Client Sample ID	Sample Date	Analytical Parameters
L1844810	L1844810-18	WC18_13-15	11/01/18	VOCs, %S
L1844810	L1844810-19	EB22_12-14	11/01/18	VOCs, %S
L1844810	L1844810-20	EB22_23-24	11/01/18	VOCs, %S
L1844810	L1844810-24	EB21_9-11	11/01/18	VOCs, %S
L1844582	L1844582-27	WC14_14-16	10/31/18	TCLP VOCs
L1844582	L1844582-02	WC12_13-15	10/31/18	VOCs, %S
L1844582	1844582-07	WC13_2-4	10/31/18	VOCs, %S
L1844582	L1844582-13	WC15_1-3	10/31/18	VOCs, %S
L1844582	L1844582-14	WC15_20-22	10/31/18	VOCs, %S
L1844582	L1844582-16	EB23_15-17	10/31/18	VOCs, %S
L1844582	L1844582-18	WC13_16-18	10/31/18	VOCs, %S
L1844582	L1844582-19	WC13_18-20	10/31/18	VOCs, %S
L1844582	L1844582-20	WC13_20-22	10/31/18	VOCs, %S
L1844582	L1844582-21	WC13_22-24	10/31/18	VOCs, %S
L1844582	L1844582-22	WC14_16-18	10/31/18	VOCs, %S
L1844582	L1844582-23	WC14_18-20	10/31/18	VOCs, %S
L1844582	L1844582-24	WC14_20-22	10/31/18	VOCs, %S
L1844582	L1844582-25	WC14_22-24	10/31/18	VOCs, %S
L1844582	L1844582-26	WC15_12-14	10/31/18	VOCs, %S
L1844582	L1844582-27	WC14_14-16	10/31/18	VOCs, %S
L1844582	L1844582-29	DUP03_GRAB _103118	10/31/18	VOCs, %S
L1844138	L1844138-08	WC01_18-19	10/29/18	VOCs, %S
L1844138	L1844138-09	WC07_11-12	10/29/18	VOCs, %S
L1844354	L1844354-01	WC05_19-20	10/30/18	VOCs, %S
L1844354	L1844354-20	WC09_16-18	10/30/18	VOCs, %S
L1844354	L1844354-22	WC10_16-18	10/30/18	VOCs, %S
L1844354	L1844354-23	WC10_18-20	10/30/18	VOCs, %S
L1844354	L1844354-24	WC10_20-22	10/30/18	VOCs, %S
L1844354	L1844354-25	WC10_22-24	10/30/18	VOCs, %S
L1844354	L1844354-15	WC10_4-6	10/30/18	VOCs, %S
L1844354	L1844354-16	WC10_6-8	10/30/18	VOCs, %S
L1844354	L1844354-21	WC10_9-11	10/30/18	VOCs, %S

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<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1844354	L1844354-02	WC11_18-20	10/30/18	VOCs, %S
L1844354	L1844354-26	DUP02_GRAB _103018	10/30/18	VOCs, %S
L1844354	L1844354-27	Field Blank	10/30/18	VOCs

Validation Overview

This data validation was performed in accordance with USEPA Region II SOP #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, field duplicate, and field and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
EB24_5-6	SW8260C	67-66-3	CHLOROFORM	U (1.5)
EB24_5-6	SW8260C	108-05-4	VINYL ACETATE	UJ
EB25_8-10	SW8260C	67-66-3	CHLOROFORM	U (1.4)
EB25_8-10	SW8260C	108-05-4	VINYL ACETATE	UJ
EB26_14-16	SW8260C	67-66-3	CHLOROFORM	U (1.3)
EB26_14-16	SW8260C	108-05-4	VINYL ACETATE	UJ
WC20_6-8	SW8260C	67-66-3	CHLOROFORM	U (1.6)
WC20_6-8	SW8260C	108-05-4	VINYL ACETATE	UJ
WC20_18-20	SW8260C	67-66-3	CHLOROFORM	U (1.5)
WC20_18-20	SW8260C	108-05-4	VINYL ACETATE	UJ
WC18_6-8	SW8260C	67-66-3	CHLOROFORM	U (1.6)
WC18_6-8	SW8260C	108-05-4	VINYL ACETATE	UJ
WC18_13-15	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
EB22_12-14	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
EB22_23-24	SW8260C	108-05-4	VINYL ACETATE	UJ
EB21_9-11	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
WC12_13-15	SW8260C	67-64-1	ACETONE	J
WC12_13-15	SW8260C	67-66-3	CHLOROFORM	U (2.5)
WC13_2-4	SW8260C	67-64-1	ACETONE	J
WC13_2-4	SW8260C	67-66-3	CHLOROFORM	U (1.6)
WC15_1-3	SW8260C	67-66-3	CHLOROFORM	U (1.8)
WC13_18-20	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
WC13_18-20	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	J
WC13_18-20	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
WC13_18-20	SW8260C	71-43-2	BENZENE	J
WC13_18-20	SW8260C	110-82-7	CYCLOHEXANE	J
WC13_18-20	SW8260C	100-41-4	ETHYLBENZENE	J
WC13_18-20	SW8260C	98-82-8	ISOPROPYLBENZENE	J
WC13_18-20	SW8260C	108-87-2	METHYL CYCLOHEXANE	J
WC13_18-20	SW8260C	91-20-3	NAPHTHALENE	J
WC13_18-20	SW8260C	108-88-3	TOLUENE	J
WC13_18-20	SW8260C	1330-20-7	XYLENE (TOTAL)	J
WC13_18-20	SW8260C	104-51-8	N-BUTYLBENZENE	J
WC13_18-20	SW8260C	103-65-1	N-PROPYLBENZENE	J
WC13_18-20	SW8260C	95-47-6	O-XYLENE	J
WC13_18-20	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
WC13_18-20	SW8260C	622-96-8	4-ETHYLTOLUENE	J
WC13_18-20	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	J
WC13_18-20	SW8260C	179601-23-1	P/M-XYLENE	j
WC13_18-20	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
WC13_22-24	SW8260C	67-64-1	ACETONE	J
WC13_22-24	SW8260C	67-66-3	CHLOROFORM	U (1.8)
WC14_14-16	SW8260C	630-20-6	1,1,1,2-TETRACHLOROETHANE	UJ
WC14_14-16	SW8260C	71-55-6	1,1,1-TRICHLOROETHANE	UJ
WC14_14-16	SW8260C	79-34-5	1,1,2,2-TETRACHLOROETHANE	UJ
WC14_14-16	SW8260C	79-00-5	1,1,2-TRICHLOROETHANE	UJ
WC14_14-16	SW8260C	75-34-3	1,1-DICHLOROETHANE	UJ
WC14_14-16	SW8260C	75-35-4	1,1-DICHLOROETHENE	UJ
WC14_14-16	SW8260C	563-58-6	1,1-DICHLOROPROPENE	UJ
WC14_14-16	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
WC14_14-16	SW8260C	96-18-4	1,2,3-TRICHLOROPROPANE	UJ
WC14_14-16	SW8260C	120-82-1	1,2,4-TRICHLOROBENZENE	UJ
WC14_14-16	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
WC14_14-16	SW8260C	96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	UJ
WC14_14-16	SW8260C	106-93-4	1,2-DIBROMOETHANE	UJ
WC14_14-16	SW8260C	95-50-1	1,2-DICHLOROBENZENE	UJ
WC14_14-16	SW8260C	107-06-2	1,2-DICHLOROETHANE	UJ
WC14_14-16	SW8260C	78-87-5	1,2-DICHLOROPROPANE	UJ
WC14_14-16	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
WC14_14-16	SW8260C	541-73-1	1,3-DICHLOROBENZENE	UJ
WC14_14-16	SW8260C	142-28-9	1,3-DICHLOROPROPANE	UJ
WC14_14-16	SW8260C	542-75-6	1,3-DICHLOROPROPENE, TOTAL	UJ
WC14_14-16	SW8260C	106-46-7	1,4-DICHLOROBENZENE	UJ
WC14_14-16	SW8260C	123-91-1	1,4-DIOXANE	UJ
WC14_14-16	SW8260C	594-20-7	2,2-DICHLOROPROPANE	UJ
WC14_14-16	SW8260C	78-93-3	2-BUTANONE	UJ
WC14_14-16	SW8260C	591-78-6	2-HEXANONE	UJ
WC14_14-16	SW8260C	108-10-1	4-METHYL-2-PENTANONE	UJ
WC14_14-16	SW8260C	67-64-1	ACETONE	UJ
WC14_14-16	SW8260C	107-02-8	ACROLEIN	UJ
WC14_14-16	SW8260C	107-13-1	ACRYLONITRILE	UJ
WC14_14-16	SW8260C	71-43-2	BENZENE	J
WC14_14-16	SW8260C	108-86-1	BROMOBENZENE	UJ
WC14_14-16	SW8260C	74-97-5	BROMOCHLOROMETHANE	UJ
WC14_14-16	SW8260C	75-27-4	BROMODICHLOROMETHANE	UJ
WC14_14-16	SW8260C	75-25-2	BROMOFORM	UJ
WC14_14-16	SW8260C	74-83-9	BROMOMETHANE	UJ
WC14_14-16	SW8260C	75-15-0	CARBON DISULFIDE	UJ
WC14_14-16	SW8260C	56-23-5	CARBON TETRACHLORIDE	UJ
WC14_14-16	SW8260C	108-90-7	CHLOROBENZENE	UJ
WC14_14-16	SW8260C	75-00-3	CHLOROETHANE	UJ
WC14_14-16	SW8260C	67-66-3	CHLOROFORM	UJ
WC14_14-16	SW8260C	74-87-3	CHLOROMETHANE	UJ
WC14_14-16	SW8260C	110-82-7	CYCLOHEXANE	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
WC14_14-16	SW8260C	124-48-1	DIBROMOCHLOROMETHANE	UJ
WC14_14-16	SW8260C	74-95-3	DIBROMOMETHANE	UJ
WC14_14-16	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ
WC14_14-16	SW8260C	60-29-7	ETHYL ETHER	UJ
WC14_14-16	SW8260C	100-41-4	ETHYLBENZENE	J
WC14_14-16	SW8260C	76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	UJ
WC14_14-16	SW8260C	87-68-3	HEXACHLOROBUTADIENE	UJ
WC14_14-16	SW8260C	79-20-9	METHYL ACETATE	UJ
WC14_14-16	SW8260C	1634-04-4	METHYL TERT BUTYL ETHER	UJ
WC14_14-16	SW8260C	75-09-2	METHYLENE CHLORIDE	UJ
WC14_14-16	SW8260C	100-42-5	STYRENE	UJ
WC14_14-16	SW8260C	75-65-0	TERT-BUTYL ALCOHOL	UJ
WC14_14-16	SW8260C	127-18-4	TETRACHLOROETHENE	UJ
WC14_14-16	SW8260C	108-88-3	TOLUENE	J
WC14_14-16	SW8260C	79-01-6	TRICHLOROETHENE	UJ
WC14_14-16	SW8260C	75-69-4	TRICHLOROFLUOROMETHANE	UJ
WC14_14-16	SW8260C	108-05-4	VINYL ACETATE	UJ
WC14_14-16	SW8260C	75-01-4	VINYL CHLORIDE	UJ
WC14_14-16	SW8260C	1330-20-7	XYLENE (TOTAL)	J
WC14_14-16	SW8260C	156-59-2	CIS-1,2-DICHLOROETHENE	UJ
WC14_14-16	SW8260C	10061-01-5	CIS-1,3-DICHLOROPROPENE	UJ
WC14_14-16	SW8260C	104-51-8	N-BUTYLBENZENE	J
WC14_14-16	SW8260C	95-49-8	O-CHLOROTOLUENE	UJ
WC14_14-16	SW8260C	95-47-6	O-XYLENE	J
WC14_14-16	SW8260C	106-43-4	P-CHLOROTOLUENE	UJ
WC14_14-16	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
WC14_14-16	SW8260C	622-96-8	4-ETHYLTOLUENE	J
WC14_14-16	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	J
WC14_14-16	SW8260C	179601-23-1	P/M-XYLENE	J
WC14_14-16	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
WC14_14-16	SW8260C	98-06-6	TERT-BUTYLBENZENE	J

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
WC14_14-16	SW8260C	156-60-5	TRANS-1,2-DICHLOROETHENE	UJ
WC14_14-16	SW8260C	10061-02-6	TRANS-1,3-DICHLOROPROPENE	UJ
WC14_14-16	SW8260C	110-57-6	TRANS-1,4-DICHLORO-2-BUTENE	UJ
DUP03_GRAB_103118	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
DUP03_GRAB_103118	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	J
DUP03_GRAB_103118	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
DUP03_GRAB_103118	SW8260C	71-43-2	BENZENE	J
DUP03_GRAB_103118	SW8260C	110-82-7	CYCLOHEXANE	J
DUP03_GRAB_103118	SW8260C	100-41-4	ETHYLBENZENE	J
DUP03_GRAB_103118	SW8260C	98-82-8	ISOPROPYLBENZENE	J
DUP03_GRAB_103118	SW8260C	108-87-2	METHYL CYCLOHEXANE	J
DUP03_GRAB_103118	SW8260C	91-20-3	NAPHTHALENE	j
DUP03_GRAB_103118	SW8260C	108-88-3	TOLUENE	J
DUP03_GRAB_103118	SW8260C	1330-20-7	XYLENE (TOTAL)	J
DUP03_GRAB_103118	SW8260C	104-51-8	N-BUTYLBENZENE	J
DUP03_GRAB_103118	SW8260C	103-65-1	N-PROPYLBENZENE	J
DUP03_GRAB_103118	SW8260C	95-47-6	O-XYLENE	J
DUP03_GRAB_103118	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
DUP03_GRAB_103118	SW8260C	622-96-8	4-ETHYLTOLUENE	J
DUP03_GRAB_103118	SW8260C	99-87-6	P-ISOPROPYLTOLUENE	J
DUP03_GRAB_103118	SW8260C	179601-23-1	P/M-XYLENE	J
DUP03_GRAB_103118	SW8260C	135-98-8	SEC-BUTYLBENZENE	J
WC05_19-20	SW8260C	107-02-8	ACROLEIN	UJ
WC05_19-20	SW8260C	108-05-4	VINYL ACETATE	UJ
WC11_18-20	SW8260C	107-02-8	ACROLEIN	UJ
WC11_18-20	SW8260C	108-05-4	VINYL ACETATE	UJ
WC09_16-18	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
WC09_16-18	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	J
WC09_16-18	SW8260C	75-71-8	DICHLORODIFLUOROMETHANE	UJ

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
WC09_16-18	SW8260C	108-87-2	METHYL CYCLOHEXANE	J
WC09_16-18	SW8260C	91-20-3	NAPHTHALENE	J
WC09_16-18	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
WC09_16-18	SW8260C	622-96-8	4-ETHYLTOLUENE	J
WC10_9-11	SW8260C	75-71-8	DICHLORODIFLUOROMETHAN E	UJ
WC10_16-18	SW8260C	75-71-8	DICHLORODIFLUOROMETHAN E	UJ
WC10_18-20	SW8260C	107-02-8	ACROLEIN	UJ
WC10_18-20	SW8260C	108-05-4	VINYL ACETATE	UJ
WC10_20-22	SW8260C	107-02-8	ACROLEIN	UJ
WC10_20-22	SW8260C	108-05-4	VINYL ACETATE	UJ
WC10_22-24	SW8260C	75-71-8	DICHLORODIFLUOROMETHAN E	UJ
DUP02_GRAB_103018	SW8260C	95-93-2	1,2,4,5- TETRAMETHYLBENZENE	J
DUP02_GRAB_103018	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	J
DUP02_GRAB_103018	SW8260C	75-71-8	DICHLORODIFLUOROMETHAN E	UJ
DUP02_GRAB_103018	SW8260C	108-87-2	METHYL CYCLOHEXANE	J
DUP02_GRAB_103018	SW8260C	91-20-3	NAPHTHALENE	J
DUP02_GRAB_103018	SW8260C	105-05-5	1,4-DIETHYLBENZENE	J
DUP02_GRAB_103018	SW8260C	622-96-8	4-ETHYLTOLUENE	J
FIELD BLANK	SW8260C	87-61-6	1,2,3-TRICHLOROBENZENE	UJ
FIELD BLANK	SW8260C	67-64-1	ACETONE	J
FIELD BLANK	SW8260C	74-83-9	BROMOMETHANE	UJ

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

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VOCs by USEPA Method 8260C:

L1845181:

LCS/LCSD WG1178185 displayed recoveries greater than the upper control limit for trichlorofluoromethane at 152% and 151%, bromomethane at 181% and 186%, vinyl chloride at 135% and 135%, chloroethane at 163% and 165%, and ethyl ether at 160% and 154%. In addition, the LCS/LCSD exhibited recoveries less than the lower control limit for vinyl acetate at 66% and 66%. The associated sample results are qualified as estimated.

Method blank sample WG1178185-5 displayed a positive detection for chloroform at 0.17 ug/kg. Method blank sample WG1178493-5 displayed positive detections for chloroform at 7.3 ug/kg and methyl acetate at 160 ug/kg. The associated positive detections are qualified as "U" at the reporting limit.

Sample EB24_5-6 exhibited concentrations greater than the linear range of the instrument calibration for 1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,4-dimethylbenzene, and 4-ethyltoluene. The sample was reanalyzed following methanol extraction; these results should be used for data interpretation.

L1844810:

LCS/LCSD WG1176973-3/4 displayed recoveries less than the lower control limit for vinyl acetate at 67% and 66%. The associated sample results are qualified as estimated.

The continuing calibration analyzed on 11/7/18 at 06:18 exhibited a %D greater than the control limit with a negative bias for dichlorodifluoromethane at 46%. The associated sample results are qualified as estimated.

The continuing calibration analyzed on 11/8/18 at 06:13 displayed a %D greater than the control limit with a negative bias for dichlorodifluoromethane at 46%. The associated sample results are qualified as estimated.

Method blank sample WG1176973-5 exhibited a positive detection for chloroform at 0.21 ug/kg. The associated positive sample results are qualified as "U" at the reporting limit.

L1844582:

Sample WC14_14-16 exhibited surrogate recoveries outside of control limits for toluene-d8, 4-BFB, and DBFM at 139%, 482%, and 60%, respectively. The associated sample results are qualified as estimated.

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Method blank sample WG11176613-5 displayed a positive detection for chloroform at 0.25 ug/kg. The associated positive detections are qualified as "U" at the reporting limit.

Sample WC14_14-16 exhibited concentrations greater than the linear range of the instrument calibration for 1,2,4,5-tetramethylbenzene, isopropylbenzene, methyl cyclohexane, naphthalene, and n-propylbenzene. The sample was reanalyzed following methanol extraction; these results should be used for data interpretation.

LCS/LCSD WG1176613-3 displayed recoveries greater than the upper control limit for trichlorofluoromethane, bromomethane, vinyl chloride, chloroethane, acetone and ethyl ether. The associated positive detections are qualified as "J".

L1844354:

LCS/LCSD WG1175821-3/4 displayed a recovery and RPD greater than the control limit for acetone at 150% and 62%, respectively. The associated positive field blank result is qualified as "J". In addition, the LCSD recovery of 1,2,3-trichlorobenzene was less than the lower control limit at 69%. The associated sample result is qualified as "UJ".

LCS/LCSD WG1176202-3/4 displayed recoveries less than the lower control limit for vinyl acetate at 64% and 64%, respectively. In addition, the LCSD recovery of acrolein was less than the lower control limit at 69%. The associated sample results were non-detect and are qualified as "UJ".

The continuing calibration analyzed on 11/3/18 at 07:00 displayed a %D greater than the control limit with a negative bias for bromomethane at 46.3%. The associated field blank sample results are qualified as "UJ".

The continuing calibration analyzed on 11/5/18 at 16:15 displayed a %D greater than the control limit with a negative bias for dichlorodifluoromethane at 44.8%. The associated sample results are qualified as "UJ".

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by USEPA Method 8260C:

L1845181:

Sample EB24_5-6 exhibited a surrogate recovery less than the lower control limit for DBFM at 32%. The remaining three volatile surrogates recovered within control. On the basis of professional judgment, qualification is not necessary.

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The continuing calibration analyzed on 11/9/18 at 07:27 exhibited %Ds greater than the control limit for vinyl chloride, bromomethane, chloroethane, trichlorofluoromethane, ethyl ether and vinyl acetate. The associated sample results were previously qualified; no further action is necessary.

L1844810:

LCS/LCSD WG1176973-3/4 displayed recoveries greater than the upper control limit for trichlorofluoromethane, ethyl ether, and bromomethane. The associated sample results were non-detect; qualification is not necessary.

MS/SD sample WB22_12-14 exhibited recoveries greater than the upper control limit for 1,1,2-trichloroethane, 2-butanone, acrylonitrile, and acrolein. In addition, recoveries for p-diethylbenzene were less than the lower control limit at 0% (i.e., no recovery) and 2%). Organic data is not qualified on the basis of MS/SD recoveries alone.

The continuing calibration analyzed on 11/7/18 at 07:19 displayed %Ds greater than the control limit with positive biases for bromomethane, chloroethane, and ethyl ether. The associated sample results were non-detect; qualification is not necessary.

L1844582:

TCLP method blank sample WG1175902-5 displayed a positive detection for chloroform at 4.6 ug/L. the associated sample result was non-detect; qualification is not necessary.

Samples WC14_20-22 and WC14_14-16 exhibited surrogate recoveries greater than the upper control limit for 4-BFB. The remaining 3 volatile surrogates recovered within control. On the basis of professional judgment, qualification is now necessary.

LCS WG1176883-6 exhibited a recovery greater than the upper control limit for 1,1,2-trichloroethane at 140%. The associated sample results were non-detect; qualification is not necessary.

MS/SD sample WC13_20-22 displayed recoveries outside of control limits for m/p-xylenes, n-butylbenzene, sec-butylbenzene, hexachlorobutadiene, p-isopropyltoluene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, p-diethylbenzene, p-ethyltoluene, and 1,2,4,5-tetramethylbenzene. Organic data is not qualified on the basis of MS/SD recoveries alone.

The continuing calibration analyzed on 11/6/18 at 7:20 exhibited %Ds greater than the control limit for positive biases for bromomethane, chloroethane, trichlorofluoromethane, and ethyl

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ether. The associated sample results were non-detect or previously qualified; no further action is necessary.

Method blank sample WG1177074-5 displayed positive detections for bromomethane at 0.93 ug/kg and MTBE at 0.21 ug/kg. The associated sample results were non-detect; qualification is not required.

Method blank sample WG1176883-5 displayed a positive detection for bromomethane at 83 ug/kg. The associated sample results were non-detect; qualification is not required.

Method blank sample WG1177336-5 displayed a positive detection for bromomethane at 47 ug/kg. The associated sample results were non-detect; qualification is not required.

L1844354:

The field blank sample collected on 10/0/18 exhibited a positive detection for acetone at 6.9 ug/L. The associated positive detection were greater than the reporting limit; on the basis of professional judgment, qualification is not necessary.

Method blank sample WG1176202-5 exhibited a positive detection for chloroform. The associated sample results were non-detect; qualification is not necessary.

Method blank sample WG1176325-5 exhibited positive detections for bromomethane and MTBE. The associated sample results were non-detect; qualification is not necessary.

Method blank sample WG1176431-5 exhibited a positive detection for MTBE. The associated sample results were non-detect; qualification is not necessary.

Method blank sample WG1176433-5 exhibited a positive detection for MTBE. The associated sample results were non-detect; qualification is not necessary.

COMMENTS:

A field duplicate and parent sample pair was collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 2X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 50% for soil. The following analytes did not meet the precision criteria:

- DUP03_GRAB_103118 and WC13_18-20: 1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,4-diethylbenzene, 4-ethyltoluene, benzene, cyclohexane, ethylbenzene, isopropylbenzene, methyl cyclohexane, naphthalene, n-

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butylbenzene, n-propylbenzene, o-xylene, p-isopropyltoluene, m,p-xylenes, toluene, toluene, and sec-butylbenzene.

- DUP02_GRAB_103018 and WC09_16-18: 1,2,4,5-tetramethylbenzene, 1,2,4-trimethylbenzene, methyl cyclohexane, naphthalene, 1,4-diethylbenzene, and 4-ethyltoluene.

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501
Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Elizabeth Adkins, Langan Senior Staff Engineer

From: Emily Strake, Langan Senior Project Chemist

Date: February 10, 2019

Re: Data Usability Summary Report
For 561 Greenwich St.
Groundwater Samples Collected November 2018
Langan Project No.: 190043701

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of groundwater samples collected between November 6 and November 8, 2018 by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. ("Langan") at 561 Greenwich Street ("the site"). The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAC registration # 11148) for volatile organic compounds (VOC), 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS) by the methods specified below.

- VOCs by SW-846 Method 8260C
- 1,4-dioxane by SW-846 Method 8270D-SIM
- PFAS by USEPA Method 537M

Table 1, below, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

TABLE 1: SAMPLE SUMMARY

<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1845464	L1845464-01	MW02_110618	11/06/18	VOCs
L1845464	L1845464-02	MW21_110618	11/06/18	VOCs
L1845464	L1845464-03	MW05_110618	11/06/18	VOCs
L1845463	L1845463-01	MW02_110618	11/06/18	1,4-Dioxane, PFAS
L1845463	L1845463-01	MW03_110618	11/06/18	1,4-Dioxane, PFAS
L1845463	L1845463-01	GWDUP01_110618	11/06/18	1,4-Dioxane, PFAS
L1845463	L1845463-01	MW05_110618	11/06/18	1,4-Dioxane, PFAS

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<i>SDG</i>	<i>Lab Sample ID</i>	<i>Client Sample ID</i>	<i>Sample Date</i>	<i>Analytical Parameters</i>
L1845777	L1845777-01	MW04_110818	11/08/18	VOCs, 1,4-Dioxane, PFAS
L1845777	L1845777-02	MW06_110818	11/08/18	VOCs, 1,4-Dioxane, PFAS
L1845777	L1845777-03	MW11_110818	11/08/18	VOCs, 1,4-Dioxane, PFAS
L1845777	L1845777-04	MW15_110818	11/08/18	VOCs, 1,4-Dioxane, PFAS
L1845777	L1845777-05	GWDUP02_110818	11/08/18	VOCs
L1845777	L1845777-06	FIELD BLANK	11/08/18	VOCs, 1,4-Dioxane, PFAS
L1845645	L1845645-01	MW26_110718	11/07/18	VOCs
L1845645	L1845645-02	MW25_110618	11/06/18	VOCs
L1845645	L1845645-03	MW24_110718	11/07/18	VOCs
L1845645	L1845645-04	MW22_110718	11/07/18	VOCs
L1845645	L1845645-05	MW23_110718	11/07/18	VOCs
L1845645	L1845645-06	FIELD BLANK	11/07/18	VOCs, 1,4-Dioxane, PFAS

Validation Overview

This data validation was performed in accordance with USEPA Region II SOP #HW-34A, "Trace Volatile Data Validation" (September 2016, Revision 1), USEPA Region II SOP #HW-35A, "Semivolatile Data Validation" (September 2016, Revision 1), the USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA-540-R-2017-002, January 2017), USEPA "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA-540-R-2017-001, January 2017) and the specifics of the methods employed.

Validation includes review of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, instrument tuning, instrument calibration, laboratory blanks, laboratory control samples, system monitoring compounds, internal standard area counts, isotope dilution recoveries, matrix spike/spike duplicate recoveries, target compound identification and quantification, chromatograms, overall system performance, field duplicate, and field and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

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- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UU** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers should supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items specified for review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

TABLE 2: VALIDATOR-APPLIED QUALIFICATION

<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
GWDUP01_110618	537(M)	27619-97-2	1H,1H,2H,2H-PERFLUOROOCTANESULFONIC ACID (6:2FTS)	U (1.83)
MW04_110818	537(M)	27619-97-2	1H,1H,2H,2H-PERFLUOROOCTANESULFONIC ACID (6:2FTS)	U (1.82)
MW04_110818	537(M)	2706-90-3	PERFLUOROPENTANOIC ACID (PFPEA)	J
MW06_110818	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
MW06_110818	SW8260C	91-20-3	NAPHTHALENE	J
MW06_110818	537(M)	27619-97-2	1H,1H,2H,2H-PERFLUOROOCTANESULFONIC ACID (6:2FTS)	U (1.82)
MW06_110818	537(M)	2706-90-3	PERFLUOROPENTANOIC ACID (PFPEA)	J
MW11_110818	537(M)	27619-97-2	1H,1H,2H,2H-PERFLUOROOCTANESULFONIC ACID (6:2FTS)	U (1.8)

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<i>Client Sample ID</i>	<i>Analysis</i>	<i>CAS #</i>	<i>Analyte</i>	<i>Validator Qualifier</i>
MW11_110818	537(M)	2706-90-3	PERFLUOROPENTANOIC ACID (PFPEA)	J
MW15_110818	SW8260C	91-20-3	NAPHTHALENE	J
MW15_110818	537(M)	27619-97-2	1H,1H,2H,2H-PERFLUOROOCTANESULFONIC ACID (6:2FTS)	U (1.85)
MW15_110818	537(M)	2706-90-3	PERFLUOROPENTANOIC ACID (PFPEA)	J
GWDUP02_110818	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
GWDUP02_110818	SW8260C	91-20-3	NAPHTHALENE	J
MW22_110718	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
MW22_110718	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	J
MW22_110718	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
MW22_110718	SW8260C	91-20-3	NAPHTHALENE	J
MW23_110718	SW8260C	95-93-2	1,2,4,5-TETRAMETHYLBENZENE	J
MW23_110718	SW8260C	95-63-6	1,2,4-TRIMETHYLBENZENE	J
MW23_110718	SW8260C	108-67-8	1,3,5-TRIMETHYLBENZENE	J
MW23_110718	SW8260C	91-20-3	NAPHTHALENE	J
FIELD BLANK	537(M)	27619-97-2	1H,1H,2H,2H-PERFLUOROOCTANESULFONIC ACID (6:2FTS)	U (1.77)

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by USEPA Method 8260C:

L1845777:

LCS WG1179345-3/4 displayed RPDs greater than the control limit for tert-butylbenzene at 23%, 1,2-dibromo-3-chloropropane at 22%, Hexachlorobutadiene at 23%, naphthalene at 27%, 1,2,3-

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trichlorobenzene at 22%, 1,2,4-trichlorobenzene at 29%, and 1,2,4,5-tetramethylbenzene at 33%. The associated positive detections are qualified as "J".

L1845645:

LCS/LCSD WG1179345-3/4 displayed RPDs greater than the control limit for tert-butylbenzene at 23%, 1,2-dibromo-3-chloropropane at 22%, hexachlorobutadiene at 23%, naphthalene at 27%, 1,2,3-trichlorobenzene at 22%, 1,2,4-trimethylbenzene at 29%, and 1,2,4,5-tetramethylbenzene at 33%. The associated sample positive sample results are qualified as "J".

PFAS by USEPA Method 537M:

L1845463:

Method blank sample WG1177280-1 displayed a positive detection for 6:2FTS at 2.4 ng/L. The associated positive detection in sample GWDUP01_110618 is qualified as "U" at the reporting limit.

L1845777:

Method blank sample WG1178502-1 displayed a positive detection for 6:2FTS at 0.944 ng/L. The associated positive detections are qualified as "U" at the reporting limit.

The continuing calibration analyzed on 11/19/18 at 22:42 displayed a recovery greater than the upper control limit for internal standard M5PFPEA. The associated positive detections are qualified as "J".

L1845645:

The field blank sample collected on 11/7/18 exhibited a positive detection for 6:2FTS at 0.362 ng/L. The associated sample result was affected by method blank contamination and is qualified as "U".

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by USEPA Method 8260C:

L1845777:

MS/SD sample MW11_110818 displayed RPDs greater than the control limit for bromomethane at 31% and trans-1,4-dichloro-2-butene at 65%. In addition, the recoveries of chloroethane were

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greater than the control limit at 140% and 140%. Organic data is not qualified on the basis of MS/SD recoveries or RPDs alone.

L1845645:

LCS/LCSD WG1178869-3/4 displayed a RPD greater than the control limit for 1,4-dioxane at 67%. The associated sample results were non-detect; qualification is not necessary.

PFAS by USEPA Method 537M:

L1845463:

Sample MW02_110618 exhibited recoveries greater than the upper control limit for isotope dilution standards M2-6:2FTS and M2-8:2FTS at 253% and 215%, respectively. The associated sample results are non-detect; qualification is not necessary.

Sample GWDUP01_110618 displayed a recovery greater than the control limit for isotope dilution standard M2-8:2FTS at 207%. The associated sample result is non-detect; qualification is not necessary.

The continuing calibrations analyzed on 11/15/18 at 20:58 and 11/16/18 at 01:06 displayed recoveries greater than the upper control limit for internal standard MPFDOA. The corresponding sample result is non-detect; qualification is not necessary.

The continuing calibration analyzed on 11/16/18 at 03:35 displayed recoveries greater than the upper control limit for internal standards M7-PFUDA, MPFDOA, and M2PFTEDA. The associated sample results are non-detect; qualification is not required.

L1845777:

The continuing calibration analyzed on 11/20/18 at 01:44 displayed a recovery greater than the upper control limit for 8:2FTS at 130.5%. The associated sample results were non-detect; qualification is not necessary.

Samples MW06_110818, MW11_110818, and MW15_110818 exhibited isotope dilution standard recoveries greater than the upper control limit for M2-6:2FTS at 617%, 363%, and 301%, respectively. In addition, MW06_110818, MW11_110818, and MW15_110818 exhibited isotope dilution standard recoveries greater than the upper control limit for M2-8:2FTS at 377%, 217%, and 240%, respectively. The associated positive detections were previously qualified; no further action is required.

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L1845645:

The continuing calibration analyzed on 11/2018 at 01:44 displayed a %D greater than the control limit for 8:2FTS at 130.5%. In addition, the continuing calibration analyzed on 11/19/18 at 22:42 exhibited a %D greater than the control limit for M5PFPEA at 151.1%. The associated sample results were non-detect; qualification is not necessary.

COMMENTS:

Field duplicate and parent sample pairs were collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 1X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 30% for groundwater. The following analytes did not meet the precision criteria:

- GWDUP01_110618 and MW02_110618: none
- GWDUP02_110818 and MW06_110818: none

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Emily Strake, CEP
Senior Project Chemist

APPENDIX F

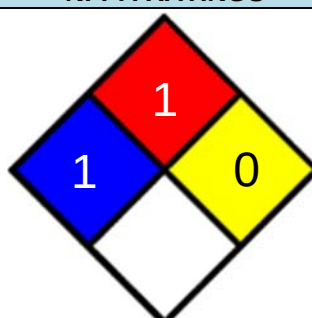
Laboratory Analytical Results – SRI (Separate PDF)

APPENDIX G

Safety Data Sheets

SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY INFORMATION			
PRODUCT TYPE:	Activated Carbon		
PRODUCT NAME:	AquaCarb ® Series, VOCarb ® Series, AC Series, VC Series, BevCarb ® Series, and UltraCarb ® Series		
COMPANY ID:	Evoqua Water Technologies LLC 181 Thorne Hill Drive, Warrendale, PA 15086		
TELEPHONE NUMBER:	INFORMATION:	CORPORATE	866.926.8420
	MEDICAL EMERGENCY:	CHEMTREC	800.424.9300
	TRANSPORTATION EMERGENCY:	CHEMTREC	800.424.9300
DATE PREPARED:	April 15, 2015	REVISION:	0

SECTION 2: HAZARD(S) IDENTIFICATION			
HMIS RATINGS		NFPA RATINGS	GUIDE
HEALTH	1		4 – EXTREME/SEVERE 3 – HIGH/SERIOUS 2 – MODERATE 1 - SLIGHT 0 – MINIMUM W – WATER REACTIVE OX - OXIDIZER
FLAMMABILITY	1		
PHYSICAL HAZARD	0		
PERSONAL PROTECTION	E		
PICTOGRAM		SIGNAL WORD	HAZARD STATEMENT
		WARNING	H315: Causes skin irritation H320: Causes eye irritation
PRECAUTIONARY STATEMENT(S)			
PREVENTION		P261: Avoid breathing dust/fume P264: Wash ... thoroughly after handling.	
RESPONSE		P305: IF IN EYES: Irrigate for 15 minutes P304: IF INHALED: Remove to fresh air	
STORAGE		P402: Store in a dry place. P403: Store in a well ventilated place. P404: Store in a closed container.	
OTHER HAZARDS			
NONE			

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS			
PERCENT BY WEIGHT	COMMON NAME (Ingredient / Component)	CAS NO.	IMPURITIES
100	Activated Carbon	7440-44-0	NONE

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SECTION 4: FIRST-AID MEASURES	
NECESSARY FIRST AID INSTRUCTIONS	
INHALATION FIRST AID	Remove affected person to fresh air. Give artificial respiration ONLY if breathing has stopped and give CPR ONLY if there is no breathing and no pulse. Obtain medical attention immediately.
SKIN CONTACT FIRST AID	Wash skin for 5 minutes with flowing water and soap. Clothing should be washed before reuse. Obtain medical assistance if irritation develops.
EYE CONTACT FIRST AID	Immediately irrigate eyes with flowing water continuously for 15 minutes while holding eyelids open. Contacts should be removed before or during flushing. Get medical assistance if irritation develops.
INGESTION FIRST AID:	Do not induce vomiting. Obtain medical attention immediately.
DESCRIPTION OF MOST IMPORTANT SYMPTOMS	
No Additional Information Available	
RECOMMENDATIONS FOR IMMEDIATE MEDICAL CARE	
No Additional Information Available	

SECTION 5: FIRE-FIGHTING MEASURES	
SUITABLE EXTINGUISHING MEDIA	Water Spray, Carbon Dioxide, Foam or Dry Chemical
UNSUITABLE EXTINGUISHING MEDIA	None
SPECIFIC HAZARDS	Avoid producing suspensions of dust during handling and avoid exposure of suspensions to sources of ignition. Suspensions of – 40 mesh particles may explode if exposed to strong ignition sources. Carbon monoxide and carbon dioxide gas may be emitted upon combustion of material. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion.
PERSONAL PROTECTIVE EQUIPMENT	In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full face piece, operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES	
PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	
PERSONAL PRECAUTIONS	Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of a material from eyes, skin, and clothing.
ENVIRONMENTAL PRECAUTIONS	The material, in its original state, is not harmful to the environment.
CONTAINMENT AND CLEAN-UP	Clean up spills in a manner that does not disperse dust into the air. Avoid introducing materials into waterway.
OTHER INFORMATION	None

SECTION 7: HANDLING AND STORAGE	
PRECAUTIONS FOR SAFE HANDLING	Avoid dispersion into air. Keep containers dry and closed. Follow good handling and housekeeping practices to minimize spills, generation of airborne dusts, and accumulation of dusts on exposed surfaces. Use with adequate exhaust ventilation to draw dust away from workers' breathing zones.

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	Prevent or minimize exposures to dusts by using appropriate respirators, gloves and eye protection. Wash exposed skin areas thoroughly with soap and water. Use caution when pouring, using pneumatic transport, swirling, etc. as this material can become electrostatically charged and present a dust explosion hazard.
CONDITIONS FOR SAFE STORAGE	Avoid spilling material so as to avoid creating a dust suspension. Store at ambient atmospheric conditions. Product should be stored in a closed dry container. Maintain good housekeeping procedures. Store away from strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS	Provide ventilation if necessary to minimize exposure. General ventilation is usually acceptable, but local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.		
RESPIRATORY PROTECTION	If use conditions generate dust levels above the TLV / PEL, wear a NIOSH-approved particulate respirator or a NIOSH-approved cartridge respirator fitted with dust filters.		
SKIN PROTECTION	Wear appropriate dust resistant clothing and gloves.		
EYE/FACE PROTECTION	Safety glasses with side shields. If eye contact or dusty conditions are likely, wear dust tight goggles.		
EXPOSURE LIMITS/GUIDELINES	Exposure limits have not been established for this material. However, the following are widely accepted limits for exposure to otherwise nontoxic particulates:		
	RESULT	OSHA 8 HR mg/m³	ACGIH TLV 8 HR mg/m³
PARTICULATES NOT OTHERWISE REGULATED (PNOR)	TWA	15 (Total) 5 (Respirable)	----- -----
PARTICULATES NOT OTHERWISE CLASSIFIED (PNOC)	TWA	----- -----	10 (Inhalable) 3 (Respirable)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

COLOR	BLACK	MOLECULAR WEIGHT	NA
ODOR	NONE	ODOR THERSHOLD	NONE
pH VALUE	NA	VAPOR PRESSURE	0
MELTING POINT	NA	VAPOR DENSITY	SOLID
FREEZING POINT	NA	RELATIVE DENSITY	0.4 TO 0.7
INITIAL BOILING POINT	NA	SOLUBILITY	NOT SOLUABLE
FLASHPOINT	NA	PARTITION COEFFICEINT	NA
EVAPORATION RATE	NA	AUTO IGNITION TEMP.	>220° C
FLAMMABILITY	>220° C	DECOMP. TEMP.	NA
UEL	NA	VISCOSITY	NA
LEL	NA		

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	NA
CHEMICAL STABILITY	Stable
POSSIBILITY OF HAZARDOUS REACTIONS	None
CONDITIONS TO AVOID	Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion. Avoid contact with strong acids
HAZAROUS DECOMPOSITION PRODUCTS	Hazardous decomposition will produce carbon oxides.

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SECTION 11: TOXICOLOGICAL INFORMATION		
INHALATION	ACUTE	Inhalation of carbon dust is mildly irritating to the lungs and can immediately give rise to an increased mucociliary transport and airway resistance mediated by the vagus. Inhalation LC50 (Rat) > 64.4 mg / l.
	CHRONIC	There are no known chronic inhalation effects.
SKIN	ACUTE	Skin contact is expected to be slightly irritating. The primary skin irritation index (rabbit) is 0.
	CHRONIC	There are no known chronic dermal effects
EYE	ACUTE	Eye contact can cause conjunctivitis, epithelial hyperplasia of the cornea, as well as eczematous inflammation of the eyelids.
INGESTION	ACUTE	Activated carbon is practically nontoxic. The probable oral lethal dose (human) is greater than 15g/kg; more than one quart (2.2 lbs) for a 150 lb person.
	CHRONIC	There are no known chronic ingestion effects.
CARCINOGENICITY/MUTAGENICITY		There are no known carcinogenic/mutagenic effects.
REPRODUCTIVE EFFECTS		There are no known reproductive effects.
NEUROTOXICITY		There are no known neurotoxic effects.
OTHER EFFECTS		No other effects of carbon are known.
TARGET ORGANS		Target organs include the respiratory system and the cardiovascular system.

SECTION 12: ECOLOGICAL INFORMATION
The material, in its original state, is not harmful to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS	
SPILL/LEAK PROCEDURES	Clean spills in a manner that does not disperse dust into the air, preferably a wet-down procedure or vacuum.
CLEANUP	If material is not contaminated, spilled media can be re-bagged. Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal.
REGULATORY REQUIREMENTS	Generators of waste material are required to evaluate all waste for compliance with RCRA and any local disposal procedures and regulations. NOTE: State and local regulations may be more stringent than federal regulations.
DISPOSAL	Material that cannot be used or chemically reprocessed and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. WARNING: Wet activated carbon depletes oxygen from the air and therefore dangerously low levels of oxygen may be encountered. Whenever workers enter a vessel containing activated carbon, the vessel's oxygen content should be determined and work procedures for potentially low oxygen areas should be followed.

SECTION 14: TRANSPORT INFORMATION		
LAND – DOT	UN/NA IDENTIFICATION NUMBER:	Not Applicable to unused finished product
	UN-PROPER SHIPPING NAME:	Not Applicable to unused finished product
	TRANSPORT HAZARD CLASS:	Not Applicable to unused finished product
	PACKING GROUP:	Not Applicable to unused finished product
	MARINE POLLUTANT:	Not Applicable to unused finished product
	HAZARD CLASS:	Not Applicable to unused finished product

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WATER – IMO/IMDG	UN/NA IDENTIFICATION NUMBER:	Not Applicable to unused finished product
	UN-PROPER SHIPPING NAME:	Not Applicable to unused finished product
	TRANSPORT HAZARD CLASS:	Not Applicable to unused finished product
	PACKING GROUP:	Not Applicable to unused finished product
	MARINE POLLUTANT:	Not Applicable to unused finished product
AIR – ICAO/IATA <i>For product quantities less than 0.5 Kg</i>	UN/NA IDENTIFICATION NUMBER:	Not Applicable to unused finished product
	UN-PROPER SHIPPING NAME:	Not Applicable to unused finished product
	TRANSPORT HAZARD CLASS:	Not Applicable to unused finished product
	PACKING GROUP:	Not Applicable to unused finished product
	MARINE POLLUTANT:	Not Applicable to unused finished product
This material does not meet the definition of a self-heating substance (Class 4.2) as determined by the test protocol for a “self-heating substance” United Nations Transportation of Dangerous Goods, Manual of Tests and Criteria, Part III, Section 33.3.1.6 – Test N.4 – Test Method for Self-Heating Substances.		

SECTION 15: REGULATORY INFORMATION	
OSHA	Hazard Communication Standard: Irritant
OSHA	Process Safety Standard: No
CAA	Section 112r: No
CERCLA	Section 103: No RQ: None
SARA	Section 302: No; SARA Section 304: No; SARA Section 313: No
SARA HAZARD CATEGORIES 311/312	Acute: Yes Chronic: No Fire: No Reactive: No Sudden Pressure Release: No
TSCA	The ingredients of this product are on the TSCA Inventory List.

SECTION 16: OTHER INFORMATION	
DISCLAIMER:	The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the user thereof. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial and local laws.
REVISION INDICATOR:	Revision 0: (This SDS replaces the former MSDS for this product pursuant to OSHA 1910.1200(g) Appendix D. The MSDS for this product should be considered obsolete).

SAFETY DATA SHEET

Klozur® SP

SDS # : 7775-27-1-12
Revision date: 2018-07-13
Format: NA
Version 1.04



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Klozur® SP

CAS-No 7775-27-1

Synonyms Sodium Persulfate; Sodium Peroxydisulfate; Disodium Peroxydisulfate; Peroxydisulfuric acid, disodium salt; Peroxydisulfuric acid, sodium salt.

Alternate Commercial Name Klozur® Persulfate

Recommended use of the chemical and restrictions on use

Recommended Use: In situ and ex situ chemical oxidation of contaminants and compounds of concern for environmental remediation applications

Restrictions on Use No uses to be advised against were identified.

Manufacturer/Supplier

PeroxyChem LLC
2005 Market Street
Suite 3200
Philadelphia, PA 19103
Phone: +1 267/ 422-2400 (General Information)
E-Mail: sdsinfo@peroxychem.com

Emergency telephone numbers

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)
1 303/ 389-1409 (Medical - U.S. - Call Collect)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Oxidizing Solids	Category 3

GHS Label elements, including precautionary statements**EMERGENCY OVERVIEW****Danger****Hazard Statements**

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H320 - Causes eye irritation
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H302 - Harmful if swallowed
H272 - May intensify fire; oxidizer

**Precautionary Statements - Prevention**

P261 - Avoid breathing dust.
P285 - In case of inadequate ventilation wear respiratory protection
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/ protective clothing
P264 - Wash face, hands and any exposed skin thoroughly after handling
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P220 - Keep/Store away from clothing/combustible materials
P221 - Take any precaution to avoid mixing with combustibles

Precautionary Statements - Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/ attention
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice/ attention
P304 + P341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P370 + P378 - In case of fire: Use water spray for extinction

Precautionary Statements - Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Risk of decomposition by heat or by contact with incompatible materials

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTSFormula Na₂O₈S₂

Chemical name	CAS-No	Weight %
Sodium Persulfate	7775-27-1	> 99
Sodium sulfate	7757-82-6	< 2

4. FIRST AID MEASURES

General Advice	May produce an allergic reaction.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids intermittently. Consult a physician. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Inhalation	Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth. Drink 1 or 2 glasses of water.
Most important symptoms and effects, both acute and delayed	Itching; Redness; Coughing and/ or wheezing.
Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Water. Cool containers with flooding quantities of water until well after fire is out.
Unsuitable extinguishing media	Do not use carbon dioxide or other gas filled fire extinguishers; they will have little effect on decomposing persulfate.
Specific Hazards Arising from the Chemical	Decomposes under fire conditions to release oxygen that intensifies the fire.
Flammable properties	Contact with combustible material may cause fire
Explosion data	
Sensitivity to Mechanical Impact	Not sensitive.
Sensitivity to Static Discharge	Not sensitive.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Keep off any unprotected persons. Avoid contact with the skin and the eyes. Avoid breathing dust. Wear personal protective equipment.
Other	Never add other substances or combustible waste to product residues.
Environmental Precautions	Prevent material from entering into soil, ditches, sewers, waterways, and/or groundwater.

See Section 12, Ecological Information for more detailed information.

Methods for Containment

Vacuum, shovel or pump waste into a drum and label contents for disposal. Avoid dust formation. Store in closed container.

Methods for cleaning up

Clean up spill area and treat as special waste. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handling

Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Avoid dust formation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Avoid contact with skin and eyes. Avoid breathing dust. Remove and wash contaminated clothing before re-use. Reference to other sections.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Do not store near combustible materials. Avoid contamination of opened product. Keep away from food, drink and animal feedings. Avoid formation and deposition of dust.

Incompatible products

Acids, Alkalis, Halides, Combustible materials, Organic material, Reducing agents. Acids, alkalis, halides (fluorides, chlorides, bromides), combustible materials, reducing agents and organic compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Sodium Persulfate 7775-27-1	TWA: 0.1 mg/m ³	-	-	-
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Sodium Persulfate 7775-27-1	TWA: 0.1 mg/m ³	-	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³

Appropriate engineering controls**Engineering measures**

Provide local exhaust or general ventilation adequate to maintain exposures below permissible exposure limits.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Eye protection recommended. Chemical goggles consistent with EN 166 or equivalent.

Skin and Body Protection

Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection

Protective gloves: Neoprene gloves, Polyvinylchloride, Natural Rubber.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn: particulate filtering facepiece respirators.

Hygiene measures

Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands before breaks and after shifts. Keep work clothes separate, remove contaminated clothing - launder after open handling of product.

General information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Crystalline solid
Physical State	Solid
Color	White
Odor	odorless
Odor threshold	Not applicable
pH	6.0 (1% solution)
Melting point/freezing point	180 °C (Decomposes)
Boiling Point/Range	Decomposes upon heating
Flash point	Not flammable
Evaporation Rate	No information available
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	Not applicable
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	6.07E-30 mm Hg at 25°C
Vapor density	No information available
Density	2.59 g/cm ³ (crystal density)
Specific gravity	No information available
Water solubility	42 % @ 25 °C
Solubility in other solvents	No information available
Partition coefficient	No information available (inorganic)
Autoignition temperature	No evidence of combustion up to 600°C No evidence of combustion up to 600 °C
Decomposition temperature	> 100 °C (assume)
Viscosity, kinematic	No information available (Solid)
Viscosity, dynamic	No information available
Explosive properties	Not explosive
Oxidizing properties	oxidizer
Molecular weight	238.1
VOC content (%)	Not applicable
Bulk density	1.12 g/cm ³ (loose)

10. STABILITY AND REACTIVITY

Reactivity	None under normal use condtions. Oxidizer. Contact with other material may cause fire
Chemical Stability	Stable.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Heat. Moisture.
Incompatible materials	Acids, alkalis, halides (fluorides, chlorides, bromides), combustible materials, reducing agents and organic compounds. . Acids, Alkalis, Halides, Combustible materials, Organic material, Reducing agents.
Hazardous Decomposition Products	Oxygen which supports combustion

11. TOXICOLOGICAL INFORMATION

Product Information

Unknown acute toxicity	0% of the mixture consists of ingredient(s) of unknown toxicity
LD50 Oral	Sodium Persulfate: 895 mg/kg (rat)
LD50 Dermal	Sodium Persulfate: > 10 g/kg
LC50 Inhalation	Sodium Persulfate: >5.10 mg/L (4h) (rat)
Serious eye damage/eye irritation	Irritating to eyes.
Skin corrosion/irritation	Minimally irritating.

Sensitization Sodium Persulfate: May cause sensitization by inhalation and skin contact.

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation	NOAEL Oral Value
Sodium Persulfate (7775-27-1)	895 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 21.6 mg/L (Rat) 4 h	
Sodium sulfate (7757-82-6)	> 10000 mg/kg (Rat)			

Information on toxicological effects

Symptoms Symptoms of allergic reaction may include rash, itching, swelling and trouble breathing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Irritating to eyes, respiratory system and skin.
corrosivity None.

Carcinogenicity Contains no ingredient listed as a carcinogen.

Mutagenicity Did not show mutagenic effects in animal experiments

Neurological effects Not neurotoxic

Reproductive toxicity This product is not recognized as reprotox by Research Agencies.
Developmental toxicity None known.
Teratogenicity Not teratogenic in animal studies.

STOT - single exposure May cause respiratory irritation.
STOT - repeated exposure Not classified.

Target organ effects Eyes, Lungs.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects

Sodium Persulfate (7775-27-1)				
Active Ingredient(s)	Duration	Species	Value	Units
Sodium Persulfate	96 h LC50	Rainbow trout	163	mg/L
Sodium Persulfate	48 h LC50	Daphnia magna	133	mg/L
Sodium Persulfate	96 h LC50	Grass shrimp	519	mg/L
Sodium Persulfate	72 h EC50	Algae Selenastrum capricornutum	116	mg/L

Persistence and degradability Biodegradability does not pertain to inorganic substances.

Bioaccumulation Does not bioaccumulate.

Mobility Dissociates into ions.

Other Adverse Effects None known.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods	This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.
Contaminated Packaging	Empty remaining contents. Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION**DOT**

UN/ID no	UN 1505
Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

TDG

UN/ID no	UN 1505
Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

MEX

UN/ID no	UN 1505
Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

ICAO

UN/ID no	UN 1505
Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

ICAO/IATA

UN/ID no	UN 1505
Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

IMDG/IMO

UN/ID no	UN 1505
Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

ADR/RID

UN/ID no	UN 1505
Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

ADN

Proper Shipping Name	SODIUM PERSULFATE
Hazard class	5.1
Packing Group	III

15. REGULATORY INFORMATION**U.S. Federal Regulations**

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

This product is not subject to reporting under the Emergency Planning and Community Right-to-Know rule.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA/EPCRA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations**U.S. State Right-to-Know Regulations**

This product contains the following substances regulated under state Right-to-Know laws:

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium Persulfate		X			
Sodium sulfate	X		X		

California Proposition 65

This product does not contain any Proposition 65 chemicals

CANADA**Environmental Emergencies**

This product contains no substances listed under Canada's Environmental Emergency regulations.

Canadian National Pollutant Release Inventory

This product contains no substances reportable under Canada's National Pollutant Release Inventory regulations.

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/EL INCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Sodium Persulfate 7775-27-1 (> 99)	X	X	X	X	X	X	X	X	X
Sodium sulfate 7757-82-6 (< 2)	X	X	X	X	X	X	X	X	X

Mexico

Mexico - Grade

Slight risk, Grade 1

16. OTHER INFORMATION

NFPA	Health Hazards 1	Flammability 0	Stability 1	Special Hazards OX
HMIS	Health Hazards 1	Flammability 0	Physical hazard 1	Special precautions J

NFPA/HMIS Ratings Legend

Special Hazards: OX = Oxidizer

Protection=J (Safety goggles, gloves, apron, combination dust and vapor respirator)

Revision date: 2018-07-13
Revision note SDS sections updated: 3
Issuing Date: 2017-03-17

Disclaimer

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Prepared By:

PeroxyChem

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End of Safety Data Sheet

APPENDIX H

Baseline Analytical Data

Table H-1 Remedial Design Memorandum Baseline Soil Analytical Results												
561 Greenwich Street New York, New York BCP Site No.: C231129 Langan Project No.: 190043701												
Sample ID	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives - Restricted Residential	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Industrial	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Protection of GW	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Residential	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	HC Soil High Contaminant Soil		HC Soil DUP High Contaminant Soil Duplicate		LC Soil Low Contaminant Soil	
Sample Description							11/15/2018 Soil		11/15/2018 Soil		11/15/2018 Soil	
Sampling Date												
Matrix												
Volatile Organics, 8260 - Comprehensive	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Dilution Factor							250		1000		100	
1,1,1,2-Tetrachloroethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,1,1-Trichloroethane	100	500	1,000	0.680	100	0.680	0.44	U	2.30	U	0.21	U
1,1,2,2-Tetrachloroethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,1,2-Trichloroethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,1-Dichloroethane	26	240	480	0.270	19	0.270	0.44	U	2.30	U	0.21	U
1,1-Dichloroethylene	100	500	1,000	0.330	100	0.330	0.44	U	2.30	U	0.21	U
1,2,3-Trichlorobenzene	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,2,3-Trichloropropane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,2,4-Trichlorobenzene	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,2,4-Trimethylbenzene	52	190	380	3.600	47	3.600	18.00	D	14.00	D	2.70	D
1,2-Dibromo-3-chloropropane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,2-Dibromoethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,2-Dichlorobenzene	100	500	1,000	1.100	100	1.100	0.44	U	2.30	U	0.21	U
1,2-Dichloroethane	3,100	30	60	0.0200	2,300	0.0200	0.44	U	2.30	U	0.21	U
1,2-Dichloropropane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
1,3,5-Trimethylbenzene	52	190	380	8.400	47	8.400	6.70	D	5.40	D	0.68	D
1,3-Dichlorobenzene	49	280	560	2.400	17	2.400	0.44	U	0.00	U	0.21	U
1,4-Dichlorobenzene	13	130	250	1.800	9,800	1.800	0.44	U	0.00	U	0.21	U
1,4-Dioxane	13	130	250	0.100	9,800	0.100	0.00	U	0.00	U	4.10	U
2-Butanone	100	500	1,000	0.120	100	0.120	0.44	U	0.00	U	0.21	U
2-Hexanone	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
4-Methyl-2-pentanone	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Acetone	100	500	1,000	0.0500	100	0.0500	0.87	U	0.00	U	0.41	U
Acrolein	~	~	~	~	~	~	0.87	U	0.00	U	0.41	U
Acrylonitrile	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Benzene	4,800	44	89	0.0600	2,900	0.0600	0.44	U	0.00	U	0.21	U
Bromochloromethane	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Bromodichloromethane	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Bromoform	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Bromomethane	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Carbon disulfide	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Carbon tetrachloride	2,400	22	44	0.760	1,400	0.760	0.44	U	0.00	U	0.21	U
Chlorobenzene	100	500	1,000	1.100	100	1.100	0.44	U	0.00	U	0.21	U
Chloroethane	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Chloroform	49	350	700	0.370	10	0.370	0.44	U	0.00	U	0.21	U
Chloromethane	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
cis-1,2-Dichloroethylene	100	500	1,000	0.250	59	0.250	0.44	U	0.00	U	0.21	U
cis-1,3-Dichloropropylene	~	~	~	~	~	~	0.44	U	0.00	U	0.21	U
Cyclohexane	~	~	~	~	~	~	4.20	D	6.40	D	0.65	D
Dibromochloromethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
Dibromomethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
Dichlorodifluoromethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
Ethyl Benzene	41	390	780	1	30	1	4.30	D	3.20	JD	0.37	JD
Hexachlorobutadiene	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
Isopropylbenzene	~	~	~	~	~	~	1.80	D	2.30	U	0.21	U
Methyl acetate	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
Methyl tert-butyl ether (MTBE)	100	500	1,000	0.930	62	0.930	0.44	U	2.30	U	0.21	U
Methylcyclohexane	~	~	~	~	~	~	29.00	D	24.00	D	2.30	D
Methylene chloride	100	500	1,000	0.0500	51	0.0500	0.87	U	4.70	U	0.41	U
n-Butylbenzene	100	500	1,000	12	100	12	1.70	D	2.30	U	0.21	U
n-Propylbenzene	100	500	1,000	3,900	100	3,900	3.60	D	2.90	JD	0.31	JD
o-Xylene	~	~	~	~	~	~	8.70	D	6.20	D	0.21	U
p- & m- Xylenes	~	~	~	~	~	~	21.00	D	15.00	D	0.91	D
p-Isopropyltoluene	~	~	~	~	~	~	1.00	D	2.30	U	0.21	U
sec-Butylbenzene	100	500	1,000	11	100	11	0.81	JD	2.30	U	0.21	U
Styrene	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
tert-Butyl alcohol (TBA)	~	~	~	~	~	~	0.44	U	2.30	U	0.59	JD
tert-Butylbenzene	100	500	1,000	5,900	100	5,900	0.44	U	2.30	U	0.21	U
Tetrachloroethylene	19	150	300	1.300	5,500	1.300	0.44	U	2.30	U	0.21	U
Toluene	100	500	1,000	0.700	100	0.700	5.50	D	3.90	JD	0.21	U
trans-1,2-Dichloroethylene	100	500	1,000	0.190	100	0.190	0.44	U	2.30	U	0.21	U
trans-1,3-Dichloropropylene	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
trans-1,4-dichloro-2-butene	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
Trichloroethylene	21	200	400	0.470	10	0.470	0.44	U	2.30	U	0.21	U
Trichlorofluoromethane	~	~	~	~	~	~	0.44	U	2.30	U	0.21	U
Vinyl Chloride	0.900	13	27	0.0200	0.210	0.0200	0.44	U	2.30	U	0.21	U
Xylenes, Total	100	500	1,000	1.600	100	0.260	30.00	D	22.00	D	0.91	JD
							160.92		188.20		26.30	
Volatile Organics, Tentatively Identified Cmpd	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Dilution Factor							250		1000		100	
1,2,4,5-Tetramethylbenzene	~	~	~	~	~	~	4.3	JDN	NT		NT	
dimethyl Cyclohexane isomer	~	~	~	~	~	~	7.5	JD	NT		NT	
Ethyl Dimethyl Benzene isomer	~	~	~	~	~	~	7.3	JD	NT		NT	
Ethyl Methyl Benzene isomer	~	~	~	~	~	~	10.0	JD	NT		NT	
Naphthalene	100	500	1,000	12	100	12	8.3	JDN	NT		1	JDN
p-Diethylbenzene	~	~	~	~	~	~	6.6	JDN	NT		0.830	
p-Ethyltoluene	~	~	~	~	~	~	6.7	JDN	NT		NT	
unknown cyclic hydrocarbons	~	~	~	~	~	~	15	JD	NT		NT	
Unknown alipahic hydrocarbon	~	~	~	~	~	~	NT		39	JDN	NT	
Unknown alkane isomers	~	~	~	~	~	~	43	JD	NT		5.7	JD
Unknown alkyl subst. Benzene isomer	~	~	~	~	~	~	NT		NT		1.2	JD
unknown alkyl subst. Benzene isomers	~	~	~	~	~	~	16	JD	NT		NT	JD
NJDEP EPH (Cat. 2 Non-Fractionated)							mg/kg		mg/kg		mg/kg	
Dilution Factor							1		1		1	
Total EPH	~	~	~	~	~	~	149		173		56.3	U
Total Solids							%		%		%	
Dilution Factor							1		1		1	
% Solids	~	~	~	~	~	~	81		81.800		87.9	

NOTES:
mg/kg - milligram per kilogram
Indicates that the detection limit exceeds one or more NYSDEC Part 375 Soil Cleanup Objectives
Indicates that the value exceeds one or more NYSDEC Part 375 Soil Cleanup Objective(s)

Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar numbers.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
NT=this indicates the analyte was not a target for this sample
~=this indicates that no regulatory limit has been established for this analyte

Table H-2
Remedial Design Memorandum
Baseline Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Sample ID		NYSDEC TOGS Standards and Guidance Values - GA	HC GW		LC GW	
Sample Description			High Contaminant Groundwater		Low Contaminant Groundwater	
Sampling Date			11/15/2018		11/15/2018	
Matrix			Water		Water	
Compound	CAS Number		Result	Q	Result	Q
Metals, Target Analyte, ICP		µg/L	µg/L		µg/L	
Dilution Factor			1		1	
Aluminum	7429-90-5	~	55.60	U	82.30	E
Barium	7440-39-3	1,000	124		89	
Calcium	7440-70-2	~	168,000	B	129,000	E
Chromium	7440-47-3	50	5.56	U	5.56	U
Cobalt	7440-48-4	~	4.44	U	4.44	U
Copper	7440-50-8	200	22.200	U	22.200	U
Iron	7439-89-6	~	6,470		278	U
Lead	7439-92-1	25	15		5.560	U
Magnesium	7439-95-4	35,000	105,000		20,500	
Manganese	7439-96-5	300	3,540		565	
Nickel	7440-02-0	100	11.10	U	11.10	U
Potassium	7440-09-7	~	39,100		21,400	
Silver	7440-22-4	50	5.56	U	5.56	U
Sodium	7440-23-5	20,000	412,000		122,000	
Vanadium	7440-62-2	~	11.10	U	11.10	U
Zinc	7440-66-6	2,000	27.80	U	27.80	U
Metals, Target Analyte, ICPMS		µg/L	µg/L		µg/L	
Dilution Factor			1		1	
Antimony	7440-36-0	3	1.11	U	1.11	U
Arsenic	7440-38-2	25	12.70		3.83	
Beryllium	7440-41-7	3	0.33	U	0.33	U
Cadmium	7440-43-9	5	0.56	U	0.56	U
Selenium	7782-49-2	10	13.10	B	9.53	E
Thallium	7440-28-0	~	1.11	U	1.11	U
Mercury by 7473		µg/L	µg/L		µg/L	
Dilution Factor			1		1	
Mercury	7439-97-6	0.700	0.20	U	0.20	U

NOTES:

µg/L - microgram per liter

Indicates that the value exceeds the regulatory limit

Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar numbers.

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

Table H-2
Remedial Design Memorandum
Baseline Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

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

APPENDIX I

SOD Documentation

Table I-1
Remedial Design Memorandum
Alkaline Titration Curve

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

	Volume of 10N NaOH per jar (ml)
MW-02 and W14	2.15
MW-05 and EB21-22	1.67

Jar = 300 grams soil and 400 ml water

Table I-2
Remedial Design Memorandum
SOD Test Setup

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number	Treatment Jar ID	Groundwater	Soil	Added Persulfate	Added Persulfate Dose	Total Added Alkaline Reagent
		mL	g	g	g/L or g/kg wet soil	mL
1	HC_Only GW	500	-	2.5	5	1.25
2	HC_PS	400	300	9	30	7.5
3	HC_PS_DUP	400	300	9	30	7.5
4	LC_Only GW	500	-	2.5	5	1.15
5	LC_PS	400	300	4.5	15	5
6	LC_PS_Dup	400	300	4.5	15	5

Notes:

-

N/A

mL: milliliter

g/kg: gram per kilogram

g/L: gram per liter

g: gram

GW: groundwater

HC: High Contaminant

LC: Low Contaminant

ORP: Oxidation-Reduction Potential

SOD: Soil Oxidant Demand

TIC: Tentatively Identified Compound

TOC: Total Organic Carbon

VOC: Volatile Organic Compound

1. Homogenized soil from WC-14 (12'-28') and groundwater from MW-02 was used for the High Contaminant test.
2. Homogenized soil from EB-21 (15'-22') and EB-22 (16'-22') and groundwater from MW-05 was used for the Low Contaminant test.
3. Added persulfate dose is shown in g/L for Jars 1 and 4, and in g/kg wet soil for Jars 2, 3, 5, and 6.
4. pH and Residual Oxidant (alkaline activated persulfate) analyses were performed at NJIT.

Table I-3
Remedial Design Memorandum
Residual Persulfate - 11.21.18

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Date	11/21/2018
Analyst Initials	AB
Oxidant	Na ₂ S ₂ O ₈
Days from Initial	6
Method	Spectrophotometric

$$a = 3.6229$$

$$b = -3.05E-01$$

ID	Dilution Factor	% Absorb	% Absorb without Coloring Reagent	Net % Absorb Reading	Concentration (g/L)
1	1	1.278	0	1.278	4.33
2	1	3.646	0	3.646	12.90
2	3	1.262	0	1.262	12.80
3	1	3.798	0	3.798	13.45
3	3	1.525	0	1.525	15.66
4	1	1.289	0	1.289	4.36
5	1	1.970	0	1.97	6.83
5	2	1.032	0	1.032	6.87
6	1	2.034	0	2.034	7.06
6	2	1.048	0	1.048	6.98

ID	Average Concentration
	(g/L)
1	4.33
2	12.85
3	14.56
4	4.36
5	6.85
6	7.02

Table I-3
Remedial Design Memorandum
Residual Persulfate - 11.29.18

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Date	11/29/2018
Analyst Initials	AB
Oxidant	Na ₂ S ₂ O ₈
Days from Initial	14
Method	Spectrophotometric

$$a = 3.6229$$

$$b = -3.05E-01$$

ID	Dilution Factor	% Absorb	% Absorb without Coloring Reagent	Net % Absorb Reading	Concentration (g/L)
1	1	1.217	0	1.217	4.10
2	1	1.556	0	1.556	5.33
2	1.11	1.511	0	1.511	5.74
3	1	1.802	0	1.802	6.22
3	1.25	1.519	0	1.519	6.50
4	1	1.264	0	1.264	4.27
5	1	0.944	0	0.944	3.12
6	1	0.948	0	0.948	3.13

ID	Average Concentration
	(g/L)
1	4.10
2	5.54
3	6.36
4	4.27
5	3.12
6	3.13

Table I-3
Remedial Design Memorandum
Residual Persulfate - 12.14.18

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Date	12/14/2018
Analyst Initials	AB
Oxidant	Na ₂ S ₂ O ₈
Days from Intial	15
Method	Spectrophotometric

$$a = 3.6229$$

$$b = -3.05E-01$$

ID	Dilution Factor	% Absorb	% Absorb without Coloring Reagent	Net % Absorb Reading	Concentration (g/L)
3	1	0.628	0	0.628	1.97
5	1	0.523	0	0.523	1.59
6	1	0.590	0	0.59	1.83
7	1	0.630	0	0.63	1.98
11	1	0.591	0	0.591	1.84
12	1	0.508	0	0.508	1.54
15	1	0.630	0	0.63	1.98
16	1	0.440	0	0.44	1.29

ID	Concentration
	(g/L)
3	1.97
5	1.59
6	1.83
7	1.98
11	1.84
12	1.54
15	1.98
16	1.29

Table I-3
Remedial Design Memorandum
Residual Persulfate - 01.04.19

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Date	1/4/2019
Analyst Initials	AB
Oxidant	Na ₂ S ₂ O ₈
Days from Intial	16 & 36
Method	Spectrophotometric

a = 3.6229

b = -3.05E-01

ID	Dilution Factor	% Absorb	% Absorb without Coloring Reagent	Net % Absorb Reading	Concentration (g/L)	Ascorbic Acid Added (g)	Ascorbic Acid Added (g/L)	TOC from Ascorbic Acid Added (g/L)	TOC from Ascorbic Acid Added (µg/L)	GW Analytical TOC (µg/L)
5	1	0.457	0	0.457	1.35	1.6	3.5	1.4	1,415,999	1,900,000
6	1	0.363	0	0.363	1.01	1.2	2.6	1.1	1,061,999	1,480,000
7	1	0.467	0	0.467	1.39	1.7	3.7	1.5	1,504,499	2,110,000
X3	1	0.672	0	0.672	2.13	2.5	5.7	2.3	2,332,331	2,560,000
X4	1	0.670	0	0.67	2.12	2.5	5.7	2.3	2,332,331	2,660,000
15	1	0.346	0	0.346	0.95	1.1	2.5	1.0	1,026,226	1,410,000
16	1	0.340	0	0.34	0.93	1.1	2.5	1.0	1,026,226	1,440,000

ID	Concentration (g/L)
5	1.35
6	1.01
7	1.39
X3	2.13
X4	2.12
15	0.95
16	0.93

Table I-4
Remedial Design Memorandum
Persulfate Calibration Curve

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Persulfate Calibration Curve		
Dilution Factor	Concentration (g/L)	Abs%
2	5.00	1.458
4	2.50	0.758
6	1.67	0.604
8	1.25	0.392

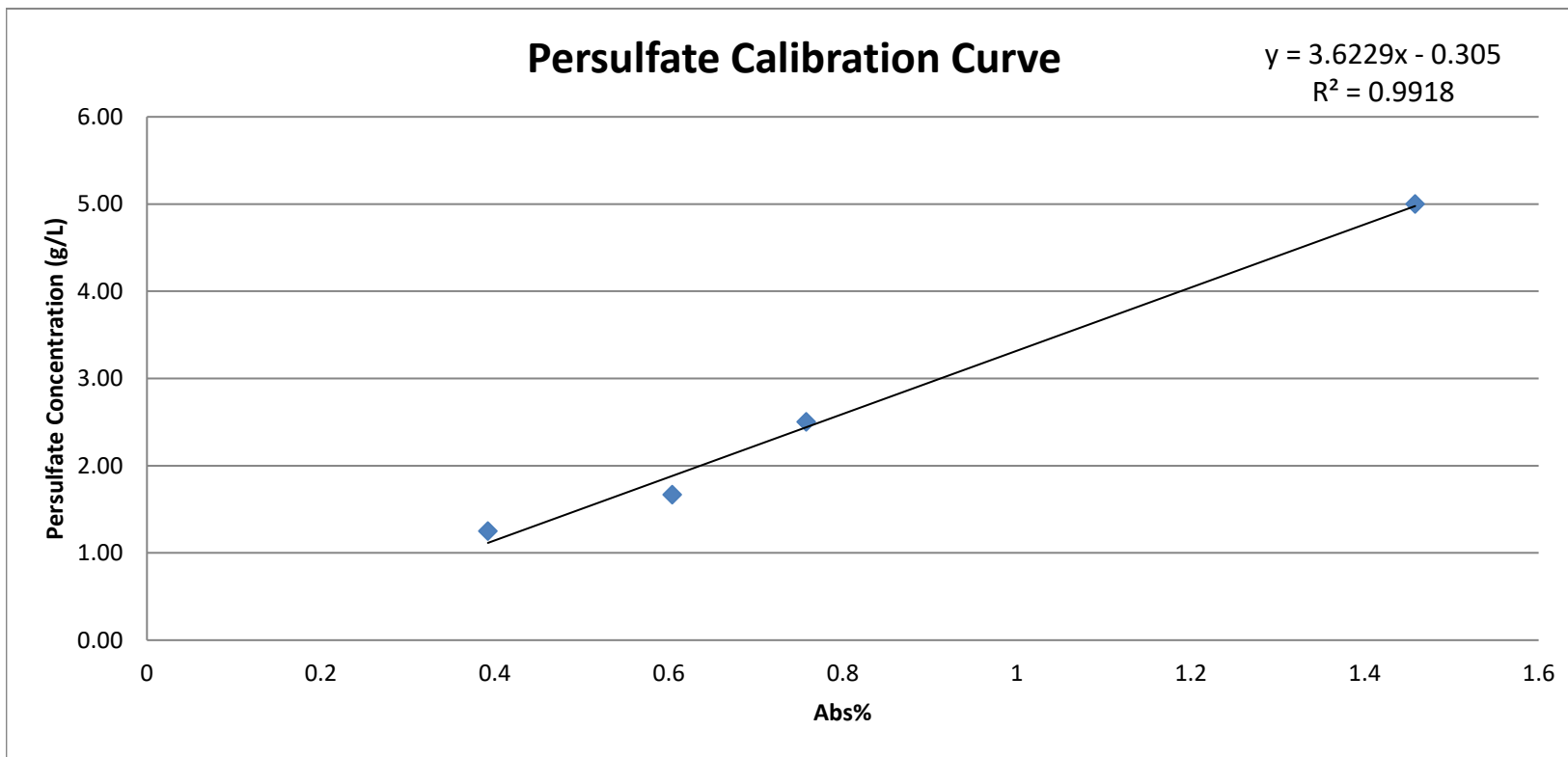


Table I-5
Remedial Design Memorandum
SOD Calculations

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Project Name:	551 Greenwich Street	Date Started:	11/15/2018
Project Number:	190043701	Analyst Initials:	AB

Sample ID 1

Description: **High Contaminant Groundwater Only**

Client Sample No. (Soil):	N/A	Client Sample No. (Water):	MW-02
Mositure Content %		Volume Used (mL):	500
Soil Weight Used (g):		Mass Na2S2O8 (g):	2.5
Test Temp (°C)	Room temperature	Initial Na2S2O8 Concen. (g/L):	5.00
Initial Alkaline Addition-10N NaOH (mL)	0.25		
Total Water Volume (L)	0.500		
Total Dry Soil (kg)	0.000		

Time	Na2S2O8 Conc.	pH	Alkaline Addition	Total Na2S2O8 Consumed	Total Na2S2O8 Consumed
(Days)	(g/L)	S.U.	(mL)	(g)	(g/L)
0	5.00				
6	4.33	7.90	1	0.3	0.67
14	4.10	10.59	0	0.4	0.89

Project Name:	551 Greenwich Street	Date Started:	11/15/2018
Project Number:	190043701	Analyst Initials:	AB

Sample ID 2

Description: **High Contaminant_Persulfate**

Client Sample No. (Soil):	WC-14 (12'-28')	Client Sample No. (Water):	MW-02
Mositure Content %	19%	Volume Used (mL):	400
Soil Weight Used (g):	300	Mass Na2S2O8 (g):	9.0
Test Temp (°C)	Room temperature	Initial Na2S2O8 Concen. (g/L):	19.59
Initial Alkaline Addition-10N NaOH (mL)	2.5		
Total Water Volume (L)	0.460		
Total Dry Soil (kg)	0.243		

Time	Na2S2O8 Conc.	pH	Alkaline Addition	Total Na2S2O8 Consumed	Na2S2O8 Consumed	Na2S2O8 Consumed
(Days)	(g/L)	S.U.	(mL)	(g)	(g/Kg wet soil)	(g/Kg dry soil)
0	19.59					
6	12.85	7.24	5	3.1	8.95	11.04
14	5.54	10.36	0	6.5	20.15	24.88

Project Name:	551 Greenwich Street	Date Started:	11/15/2018
Project Number:	190043701	Analyst Initials:	AB

Sample ID 3

Description: **High Contaminant_Persulfate Duplicate**

Client Sample No. (Soil):	WC-14 (12'-28')	Client Sample No. (Water):	MW-02
Mositure Content %	19%	Volume Used (mL):	400
Soil Weight Used (g):	300	Mass Na2S2O8 (g):	9.0
Test Temp (°C)	Room temperature	Initial Na2S2O8 Concen. (g/L):	19.59
Initial Alkaline Addition-10N NaOH (mL)	2.5		
Total Water Volume (L)	0.460		
Total Dry Soil (kg)	0.243		

Time	Na2S2O8 Conc.	pH	Alkaline Addition	Total Na2S2O8 Consumed	Na2S2O8 Consumed	Na2S2O8 Consumed
(Days)	(g/L)	S.U.	(mL)	(g)	(g/Kg wet soil)	(g/Kg dry soil)
0	19.59					
6	14.56	7.41	5	2.3	6.33	7.82
14	6.36	10.42	0	6.1	18.89	23.32

Table I-5
Remedial Design Memorandum
SOD Calculations

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Project Name:	551 Greenwich Street	Date Started:	11/15/2018
Project Number:	190043701	Analyst Initials:	AB

Sample ID 4			
Description: Low Contaminant Groundwater Only			
Client Sample No. (Soil):	N/A	Client Sample No. (Water):	MW-05
Mositure Content %		Volume Used (mL):	500
Soil Weight Used (g):		Mass Na2S2O8 (g):	2.5
Test Temp (°C)	Room temperature	Initial Na2S2O8 Concen. (g/L):	5.00
Initial Alkaline Addition-10N NaOH (mL)	0.25		
Total Water Volume (L)	0.500		
Total Dry Soil (kg)	0.000		

Time	Na2S2O8 Conc.	pH	Alkaline Addition	Total Na2S2O8 Consumed	Total Na2S2O8 Consumed
(Days)	(g/L)	S.U.	(mL)	(g)	(g/L)
0	5.00				
6	4.36	7.76	1	0.3	0.63
14	4.27	12.24	0	0.4	0.72

Project Name:	551 Greenwich Street	Date Started:	11/15/2018
Project Number:	190043701	Analyst Initials:	AB

Sample ID 5			
Description: Low Contaminant Persulfate			
Client Sample No. (Soil):	EB-21 (15'-22') and EB-22 (16'-22')	Client Sample No. (Water):	MW-05
Mositure Content %	12%	Volume Used (mL):	400
Soil Weight Used (g):	300	Mass Na2S2O8 (g):	4.5
Test Temp (°C)	Room temperature	Initial Na2S2O8 Concen. (g/L):	10.26
Initial Alkaline Addition-10N NaOH (mL)	2.5		
Total Water Volume (L)	0.439		
Total Dry Soil (kg)	0.264		

Time	Na2S2O8 Conc.	pH	Alkaline Addition	Total Na2S2O8 Consumed	Na2S2O8 Consumed	Na2S2O8 Consumed
(Days)	(g/L)	S.U.	(mL)	(g)	(g/Kg wet soil)	(g/Kg dry soil)
0	10.26					
6	6.85	9.84	3	1.5	3.93	4.47
14	3.12	11.61	0	3.1	9.39	10.67

Project Name:	551 Greenwich Street	Date Started:	11/15/2018
Project Number:	190043701	Analyst Initials:	AB

Sample ID 6			
Description: Low Contaminant Persulfate Duplicate			
Client Sample No. (Soil):	EB-21 (15'-22') and EB-22 (16'-22')	Client Sample No. (Water):	MW-05
Mositure Content %	12%	Volume Used (mL):	400
Soil Weight Used (g):	300	Mass Na2S2O8 (g):	4.5
Test Temp (°C)	Room temperature	Initial Na2S2O8 Concen. (g/L):	10.26
Initial Alkaline Addition-10N NaOH (mL)	2.5		
Total Water Volume (L)	0.439		
Total Dry Soil (kg)	0.264		

Time	Na2S2O8 Conc.	pH	Alkaline Addition	Total Na2S2O8 Consumed	Na2S2O8 Consumed	Na2S2O8 Consumed
(Days)	(g/L)	S.U.	(mL)	(g)	(g/Kg wet soil)	(g/Kg dry soil)
0	10.26					
6	7.02	9.71	3	1.4	3.68	4.18
14	3.13	11.65	0	3.1	9.37	10.65

Table I-6
Remedial Design Memorandum
SOD Results Summary

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number	Treatment Jar ID	pH	SOD		
<i>Unit</i>		<i>S.U.</i>	<i>g/kg wet soil</i>	<i>g/kg dry soil</i>	<i>g/L</i>
1	HC_Only GW	10.59	-	-	0.89
2	HC_PS	10.36	20.15	24.88	-
3	HC_PS_DUP	10.42	18.89	23.32	-
4	LC_Only GW	12.24	-	-	0.72
5	LC_PS	11.61	9.39	10.67	-
6	LC_PS_Dup	11.65	9.37	10.65	-

Notes:

g/kg: gram per kilogram

g/L: gram per liter

S.U.: Standard Units

1. pH and residual oxidant results were performed at NJIT.
2. The oxidant measurement calibration curve, residual oxidant results and SOD analysis details are provided in Attachment E.
3. The final pH is shown on the table.
4. Refer to Tables 1, 2, and 3 for descriptions of Treatment Jar IDs.

APPENDIX J

ISCO Effectiveness Test Documentation

Table J-1
Remedial Design Memorandum
ISCO Test Results- SOD, pH, ORP

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number	Treatment Jar ID	pH	ORP	SOD	
	<i>Unit</i>	<i>S.U.</i>	<i>mV</i>	<i>g/kg wet soil</i>	<i>g/kg dry soil</i>
High Contaminant					
1	HC_Control	7.9	-	-	-
2	HC_Control_DUP	7.95	-	-	-
3	HC_PS	9.14	-	21.95	27.10
Low Contaminant					
9	LC_Control	7.09	-	-	-
10	LC_Control_DUP	7.17	-	-	-
11	LC_PS	10.55	-	9.64	10.95
12	LC_PS_DUP	10.48	-	10.08	11.45

Notes:

-

g/kg: gram per kilogram

g/L: gram per liter

S.U.: Standard Units

1. pH and residual oxidant results were performed at NJIT.

2. The oxidant measurement calibration curve, residual oxidant results and SOD analysis details are provided in Attachment E.

3. The final pH is shown on the table.

4. Refer to Tables 1, 2, and 3 for descriptions of Treatment Jar IDs.

Table 2-JA
Remedial Design Memorandum
High Contaminant ISCO Effectiveness Test Soil Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar ID	Sampling Date	Client Matrix	Compound	CAS Number	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg</

Table J-2B
Remedial Design Memorandum
High Contaminant ISCO Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number Treatment Jar ID Sampling Date Matrix		NYSDEC TOGS Standards and Guidance Values - GA	1 HC-Control 12/14/2018 Water		2 HC-Control-DUP 12/14/2018 Water		3 HC-PS 12/14/2018 Water	
Compound	CAS Number		Result	Q	Result	Q	Result	Q
Volatil Organic, 8260 - Comprehensive		µg/L	µg/L		µg/L		µg/L	
Dilution Factor			50		50		10	
1,1,1,2-Tetrachloroethane	630-20-6	5	0.20	U	0.20	U	0.20	U
1,1,1-Trichloroethane	71-55-6	5	0.20	U	0.20	U	0.20	U
1,1,2,2-Tetrachloroethane	79-34-5	5	0.20	U	0.20	U	0.20	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	5	0.20	U	0.20	U	0.20	U
1,1,2-Trichloroethane	79-00-5	1	0.20	U	0.20	U	0.20	U
1,1-Dichloroethane	75-34-3	5	0.20	U	0.20	U	0.20	U
1,1-Dichloroethylene	75-35-4	5	0.20	U	0.20	U	0.20	U
1,2,3-Trichlorobenzene	87-61-6	5	0.20	U	0.20	U	0.20	U
1,2,3-Trichloropropane	96-18-4	0.0400	0.20	U	0.20	U	0.20	U
1,2,4-Trichlorobenzene	120-82-1	5	0.20	U	0.20	U	0.20	U
1,2,4-Trimethylbenzene	95-63-6	5	920	D	850	D	320	D
1,2-Dibromo-3-chloropropane	96-12-8	0.0400	0.20	U	0.20	U	0.20	U
1,2-Dibromoethane	106-93-4	0.00060	0.20	U	0.20	U	0.20	U
1,2-Dichlorobenzene	95-50-1	3	0.20	U	0.20	U	0.20	U
1,2-Dichloroethane	107-06-2	0.600	0.20	U	0.20	U	0.20	U
1,2-Dichloropropane	78-87-5	1	0.20	U	0.20	U	0.20	U
1,3,5-Trimethylbenzene	108-67-8	5	2	U	280	D	110	
1,3-Dichlorobenzene	541-73-1	3	0.20	U	0.20	U	0.20	U
1,4-Dichlorobenzene	106-46-7	3	0.20	U	0.20	U	0.20	U
1,4-Dioxane	123-91-1	~	40	U	40	U	40	U
2-Butanone	78-93-3	50	29		26		130	
2-Hexanone	591-78-6	50	0.20	U	0.20	U	0.20	U
4-Methyl-2-pentanone	108-10-1	~	0.20	U	0.20	U	0.20	U
Acetone	67-64-1	50	74		70		460	D
Acrolein	107-02-8	~	0.20	U	0.20	U	0.20	U
Acrylonitrile	107-13-1	~	0.20	U	0.20	U	0.20	U
Benzene	71-43-2	1	5,500	D	5,300	D	1,600	D
Bromochloromethane	74-97-5	5	0.20	U	0.20	U	0.20	U
Bromodichloromethane	75-27-4	50	0.20	U	0.20	U	0.20	U
Bromoform	75-25-2	50	0.20	U	0.20	U	0.20	U
Bromomethane	74-83-9	5	0.20	U	0.20	U	0.20	U
Carbon disulfide	75-15-0	~	0.20	U	0.20	U	1.30	
Carbon tetrachloride	56-23-5	5	0.20	U	0.20	U	0.20	U
Chlorobenzene	108-90-7	5	0.20	U	0.20	U	0.20	U
Chloroethane	75-00-3	5	0.20	U	0.20	U	0.20	U
Chloroform	67-66-3	7	0.20	U	0.20	U	0.20	U
Chloromethane	74-87-3	5	0.20	U	0.20	U	0.20	U
cis-1, 2-Dichloroethylene	156-59-2	5	0.20	U	0.20	U	0.20	U
cis-1, 3-Dichloropropylene	10061-01-5	0.400	0.20	U	0.20	U	0.20	U
Cyclohexane	110-82-7	~	390	D	390	D	320	D
Dibromochloromethane	124-48-1	50	0.20	U	0.20	U	0.20	U
Dibromomethane	74-95-3	~	0.20	U	0.20	U	0.20	U
Dichlorodifluoromethane	75-71-8	5	0.20	U	0.20	U	0.20	U
Ethyl Benzene	100-41-4	5	540	D	510	D	220	D
Hexachlorobutadiene	87-68-3	0.500	0.20	U	0.20	U	0.20	U
Isopropylbenzene	98-82-8	5	110		110		63	
Methyl acetate	79-20-9	~	0.200	U	0.200	U	0.200	U
Methyl tert-butyl ether (MTBE)	1634-04-4	10	43		39		19	
Methylcyclohexane	108-87-2	~	390	D	460	D	340	D
Methylene chloride	75-09-2	5	11		4.10		7,400	
n-Butylbenzene	104-51-8	5	13		17		11	
n-Propylbenzene	103-65-1	5	160	E	150	D	95	
o-Xylene	95-47-6	5	1,200	DE	1,100	D	380	D
p- & m- Xylenes	179601-23-1	5	2,300	DE	2,200	DE	720	D
p-Isopropyltoluene	99-87-6	5	21		20		12	
sec-Butylbenzene	135-98-8	5	14		14		9.80	
Styrene	100-42-5	5	0.20	U	0.20	U	0.20	U
tert-Butyl alcohol (TBA)	75-65-0	~	0.50	U	0.50	U	0.50	U
tert-Butylbenzene	98-06-6	5	3.40		3.30		2.60	
Tetrachloroethylene	127-18-4	5	0.20	U	0.20	U	0.20	U
Toluene	108-88-3	5	3,000	DE	3,500	D	740	D
trans-1,2-Dichloroethylene	156-60-5	5	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropylene	10061-02-6	0.400	0.20	U	0.20	U	0.20	U
Trichloroethylene	79-01-6	5	0.20	U	0.20	U	1.70	
Trichlorofluoromethane	75-69-4	5	0.20	U	0.20	U	0.20	U
Vinyl Chloride	75-01-4	2	0.20	U	0.20	U	0.20	U
Xylenes, Total	1330-20-7	5	3,500	D	3,300	D	1,100	D
Volatil Organic, Tentatively Identified Cmpds.		µg/L	µg/L		µg/L		µg/L	
Dilution Factor			1		1		1	
Alkyl substituted benzene isomers	NA	~	82	J	93	J	61	J
alkyl substituted cyclohexane isomer	NA	~	NT		NT		NT	
Alkyl substituted cyclohexane isomers	NA	~	59	J	50	J	87	J
Alkyl Substituted Cyclopentane isomers	NA	~	65	J	64	J	150	J
Alkyl Substituted Cyclopentene isomers	NA	~	47	J	47	J	NT	
Alkyl substituted pentane isomers	NA	~	NT		NT		NT	
Butane (TIC)	NA	~	NT		NT		23	JN
Cyclopentene	NA	~	13	JN	NT		NT	
Cyclopentene (TIC)	NA	~	NT		12	JN	NT	
dimethyl Cyclohexane isomer	NA	~	NT		NT		NT	
Dimethyl Cyclopentane isomer	NA	~	NT		NT		NT	
Heptane (TIC)	NA	~	NT		NT		24	JN
Hexane (TIC)	NA	~	16	JN	15	JN	34	JN
methyl Butane isomer	NA	~	12	J	12	J	24	J
methyl butene isomers	NA	~	48	J	25	J	NT	
methyl Cyclohexane isomer	NA	~	NT		NT		NT	
methyl cyclohexene isomer	108-87-2	~	15	J	13	J	NT	
methyl Cyclopentane isomer	NA	~	NT		NT		NT	
methyl hexane isomers	NA	~	NT		NT		29	J
methyl Pentane isomer	NA	~	NT		NT		NT	
octane (TIC)	NA	~	NT		NT		NT	
Pentane (TIC)	NA	~	NT		NT		23	JN
Tentatively Identified Compounds		~	NT		NT		NT	
unknown alkenes	NA	~	NT		NT		NT	
Metals, Target Analyte, ICP		µg/L	µg/L		µg/L		µg/L	
Dilution Factor			10		10		10	
Aluminum	7429-90-5	~	205,000		6,680		737,000	
Barium	7440-39-3	1,000	2,540		197		4,570	
Calcium	7440-70-2	~	426,000		298,000		670,000	
Chromium	7440-47-3	50	259		10.100		876	
Cobalt	7440-48-4	~	80,500		4,440	U	269	
Copper	7440-50-8	200	335		22.200	U	1,310	
Iron	7439-89-6	~	267,000	D	4,450		654,000	D
Lead	7439-92-1	25	1,720		55,200		5,840	
Magnesium	7439-95-4	35,000	135,000		94,200		213,000	
Manganese	7439-96-5	300	3,050		734		10,200	
Nickel	7440-02-0	100	238		11.100	U	835	
Potassium	7440-09-7	~	84,900	B	60,500	B	177,000	B
Silver	7440-22-4	50	5.56	U	5.56	U	5.56	
Sodium	7440-23-5	20,000	1,690,000	D	1,530,000	D	9,120,000	D
Vanadium	7440-62-2	~	348		32.900		1,270	
Zinc	7440-66-6	2,000	1,500		55.700		7,520	
Metals, Target Analyte, ICPMS		µg/L	µg/L		µg/L		µg/L	
Dilution Factor			1		1		1	
Antimony	7440-36-0	3	4.82		4.57		5.86	
Arsenic	7440-38-2	25	86.500		26.200		272	
Beryllium	7440-41-7	3	1.07		0.33	U	1.36	
Cadmium	7440-43-9	5	2.38		0.56	U	11.80	
Selenium	7782-49-2	10	186		41.800		464	
Thallium	7440-28-0	~	1.83		1.11	U	1.65	
Mercury by 7473		µg/L	µg/L		µg/L		µg/L	
Dilution Factor			1		1		1	
Mercury	7439-97-6	0.700	0.20	U	0.20	U	0.88	
Total Organic Carbon			µg/L		µg/L		µg/L	
Dilution Factor			10		10		10	
Total Organic Carbon (TOC)		~	33,800	D	35,000	D	335,000	D

NOTES:
µg/L - microgram per liter
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar IDs.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
NT=this indicates the analyte was not a target for this sample
~=this indicates that no regulatory limit has been established for this analyte

Table J-3A
Remedial Design Memorandum
Low Contaminant ISCO Effectiveness Test Soil Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number Treatment Jar ID Sampling Date Matrix		NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	9 LC-Control 12/14/2018 Soil		10 LC-Control-DUP 12/14/2018 Soil		11 LC-PS 12/14/2018 Soil		12 LC-PS-DUP 12/14/2018 Soil	
Compound	CAS Number			Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, 8260 - Comprehensive		mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor				100		100		1		100	
1,1,1,2-Tetrachloroethane	630-20-6	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,1,1-Trichloroethane	71-55-6	500	0.680	0.003	U	0.003	U	0.003	U	0.003	U
1,1,2,2-Tetrachloroethane	79-34-5	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,1,2-Trichloroethane	79-00-5	~	~	0.003	U	0.003	U	0.003	U	0.023	
1,1-Dichloroethane	75-34-3	240	0.270	0.003	U	0.003	U	0.003	U	0.003	U
1,1-Dichloroethylene	75-35-4	500	0.330	0.003	U	0.003	U	0.003	U	0.003	U
1,2,3-Trichlorobenzene	87-61-6	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,2,3-Trichloropropane	96-18-4	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,2,4-Trichlorobenzene	120-82-1	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,2,4-Trimethylbenzene	95-63-6	190	3.600	0.660	D	1.30	D	0.14		0.16	
1,2-Dibromo-3-chloropropane	96-12-8	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,2-Dibromoethane	106-93-4	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,2-Dichlorobenzene	95-50-1	500	1.100	0.003	U	0.003	U	0.003	U	0.003	U
1,2-Dichloroethane	107-06-2	30	0.0200	0.003	U	0.003	U	0.003	U	0.003	U
1,2-Dichloropropane	78-87-5	~	~	0.003	U	0.003	U	0.003	U	0.003	U
1,3,5-Trimethylbenzene	108-67-8	190	8.400	0.080		0.430	JD	0.025		0.026	
1,3-Dichlorobenzene	541-73-1	280	2.400	0.003	U	0.003	U	0.003	U	0.003	U
1,4-Dichlorobenzene	106-46-7	130	1.800	0.003	U	0.003	U	0.003	U	0.003	U
1,4-Dioxane	123-91-1	130	0.100	0.059	U	0.057	U	0.059	U	0.058	U
2-Butanone	78-93-3	500	0.120	0.003	U	0.003	U	0.003	U	0.003	U
2-Hexanone	591-78-6	~	~	0.003	U	0.003	U	0.003	U	0.003	U
4-Methyl-2-pentanone	108-10-1	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Acetone	67-64-1	500	0.0500	0.018		0.006	U	0.039		0.044	
Acrolein	107-02-8	~	~	0.006	U	0.006	U	0.006	U	0.006	U
Acrylonitrile	107-13-1	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Benzene	71-43-2	44	0.0600	0.003	U	0.003	U	0.003	U	0.003	U
Bromochloromethane	74-97-5	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Bromodichloromethane	75-27-4	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Bromoform	75-25-2	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Bromomethane	74-83-9	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Carbon disulfide	75-15-0	~	~	0.003	U	0.003	U	0.003	U	0.003	J
Carbon tetrachloride	56-23-5	22	0.760	0.003	U	0.003	U	0.003	U	0.003	U
Chlorobenzene	108-90-7	500	1.100	0.003	U	0.003	U	0.003	U	0.003	U
Chloroethane	75-00-3	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Chloroform	67-66-3	350	0.370	0.003	U	0.003	U	0.003	U	0.003	U
Chloromethane	74-87-3	~	~	0.003	U	0.003	U	0.003	U	0.003	U
cis-1,2-Dichloroethylene	156-59-2	500	0.250	0.003	U	0.003	U	0.003	U	0.003	U
cis-1,3-Dichloropropylene	10061-01-5	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Cyclohexane	110-82-7	~	~	0.120		0.510	JD	0.030		0.075	
Dibromochloromethane	124-48-1	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Dibromomethane	74-95-3	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Dichlorodifluoromethane	75-71-8	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Ethyl Benzene	100-41-4	390	1	0.036		0.180		0.006	J	0.007	
Hexachlorobutadiene	87-68-3	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Isopropylbenzene	98-82-8	~	~	0.011		0.040		0.004	J	0.004	J
Methyl acetate	79-20-9	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Methyl tert-butyl ether (MTBE)	1634-04-4	500	0.930	0.003	U	0.003	U	0.003	U	0.003	U
Methylcyclohexane	108-87-2	~	~	0.700	D	1.40	D	0.099		0.380	JD
Methylene chloride	75-09-2	500	0.0500	0.006	U	0.006	U	0.006	U	0.006	U
n-Butylbenzene	104-51-8	500	12	0.015		0.003	U	0.009		0.026	
n-Propylbenzene	103-65-1	500	3.900	0.038		0.130		0.014		0.017	
o-Xylene	95-47-6	~	~	0.024		0.150		0.003	U	0.003	U
p- & m- Xylenes	179601-23-1	~	~	0.110		0.570	U	0.016		0.021	
p-Isopropyltoluene	99-87-6	~	~	0.006		0.012		0.003	J	0.003	U
sec-Butylbenzene	135-98-8	500	11	0.003	U	0.003	U	0.004	J	0.005	J
Styrene	100-42-5	~	~	0.003	U	0.003	U	0.003	U	0.003	U
tert-Butyl alcohol (TBA)	75-65-0	~	~	0.003	U	0.003	U	0.003	U	0.003	U
tert-Butylbenzene	98-06-6	500	5.900	0.003	U	0.003	U	0.003	U	0.003	U
Tetrachloroethylene	127-18-4	150	1.300	0.003	U	0.003	U	0.003	U	0.003	U
Toluene	108-88-3	500	0.700	0.008		0.042		0.003	U	0.003	U
trans-1,2-Dichloroethylene	156-60-5	500	0.190	0.003	U	0.003	U	0.003	U	0.003	U
trans-1,3-Dichloropropylene	10061-02-6	~	~	0.003	U	0.003	U	0.003	U	0.003	U
trans-1,4-dichloro-2-butene	110-57-6	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Trichloroethylene	79-01-6	200	0.470	0.003	U	0.003	U	0.003	U	0.003	U
Trichlorofluoromethane	75-69-4	~	~	0.003	U	0.003	U	0.003	U	0.003	U
Vinyl Chloride	75-01-4	13	0.0200	0.003	U	0.003	U	0.003	U	0.003	U
Xylenes, Total	1330-20-7	500	0.260	0.13		0.86	U	0.02		0.02	
						5.85		0.63		1.03	
Volatile Organics, Tentatively Identified Cmpds.				mg/kg		mg/kg		mg/kg		mg/kg	
Dilution Factor				1.00		1.00		1.00		1.00	
Alkyl substituted benzene isomers	NA	~	~	0.55	J	NT		0.26	J	0.14	J
Alkyl substituted cyclohexane isomers	NA	~	~	NT		NT		NT		NT	
Decane (TIC)	NA	~	~	NT		NT		NT		0.07	JN
dimethyl Cyclohexane isomer	NA	~	~	0.12	J	NT		0.09	J	0.12	J
dimethyl Heptane isomer	NA	~	~	NT		NT		NT		0.05	J
ethyl cyclohexane	NA	~	~	NT		NT		NT		0.04	J
Heptane (TIC)	NA	~	~	0.13	JN	NT		0.05	JN	0.14	JN
methyl Heptane isomer	NA	~	~	NT		0.01	J	NT		0.27	J
methyl Heptane isomers	NA	~	~	0.25	J	NT		0.09	J	NT	
Methyl Hexane isomer	NA	~	~	NT		NT		0.03	J	NT	
methyl hexane isomers	NA	~	~	0.20	J	NT		NT		0.14	J
methyl Octane isomer	NA	~	~	0.09	J	NT		0.04	J	NT	
methyl octane isomers	NA	~	~	NT		NT		NT		0.17	J
Nonane	111-84-2	~	~	0.10	JN	NT		NT		NT	
Nonane (TIC)	NA	~	~	NT		NT		0.03	JN	0.17	JN
octane (TIC)	NA	~	~	NT		0.01	JN	NT		NT	
Unknown Alkane	NA	~	~	NT		NT		0.04	J	NT	
Unknown alkyl substituted hexene isomer	NA	~	~	NT		NT		NT		NT	

Table J-3A
Remedial Design Memorandum
Low Contaminant ISCO Effectiveness Test Soil Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number Treatment Jar ID Sampling Date Matrix		NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	9 LC-Control 12/14/2018 Soil		10 LC-Control-DUP 12/14/2018 Soil		11 LC-PS 12/14/2018 Soil		12 LC-PS-DUP 12/14/2018 Soil	
Compound	CAS Number			Result	Q	Result	Q	Result	Q	Result	Q
Semi-Volatiles, 8270 - Comprehensive		mg/Kg	mg/Kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor				2.00		2.00		2.00		2.00	
1,1-Biphenyl	92-52-4	~	~	0.05	U	0.05	U	0.05	U	0.05	U
1,2,4,5-Tetrachlorobenzene	95-94-3	~	~	0.10	U	0.10	U	0.10	U	0.10	U
1,2,4-Trichlorobenzene	120-82-1	~	~	0.05	U	0.05	U	0.05	U	0.05	U
1,2-Dichlorobenzene	95-50-1	500	1.100	0.05	U	0.05	U	0.05	U	0.05	U
1,2-Diphenylhydrazine (as Azobenzene)	122-66-7	~	~	0.05	U	0.05	U	0.05	U	0.05	U
1,3-Dichlorobenzene	541-73-1	280	2.400	0.05	U	0.05	U	0.05	U	0.05	U
1,4-Dichlorobenzene	106-46-7	130	1.800	0.05	U	0.05	U	0.05	U	0.05	U
2,3,4,6-Tetrachlorophenol	58-90-2	~	~	0.10	U	0.10	U	0.10	U	0.10	U
2,4,5-Trichlorophenol	95-95-4	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2,4,6-Trichlorophenol	88-06-2	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2,4-Dichlorophenol	120-83-2	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2,4-Dimethylphenol	105-67-9	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2,4-Dinitrophenol	51-28-5	~	~	0.10	U	0.10	U	0.10	U	0.10	U
2,4-Dinitrotoluene	121-14-2	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2,6-Dinitrotoluene	606-20-2	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2-Chloronaphthalene	91-58-7	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2-Chlorophenol	95-57-8	~	~	0.05	U	0.05	U	0.05	U	0.05	U
2-Methylnaphthalene	91-57-6	~	~	0.17	D	0.18	D	0.07	JD	0.05	U
2-Methylphenol	95-48-7	500	0.330	0.05	U	0.05	U	0.05	U	0.05	U
2-Nitroaniline	88-74-4	~	~	0.10	U	0.10	U	0.10	U	0.10	U
2-Nitrophenol	88-75-5	~	~	0.05	U	0.05	U	0.05	U	0.05	U
3- & 4-Methylphenols	65794-96-9	~	~	0.05	U	0.05	U	0.05	U	0.05	U
3,3-Dichlorobenzidine	91-94-1	~	~	0.05	U	0.05	U	0.05	U	0.05	U
3-Nitroaniline	99-09-2	~	~	0.10	U	0.10	U	0.10	U	0.10	U
4,6-Dinitro-2-methylphenol	534-52-1	~	~	0.10	U	0.10	U	0.10	U	0.10	U
4-Bromophenyl phenyl ether	101-55-3	~	~	0.05	U	0.05	U	0.05	U	0.05	U
4-Chloro-3-methylphenol	59-50-7	~	~	0.05	U	0.05	U	0.05	U	0.05	U
4-Chloroaniline	106-47-8	~	~	0.05	U	0.05	U	0.05	U	0.05	U
4-Chlorophenyl phenyl ether	7005-72-3	~	~	0.05	U	0.05	U	0.05	U	0.05	U
4-Nitroaniline	100-01-6	~	~	0.10	U	0.10	U	0.10	U	0.10	U
4-Nitrophenol	100-02-7	~	~	0.10	U	0.10	U	0.10	U	0.10	U
Acenaphthene	83-32-9	500	20	0.05	U	0.05	U	0.05	U	0.05	U
Acenaphthylene	208-96-8	500	100	0.05	U	0.05	U	0.05	U	0.05	U
Acetophenone	98-86-2	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Aniline	62-53-3	~	~	0.20	U	0.19	U	0.20	U	0.19	U
Anthracene	120-12-7	500	100	0.05	U	0.05	U	0.05	U	0.05	U
Atrazine	1912-24-9	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Benzaldehyde	100-52-7	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Benzdine	92-87-5	~	~	0.20	U	0.19	U	0.20	U	0.19	U
Benzo(a)anthracene	56-55-3	5.600	1	0.05	U	0.05	U	0.05	U	0.05	U
Benzo(a)pyrene	50-32-8	1	1	0.05	U	0.05	U	0.05	U	0.05	U
Benzo(b)fluoranthene	205-99-2	5.600	1	0.05	U	0.05	U	0.05	U	0.05	U
Benzo(g,h,i)perylene	191-24-2	500	100	0.05	U	0.05	U	0.05	U	0.05	U
Benzo(k)fluoranthene	207-08-9	56	0.800	0.05	U	0.05	U	0.05	U	0.05	U
Benzoic acid	65-85-0	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Benzyl alcohol	100-51-6	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Benzyl butyl phthalate	85-68-7	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Bis(2-chloroethoxy)methane	111-91-1	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Bis(2-chloroethyl)ether	111-44-4	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Bis(2-chloroisopropyl)ether	108-60-1	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Bis(2-ethylhexyl)phthalate	117-81-7	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Caprolactam	105-60-2	~	~	0.10	U	0.10	U	0.10	U	0.10	U
Carbazole	86-74-8	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Chrysene	218-01-9	56	1	0.05	U	0.05	U	0.05	U	0.05	U
Dibenzo(a,h)anthracene	53-70-3	0.560	0.330	0.05	U	0.05	U	0.05	U	0.05	U
Dibenzofuran	132-64-9	350	7	0.05	U	0.05	U	0.05	U	0.05	U
Diethyl phthalate	84-66-2	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Dimethyl phthalate	131-11-3	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Di-n-butyl phthalate	84-74-2	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Di-n-octyl phthalate	117-84-0	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Fluoranthene	206-44-0	500	100	0.05	U	0.05	U	0.05	U	0.05	U
Fluorene	86-73-7	500	30	0.05	U	0.05	U	0.05	U	0.05	U
Hexachlorobenzene	118-74-1	6	0.330	0.05	U	0.05	U	0.05	U	0.05	U
Hexachlorobutadiene	87-68-3	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Hexachlorocyclopentadiene	77-47-4	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Hexachloroethane	67-72-1	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Indeno(1,2,3-cd)pyrene	193-39-5	5.600	0.500	0.05	U	0.05	U	0.05	U	0.05	U
Isophorone	78-59-1	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Naphthalene	91-20-3	500	12	0.08	JD	0.11	D	0.05	U	0.05	U
Nitrobenzene	98-95-3	~	~	0.05	U	0.05	U	0.05	U	0.05	U
N-Nitrosodimethylamine	62-75-9	~	~	0.05	U	0.05	U	0.05	U	0.05	U
N-nitroso-di-n-propylamine	621-64-7	~	~	0.05	U	0.05	U	0.05	U	0.05	U
N-Nitrosodiphenylamine	86-30-6	~	~	0.05	U	0.05	U	0.05	U	0.05	U
Pentachlorophenol	87-86-5	6.700	0.800	0.05	U	0.05	U	0.05	U	0.05	U
Phenanthrene	85-01-8	500	100	0.05	U	0.05	U	0.05	U	0.05	U
Phenol	108-95-2	500	0.330	0.05	U	0.05	U	0.05	U	0.05	U
Pyrene	129-00-0	500	100	0.05	U	0.05	U	0.05	U	0.05	U
Semi-Volatiles, Tentatively Identified Cmpds.				mg/kg		mg/kg		mg/kg		mg/kg	
Dilution Factor				2		2		2		2	
butene Phenyl isomer	NA	~	~	NT		NT		NT		NT	
decahydro naphthalene isomer	NA	~	~	NT		NT		NT		NT	
decahydro naphthalene isomer	NA	~	~	NT		NT		NT		NT	
Decane	124-18-5	~	~	NT		NT		NT		NT	
dimethyl Heptane isomer	NA	~	~	NT		NT		NT		NT	
dimethyl octane isomer	NA	~	~	NT		NT		NT		NT	
methyl ethyl heptane isomer	NA	~	~	NT		NT		NT		NT	
methyl Octane isomer	NA	~	~	NT		NT		NT		NT	
Nonane	111-84-2	~	~	NT		NT		NT		NT	
Tentatively Identified Compounds		~	~	0	U	0	U	0	U	0	U
Tetramethyl Benzene isomer	NA	~	~	NT		NT		NT		NT	
Total Solids				%		%		%		%	
Dilution Factor				1		1		1		1	
% Solids		solids	~	85		87		84		86	

NOTES:
mg/kg - milligram per kilogram
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar numbers.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
NT= the analyte was not a target for this sample
~= no regulatory limit has been established for this analyte

Table J-3B
Remedial Design Memorandum
Low Contaminant ISCO Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number Treatment Jar ID Sampling Date Client Matrix		NYSDEC TOGS Standards and Guidance Values - GA	9 LC-Control 12/14/2018 Water		10 LC-Control-DUP 12/14/2018 Water		11 LC-PS 12/14/2018 Water		12 LC-PS-DUP 12/14/2018 Water	
Compound	CAS Number		Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, 8260 - Comprehensive		µg/L	µg/L		µg/L		µg/L		µg/L	
Dilution Factor			5		10		5		5	
1,1,1,2-Tetrachloroethane	630-20-6	5	0.20	U	0.40	U	0.20	U	0.20	U
1,1,1-Trichloroethane	71-55-6	5	0.20	U	0.40	U	0.20	U	0.20	U
1,1,2,2-Tetrachloroethane	79-34-5	5	0.20	U	0.40	U	0.20	U	0.20	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	5	0.20	U	0.40	U	0.20	U	0.20	U
1,1,2-Trichloroethane	79-00-5	1	0.20	U	0.40	U	0.20	U	0.20	U
1,1-Dichloroethane	75-34-3	5	0.20	U	0.40	U	0.20	U	0.20	U
1,1-Dichloroethylene	75-35-4	5	0.20	U	0.40	U	0.20	U	0.20	U
1,2,3-Trichlorobenzene	87-61-6	5	0.20	U	0.40	U	0.20	U	0.20	U
1,2,3-Trichloropropane	96-18-4	0.0400	0.20	U	0.40	U	0.20	U	0.20	U
1,2,4-Trichlorobenzene	120-82-1	5	0.20	U	0.40	U	0.20	U	0.20	U
1,2,4-Trimethylbenzene	95-63-6	5	510	D	1,600	DE	150	E	170	D
1,2-Dibromo-3-chloropropane	96-12-8	0.0400	0.20	U	0.40	U	0.20	U	0.20	U
1,2-Dibromoethane	106-93-4	0.00060	0.20	U	0.40	U	0.20	U	0.20	U
1,2-Dichlorobenzene	95-50-1	3	0.20	U	0.40	U	0.20	U	0.20	U
1,2-Dichloroethane	107-06-2	0.600	0.20	U	0.40	U	0.20	U	0.20	U
1,2-Dichloropropane	78-87-5	1	0.20	U	0.40	U	0.20	U	0.20	U
1,3,5-Trimethylbenzene	108-67-8	5	160	E	200	D	20		34	
1,3-Dichlorobenzene	541-73-1	3	0.20	U	0.40	U	0.20	U	0.20	U
1,4-Dichlorobenzene	106-46-7	3	0.20	U	0.40	U	0.20	U	0.20	U
1,4-Dioxane	123-91-1	~	40	U	80	U	40	U	40	U
2-Butanone	78-93-3	50	0.20	U	0.40	U	53		45	
2-Hexanone	591-78-6	50	0.20	U	0.40	U	0.20	U	0.20	U
4-Methyl-2-pentanone	108-10-1	~	0.20	U	0.40	U	0.20	U	0.20	U
Acetone	67-64-1	50	1	U	2	U	250	D	340	D
Acrolein	107-02-8	~	0.20	U	0.40	U	0.20	U	13.00	
Acrylonitrile	107-13-1	~	0.20	U	0.40	U	0.20	U	0.20	U
Benzene	71-43-2	1	6.40		12	D	1.90		2.20	
Bromochloromethane	74-97-5	5	0.20	U	0.40	U	0.20	U	0.20	U
Bromodichloromethane	75-27-4	50	0.20	U	0.40	U	0.20	U	0.20	U
Bromoform	75-25-2	50	0.20	U	0.40	U	0.20	U	0.20	U
Bromomethane	74-83-9	5	0.20	U	0.40	U	0.20	U	0.20	U
Carbon disulfide	75-15-0	~	0.20	U	0.40	U	9.90		11.00	
Carbon tetrachloride	56-23-5	5	0.20	U	0.40	U	0.20	U	0.20	U
Chlorobenzene	108-90-7	5	0.20	U	0.40	U	0.20	U	0.20	U
Chloroethane	75-00-3	5	0.20	U	0.40	U	0.20	U	0.20	U
Chloroform	67-66-3	7	0.20	U	0.40	U	0.20	U	0.20	U
Chloromethane	74-87-3	5	0.20	U	0.40	U	0.20	U	0.20	U
cis-1,2-Dichloroethylene	156-59-2	5	0.20	U	0.40	U	0.20	U	0.20	U
cis-1,3-Dichloropropylene	10061-01-5	0.400	0.20	U	0.40	U	0.20	U	0.20	U
Cyclohexane	110-82-7	~	130	E	240	D	58		71	
Dibromochloromethane	124-48-1	50	0.20	U	0.40	U	0.20	U	0.20	U
Dibromomethane	74-95-3	~	0.20	U	0.40	U	0.20	U	0.20	U
Dichlorodifluoromethane	75-71-8	5	0.20	U	0.40	U	0.20	U	0.20	U
Ethyl Benzene	100-41-4	5	110		190	D	15		20	
Hexachlorobutadiene	87-68-3	0.500	0.20	U	0.40	U	0.20	U	0.20	U
Isopropylbenzene	98-82-8	5	18		30	D	6		7.200	
Methyl acetate	79-20-9	~	0.20	U	0.40	U	0.20	U	0.20	U
Methyl tert-butyl ether (MTBE)	1634-04-4	10	0.20	U	0.40	U	0.20	U	0.20	U
Methylcyclohexane	108-87-2	~	230	D	540	D	150	E	130	D
Methylene chloride	75-09-2	5	1.00	U	2.00	U	5.00		3.10	
n-Butylbenzene	104-51-8	5	9.60		11	D	6.90		8.60	
n-Propylbenzene	103-65-1	5	60		85	D	20		25	
o-Xylene	95-47-6	5	70		200	D	4.70		6.80	
p- & m- Xylenes	179601-23-1	5	290	E	540	DE	37		55	
p-Isopropyltoluene	99-87-6	5	5.40		5.80	D	2.60		3.20	
sec-Butylbenzene	135-98-8	5	0.20	U	0.40	U	0.20	U	0.20	U
Styrene	100-42-5	5	0.20	U	0.40	U	0.20	U	0.20	U
tert-Butyl alcohol (TBA)	75-65-0	~	0.50	U	1.00	U	6.60		3.10	
tert-Butylbenzene	98-06-6	5	0.20	U	0.40	U	0.35	J	0.20	
Tetrachloroethylene	127-18-4	5	0.20	U	0.40	U	0.20	U	0.20	U
Toluene	108-88-3	5	42		120	D	1.80		2.80	
trans-1,2-Dichloroethylene	156-60-5	5	0.20	U	0.40	U	0.20	U	0.20	U
trans-1,3-Dichloropropylene	10061-02-6	0.400	0.20	U	0.40	U	0.20	U	0.20	U
trans-1,4-dichloro-2-butene	110-57-6	~	0.20	U	0.40	U	0.20	U	0.20	U
Trichloroethylene	79-01-6	5	0.20	U	0.40	U	0.51		0.42	J
Trichlorofluoromethane	75-69-4	5	0.20	U	0.40	U	0.20	U	0.20	U

Table J-3B
Remedial Design Memorandum
Low Contaminant ISCO Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number Treatment Jar ID Sampling Date Client Matrix		NYSDEC TOGS Standards and Guidance Values - GA	9 LC-Control 12/14/2018 Water	10 LC-Control-DUP 12/14/2018 Water	11 LC-PS 12/14/2018 Water	12 LC-PS-DUP 12/14/2018 Water
Compound	CAS Number		Result	Result	Result	Result
Vinyl Chloride	75-01-4	2	0.20	0.40	0.20	0.20
Xylenes, Total	1330-20-7	5	360	740	42	61

Table J-3B
Remedial Design Memorandum
Low Contaminant ISCO Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number Treatment Jar ID Sampling Date Client Matrix		NYSDEC TOGS Standards and Guidance Values - GA	9 LC-Control 12/14/2018 Water		10 LC-Control-DUP 12/14/2018 Water		11 LC-PS 12/14/2018 Water		12 LC-PS-DUP 12/14/2018 Water	
Compound	CAS Number		Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, Tentatively Identified Cmpds.			µg/L		µg/L		µg/L		µg/L	
Dilution Factor			1		2		1		1	
Alkyl substituted benzene isomers	NA	~	870	J	1,100	JD	220	J	370	J
alkyl substituted cyclohexane isomer	NA	~	29	J	NT		NT		NT	
Alkyl substituted cyclohexane isomers	NA	~	NT		22	JD	NT		NT	
Alkyl Substituted Cyclopentane isomers	NA	~	78	J	NT		27	J	NT	
Alkyl Substituted Cyclopentene isomers	NA	~	NT		150	JD	NT		NT	
Alkyl substituted pentane isomers	NA	~	23	J	NT		NT		NT	
Butane (TIC)	NA	~	NT		NT		NT		NT	
Cyclopentene	NA	~	NT		NT		NT		NT	
Cyclopentene (TIC)	NA	~	NT		NT		NT		NT	
dimethyl Cyclohexane isomer	NA	~	NT		NT		22	J	28	J
Dimethyl Cyclopentane isomer	NA	~	NT		NT		NT		20	J
Heptane (TIC)	NA	~	NT		NT		19	JN	27	JN
Hexane (TIC)	NA	~	NT		22	JDN	18	JN	24	JN
methyl Butane isomer	NA	~	NT		NT		NT		NT	
methyl butene isomers	NA	~	NT		NT		NT		NT	
methyl Cyclohexane isomer	NA	~	NT		NT		NT		22	J
methyl cyclohexene isomer	108-87-2	~	NT		NT		NT		NT	
methyl Cyclopentane isomer	NA	~	NT		NT		16	J	21	J
methyl hexane isomers	NA	~	NT		NT		30	J	NT	
methyl Pentane isomer	NA	~	NT		NT		11	J	NT	
octane (TIC)	NA	~	NT		NT		13	JN	18	JN
Pentane (TIC)	NA	~	NT		NT		NT		NT	
Tentatively Identified Compounds		~	NT		NT		NT		NT	
unknown alkenes	NA	~	44	J	NT		NT		NT	
Metals, Target Analyte, ICP		µg/L	µg/L		µg/L		µg/L		µg/L	
Dilution Factor			10		1		50		50	
Aluminum	7429-90-5	~	155,000		150,000		1,030,000		1,570,000	
Barium	7440-39-3	1,000	814		1,170		3,300		5,300	
Calcium	7440-70-2	~	117,000		131,000		190,000		187,000	
Chromium	7440-47-3	50	199		175		1,250		1,850	
Cobalt	7440-48-4	~	53		47		316		438	
Copper	7440-50-8	200	289		277		1,720		2,470	
Iron	7439-89-6	~	156,000	D	97,300		963,000	D	1,780,000	D
Lead	7439-92-1	25	193		266		743		1,160	
Magnesium	7439-95-4	35,000	66,600		60,500		155,000		212,000	
Manganese	7439-96-5	300	1,780		2,010		6,610		8,710	
Nickel	7440-02-0	100	166		121		1,020		1,560	
Potassium	7440-09-7	~	56,400	B	55,000	B	171,000	B	234,000	B
Silver	7440-22-4	50	5,560	U	5,560	U	5,560	U	5,560	U
Sodium	7440-23-5	20,000	1,220,000		1,270,000		4,660,000	D	5,110,000	D
Vanadium	7440-62-2	~	289		375		1,770		2,590	
Zinc	7440-66-6	2,000	428		378		2,320		3,410	
Metals, Target Analyte, ICPMS		µg/L	µg/L		µg/L		µg/L		µg/L	
Dilution Factor			1		1		1		1	
Antimony	7440-36-0	3	1.12		1.11	U	3.1		3.7	
Arsenic	7440-38-2	25	55		44		328		492	
Beryllium	7440-41-7	3	1.31		2.59		1.40		1.24	
Cadmium	7440-43-9	5	0.82		1.16		4.61		5.9	
Selenium	7782-49-2	10	215		264		511		562	
Thallium	7440-28-0	~	1.11	U	1.11	U	1.85		2.72	
Mercury by 7473		µg/L	µg/L		µg/L		µg/L		µg/L	
Dilution Factor			1		1		1		1	
Mercury	7439-97-6	0.700	0.20	U	0.20	U	0.20	U	0.20	U
Total Organic Carbon			µg/L		µg/L		µg/L		µg/L	
Dilution Factor			1		1		10		10	
Total Organic Carbon (TOC)		~	12,500		11,000		229,000	D	268,000	D

NOTES:

µg/L - microgram per liter

Indicates that the detection limit exceeds the regulatory limit.

Indicates that the value exceeds the regulatory limit

Q is the Qualifier Column with definitions as follows:

D=result is from an analysis that required a dilution

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

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

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

Table J-3B
Remedial Design Memorandum
Low Contaminant ISCO Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC TOGS Standards and Guidance Values - GA	9		10		11		12	
Treatment Jar ID			LC-Control		LC-Control-DUP		LC-PS		LC-PS-DUP	
Sampling Date			12/14/2018		12/14/2018		12/14/2018		12/14/2018	
Client Matrix			Water		Water		Water		Water	
Compound	CAS Number		Result	Q	Result	Q	Result	Q	Result	Q

NT= the analyte was not a target for this sample

~=no regulatory limit has been established for this analyte

APPENDIX K

GAC Effectiveness Test Documentation

Table K-1
Remedial Design Memorandum
GAC Test Results- pH, ORP

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number	Treatment Jar ID	pH	ORP
		S.U.	mV
High Contaminant			
17	HC_Control	7.53	53
18	HC_Control_DUP	7.72	52
19	HC_GAC_High	7.95	-139
20	HC_GAC_High_DUP	7.76	-125
21	HC_GAC_Low	7.67	-135
22	HC_GAC_Low_DUP	7.71	-59
Low Contaminant			
23	LC_Control	6.92	15
24	LC_Control_DUP	6.88	15
25	LC_GAC_High	6.97	-103
26	LC_GAC_High_DUP	6.94	-82
27	LC_GAC_Low	7.17	-73
28	LC_GAC_Low_DUP	7.15	-63

Notes:

g/kg: gram per kilogram

g/L: gram per liter

S.U.: Standard Units

GAC : granular activated carbon

mV: millivolt

1. pH and residual oxidant results were performed at NJIT.

2. Refer to Tables 1, 2, and 3 for descriptions of Treatment Jar IDs.

Table K-2A
Remedial Design Memorandum
High Contaminant GAC Effectiveness Test Soil Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	17		18		19		20		21		22	
Treatment Jar ID				HC_Control		HC_Control_DUP		HC_GAC_High		HC_GAC_High_DUP		HC_GAC_Low		HC_GAC_Low_DUP	
Sampling Date				1/18/2019		1/18/2019		1/18/2019		1/18/2019		1/18/2019		1/18/2019	
Client Matrix				Soil		Soil		Soil		Soil		Soil		Soil	
Compound	CAS Number			Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, 8260 - Comprehensive		mg/Kg	mg/Kg												
Dilution Factor				100		100		100		100		100		100	
1,1,1,2-Tetrachloroethane	630-20-6	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,1,1-Trichloroethane	71-55-6	500	0.680	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,1,2,2-Tetrachloroethane	79-34-5	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,1,2-Trichloroethane	79-00-5	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,1-Dichloroethane	75-34-3	240	0.270	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,1-Dichloroethylene	75-35-4	500	0.330	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2,3-Trichlorobenzene	87-61-6	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2,3-Trichloropropane	96-18-4	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2,4-Trichlorobenzene	120-82-1	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2,4-Trimethylbenzene	95-63-6	190	3.600	5.10	D	6.60	D	0.69	D	1.20	D	1.60	D	5.10	D
1,2-Dibromo-3-chloropropane	96-12-8	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2-Dibromoethane	106-93-4	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2-Dichlorobenzene	95-50-1	500	1.100	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2-Dichloroethane	107-06-2	30	0.0200	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,2-Dichloropropane	78-87-5	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,3,5-Trimethylbenzene	108-67-8	190	8.400	2.10	D	2.60	D	0.51	D	0.78	D	0.92	D	2.10	D
1,3-Dichlorobenzene	541-73-1	280	2.400	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,4-Dichlorobenzene	106-46-7	130	1.800	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
1,4-Dioxane	123-91-1	130	0.100	3.70	U	4.30	U	4.60	U	4.00	U	3.60	U	4.00	U
2-Butanone	78-93-3	500	0.120	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
2-Hexanone	591-78-6	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
4-Methyl-2-pentanone	108-10-1	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Acetone	67-64-1	500	0.0500	0.37	U	0.43	U	0.46	U	0.40	U	0.36	U	0.40	U
Acrolein	107-02-8	~	~	0.37	U	0.43	U	0.46	U	0.40	U	0.36	U	0.40	U
Acrylonitrile	107-13-1	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Benzene	71-43-2	44	0.0600	0.71	D	0.90	D	2.30	D	2.60	D	2.70	D	0.91	D
Bromochloromethane	74-97-5	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Bromodichloromethane	75-27-4	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Bromoform	75-25-2	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Bromomethane	74-83-9	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Carbon disulfide	75-15-0	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Carbon tetrachloride	56-23-5	22	0.760	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Chlorobenzene	108-90-7	500	1.100	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Chloroethane	75-00-3	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Chloroform	67-66-3	350	0.370	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Chloromethane	74-87-3	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
cis-1,2-Dichloroethylene	156-59-2	500	0.250	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
cis-1,3-Dichloropropylene	10061-01-5	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Cyclohexane	110-82-7	~	~	1.20	D	1.50	D	2.60	D	1.70	D	1.90	D	1.50	D
Dibromochloromethane	124-48-1	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Dibromomethane	74-95-3	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Dichlorodifluoromethane	75-71-8	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Ethyl Benzene	100-41-4	390	1	0.79	D	1.20	D	0.93	D	0.89	D	1.10	D	1.20	D
Hexachlorobutadiene	87-68-3	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Isopropylbenzene	98-82-8	~	~	0.47	D	0.63	D	0.43	JD	0.40	JD	0.51	D	0.62	D
Methyl acetate	79-20-9	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Methyl tert-butyl ether (MTBE)	1634-04-4	500	0.930	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Methylcyclohexane	108-87-2	~	~	11.00	D	12.00	D	11.00	D	9.20	D	11.00	D	12.00	D
Methylene chloride	75-09-2	500	0.0500	0.37	U	0.43	U	0.46	U	0.40	U	0.36	U	0.40	U
n-Butylbenzene	104-51-8	500	12	0.66	D	0.67	D	0.23	U	0.20	U	0.21	JD	0.59	D
n-Propylbenzene	103-65-1	500	3.900	0.98	D	1.30	D	0.43	JD	0.52	D	0.68	D	1.20	D
o-Xylene	95-47-6	~	~	1.80	D	2.60	D	0.79	D	1.00	D	1.40	D	2.20	D
p- & m- Xylenes	179601-23-1	~	~	4.40	D	6.40	D	2.50	D	2.80	D	3.70	D	6.10	D
p-Isopropyltoluene	99-87-6	~	~	0.38	D	0.43	JD	0.23	U	0.20	U	0.22	JD	0.39	JD
sec-Butylbenzene	135-98-8	500	11	0.28	JD	0.32	JD	0.23	U	0.20	U	0.18	U	0.30	JD
Styrene	100-42-5	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
tert-Butyl alcohol (TBA)	75-65-0	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
tert-Butylbenzene	98-06-6	500	5.900	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Tetrachloroethylene	127-18-4	150	1.300	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Toluene	108-88-3	500	0.700	2.10	D	2.60	D	2.70	D	3.10	D	3.80	D	2.60	D
trans-1,2-Dichloroethylene	156-60-5	500	0.190	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
trans-1,3-Dichloropropylene	10061-02-6	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
trans-1,4-dichloro-2-butene	110-57-6	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Trichloroethylene	79-01-6	200	0.470	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Trichlorofluoromethane	75-69-4	~	~	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Vinyl Chloride	75-01-4	13	0.0200	0.18	U	0.21	U	0.23	U	0.20	U	0.18	U	0.20	U
Xylenes, Total	1330-20-7	500	0.260	6.20	D	9.00	D	3.20	D	3.80	D	5.10	D	8.30	D
Total Solids				%		%		%		%		%		%	
Dilution Factor				1		1		1		1		1		1	
% Solids		solids	~	~		78.70		76.20		77.90		76.10		77.00	

NOTES:
mg/kg - milligram per kilogram
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar IDs.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
NT= the analyte was not a target for this sample
~= no regulatory limit has been established for this analyte

Table K-2B
Remedial Design Memorandum
High Contaminant GAC Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC TOGS	17	18	19	20	21	22
Treatment Jar ID		Standards and	HC Control	HC_Control_DUP	HC_GAC_High	HC_GAC_High_DUP	HC_GAC_Low	HC_GAC_Low_DUP
Sampling Date		Guidance Values -	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019
Client Matrix		GA	Water	Water	Water	Water	Water	Water
Compound	CAS Number	µg/L	Result	Q	Result	Q	Result	Q
VOA, 8260 LOW MASTER			µg/L		µg/L		µg/L	
Dilution Factor			50		50		50	
1,1,1,2-Tetrachloroethane	630-20-6	5	2	U	2	U	2	U
1,1,1-Trichloroethane	71-55-6	5	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	79-34-5	5	2	U	2	U	2	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	5	2	U	2	U	2	U
1,1,2-Trichloroethane	79-00-5	1	2	U	2	U	2	U
1,1-Dichloroethane	75-34-3	5	2	U	2	U	2	U
1,1-Dichloroethylene	75-35-4	5	2	U	2	U	2	U
1,2,3-Trichlorobenzene	87-61-6	5	2	U	2	U	2	U
1,2,3-Trichloropropane	96-18-4	0.0400	2	U	2	U	2	0.20
1,2,4-Trichlorobenzene	120-82-1	5	2	U	2	U	2	0.20
1,2,4-Trimethylbenzene	95-63-6	5	515	D	718	D	594	D
1,2-Dibromo-3-chloropropane	96-12-8	0.0400	2	U	2	U	2	0.20
1,2-Dibromoethane	106-93-4	0.00060	2	U	2	U	2	0.20
1,2-Dichlorobenzene	95-50-1	3	2	U	2	U	2	0.20
1,2-Dichloroethane	107-06-2	0.600	2	U	2	U	2	0.20
1,2-Dichloropropane	78-87-5	1	2	U	2	U	2	0.20
1,3,5-Trimethylbenzene	108-67-8	5	190	D	253	D	225	D
1,3-Dichlorobenzene	541-73-1	3	2	U	2	U	2	0.20
1,4-Dichlorobenzene	106-46-7	3	2	U	2	U	2	0.20
1,4-Dioxane	123-91-1	~	400	U	400	U	400	40
2-Butanone	78-93-3	50	21,200	D	16	D	6,700	D
2-Hexanone	591-78-6	50	2	U	2	U	2	0.20
4-Methyl-2-pentanone	108-10-1	~	2	U	2	U	2	0.20
Acetone	67-64-1	50	44,200	D	36,200	D	14,400	JD
Acrolein	107-02-8	~	2	U	2	U	2	0.20
Acrylonitrile	107-13-1	~	2	U	2	U	2	0.20
Benzene	71-43-2	1	4,360	D	4,920	D	2,870	D
Bromochloromethane	74-97-5	5	2	U	2	U	2	0.20
Bromodichloromethane	75-27-4	50	2	U	2	U	2	0.20
Bromoform	75-25-2	50	2	U	2	U	2	0.20
Bromomethane	74-83-9	5	2	U	2	U	2	0.20
Carbon disulfide	75-15-0	~	2	U	2	U	2	0.20
Carbon tetrachloride	56-23-5	5	2	U	2	U	2	0.20
Chlorobenzene	108-90-7	5	2	U	2	U	2	0.20
Chloroethane	75-00-3	5	2	U	2	U	2	0.20
Chloroform	67-66-3	7	2	U	2	U	2	0.20
Chloromethane	74-87-3	5	2	U	2	U	2	0.20
cis-1,2-Dichloroethylene	156-59-2	5	2	U	2	U	2	0.20
cis-1,3-Dichloropropylene	10061-01-5	0.400	2	U	2	U	2	0.20
Cyclohexane	110-82-7	~	272	D	372	D	351	D
Dibromochloromethane	124-48-1	50	2	U	2	U	2	0.20
Dibromomethane	74-95-3	~	2	U	2	U	2	0.20
Dichlorodifluoromethane	75-71-8	5	2	U	2	U	2	0.20
Ethyl Benzene	100-41-4	5	248	D	389	D	254	D
Hexachlorobutadiene	87-68-3	0.500	2	U	2	U	2	0.20
Isopropylbenzene	98-82-8	5	49	D	78	D	61	D
Methyl acetate	79-20-9	~	2	U	2	U	2	0.20
Methyl tert-butyl ether (MTBE)	1634-04-4	10	32.1	D	32.0	D	21.4	D
Methylcyclohexane	108-87-2	~	381	D	436	D	457	D
Methylene chloride	75-09-2	5	15	JD	12	JD	10	U
n-Butylbenzene	104-51-8	5	13	D	19	D	17	D
n-Propylbenzene	103-65-1	5	80	D	123	D	93	D
o-Xylene	95-47-6	5	627	D	854	D	631	D
p- & m- Xylenes	179601-23-1	5	1,220	D	1,740	D	1,290	D
p-Isopropyltoluene	99-87-6	5	13	D	16	D	15	D
sec-Butylbenzene	135-98-8	5	9	D	11	D	11	D
Styrene	100-42-5	5	2	U	2	U	2	0.20
tert-Butyl alcohol (TBA)	75-65-0	~	5	U	5	U	5	0.50
tert-Butylbenzene	98-06-6	5	2	U	2,500	JD	2,400	JD
Tetrachloroethylene	127-18-4	5	2	U	2	U	2	0.20
Toluene	108-88-3	5	2,660	D	3,120	D	1,920	D
trans-1,2-Dichloroethylene	156-60-5	5	2	U	2	U	2	0.20
trans-1,3-Dichloropropylene	10061-02-6	0.400	2	U	2	U	2	0.20
Trichloroethylene	79-01-6	5	8.8	D	7.9	D	3.30	JD
Trichlorofluoromethane	75-69-4	5	2	U	2	U	2	0.20
Vinyl Chloride	75-01-4	2	2	U	2	U	2	0.20
Xylenes, Total	1330-20-7	5	1,840	D	2,600	D	1,920	D
Total Organic Carbon			µg/L		µg/L		µg/L	
Dilution Factor			1		1		1	
Total Organic Carbon (TOC)		~	27,200		26,500		14,600	

NOTES:
µg/L - microgram per liter
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar IDs.
GAC jars were compared to the Control jars set up with the GAC test, and Persulfate + GAC jars were compared to the Control jars set up with the ISCO test.
Ascorbic acid was added to jars amended with persulfate and GAC, which contributed to the high TOC values for these jars.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
NT= the analyte was not a target for this sample
~=no regulatory limit has been established for this analyte

Table K-3A
Remedial Design Memorandum
Low Contaminant GAC Effectiveness Test Soil Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	23	24	25	26	27	28
Treatment Jar ID				LC_Control (GAC)	LC_Control_DUP (GAC)	LC_GAC_High	LC_GAC_High_DUP	LC_GAC_Low	LC_GAC_Low_DUP
Sampling Date				1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019
Matrix				Soil	Soil	Soil	Soil	Soil	Soil
Compound	CAS Number			Result	Q	Result	Q	Result	Q
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
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mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
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mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
mg/Kg		mg/Kg		mg/Kg					

NOTES:
mg/kg - milligram per kilogram
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar IDs.
GAC jars were compared to the Control jars set up with the GAC test, and Persulfate + GAC jars were compared to the Control jars set up with the ISCO test.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
NT= the analyte was not a target for this sample
~= no regulatory limit has been established for this analyte

Table K-3B
Remedial Design Memorandum
Low Contaminant GAC Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number Treatment Jar ID Sampling Date Client Matrix		NYSDEC TOGS Standards and Guidance Values GA	23	24	25	26	27	28						
			LC_Control (GAC)	LC_Control_DUP (GAC)	LC_GAC_High	LC_GAC_High_DUP	LC_GAC_Low	LC_GAC_Low_DUP						
			1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019	1/18/2019						
		Water	Water	Water	Water	Water	Water	Water						
Compound	CAS Number	GA	Result	Q	Result	Q	Result	Q	Result	Q				
VOA, 8260 LOW MASTER		µg/L	µg/L		µg/L		µg/L		µg/L					
Dilution Factor			10		10		2		10		25			
1,1,1,2-Tetrachloroethane	630-20-6	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,1,1-Trichloroethane	71-55-6	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,1,2,2-Tetrachloroethane	79-34-5	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,1,2-Trichloroethane	79-00-5	1	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,1-Dichloroethane	75-34-3	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,1-Dichloroethylene	75-35-4	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,2,3-Trichlorobenzene	87-61-6	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,2,3-Trichloropropane	96-18-4	0.0400	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,2,4-Trichlorobenzene	120-82-1	5	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U		
1,2,4-Trimethylbenzene	95-63-6	5	226	D	310	D	316	D	234	D	306	D	563	
1,2-Dibromo-3-chloropropane	96-12-8	0.0400	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
1,2-Dibromoethane	106-93-4	0.00060	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
1,2-Dichlorobenzene	95-50-1	3	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
1,2-Dichloroethane	107-06-2	0.600	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
1,2-Dichloropropane	78-87-5	1	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
1,3,5-Trimethylbenzene	108-67-8	5	68		90		91	D	118		105		138	D
1,3-Dichlorobenzene	541-73-1	3	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
1,4-Dichlorobenzene	106-46-7	3	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
1,4-Dioxane	123-91-1	~	40	U	40	U	80	U	40	U	40	U	80	U
2-Butanone	78-93-3	50	2.12	U	2.05	U	0.90	JD	0.68	U	0.67	U	1.52	D
2-Hexanone	591-78-6	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
4-Methyl-2-pentanone	108-10-1	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Acetone	67-64-1	50	6	U	6	U	4	JD	3	U	3	U	4	D
Acrolein	107-02-8	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Acrylonitrile	107-13-1	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Benzene	71-43-2	1	0.54	U	0.78	U	0.86	JD	0.20	U	0.20	U	1.32	D
Bromochloromethane	74-97-5	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Bromodichloromethane	75-27-4	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Bromoform	75-25-2	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Bromomethane	74-83-9	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Carbon disulfide	75-15-0	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Carbon tetrachloride	56-23-5	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Chlorobenzene	108-90-7	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Chloroethane	75-00-3	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Chloroform	67-66-3	7	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Chloromethane	74-87-3	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
cis-1,2-Dichloroethylene	156-59-2	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
cis-1,3-Dichloropropylene	10061-01-5	0.400	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Cyclohexane	110-82-7	~	51	U	63	U	87	D	101	U	78	U	132	D
Dibromochloromethane	124-48-1	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Dibromomethane	74-95-3	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Dichlorodifluoromethane	75-71-8	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Ethyl Benzene	100-41-4	5	12		29		48	D	4		13		61	D
Hexachlorobutadiene	87-68-3	0.500	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Isopropylbenzene	98-82-8	5	3.3	U	6.1	U	7.0	D	2.2	U	2.4	U	7.3	D
Methyl acetate	79-20-9	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Methyl tert-butyl ether (MTBE)	1634-04-4	10	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Methylcyclohexane	108-87-2	~	172	D	192	D	173	D	255	D	203	D	252	D
Methylene chloride	75-09-2	5	6.9		5.0		2.0	JD	1.7	J	2.3		2.9	JD
n-Butylbenzene	104-51-8	5	5.0		9.1		6.7	D	6.8		6.2		10.1	D
n-Propylbenzene	103-65-1	5	12		20		20	D	9		8		21	D
o-Xylene	95-47-6	5	16		31		47	D	60		39		86	D
p- & m- Xylenes	179601-23-1	5	63		123		175	D	168		149		298	D
p-Isopropyltoluene	99-87-6	5	2.63	U	3.19	U	3.16	D	4.10	U	3.99	U	4.26	D
sec-Butylbenzene	135-98-8	5	1.82	U	2.49	U	2.82	D	2.48	U	2.39	U	3.28	D
Styrene	100-42-5	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
tert-Butyl alcohol (TBA)	75-65-0	~	0.50	U	0.50	U	1.00	U	0.50	U	0.50	U	1.00	U
tert-Butylbenzene	98-06-6	5	0.20	U	0.20	U	0.40	U	0.54	U	0.40	J	0.40	U
Tetrachloroethylene	127-18-4	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Toluene	108-88-3	5	3.06	U	8.59	U	15.60	D	8.33	U	8.21	U	26.40	D
trans-1,2-Dichloroethylene	156-60-5	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
trans-1,3-Dichloropropylene	10061-02-6	0.400	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Trichloroethylene	79-01-6	5	6.42		6.02		0.40	U	1.91	U	2.14	U	2.04	D
Trichlorofluoromethane	75-69-4	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Vinyl Chloride	75-01-4	2	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U
Xylenes, Total	1330-20-7	5	79		154		222	D	228		188		384	D
Total Organic Carbon			µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Dilution Factor			1		1		1		1		1		1	
Total Organic Carbon (TOC)		~	10,300		11,000		6,640		7,430		7,010		6,960	

NOTES:
µg/L - microgram per liter
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar IDs.
GAC jars were compared to the Control jars set up with the GAC test, and Persulfate + GAC jars were compared to the Control jars set up with the ISCO test.
Ascorbic acid was added to Persulfate + GAC jars, which contributed to the high TOC values for these jars.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
NT= the analyte was not a target for this sample
~=no regulatory limit has been established for this analyte

APPENDIX L

**ISCO and GAC Effectiveness Test
Documentation**

Table L-1
Remedial Design Memorandum
ISCO and GAC Test Results- pH, ORP, SOD

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number	Treatment Jar ID	pH	ORP	SOD	
	<i>Unit</i>	<i>S.U.</i>	<i>mV</i>	<i>g/kg wet soil</i>	<i>g/kg dry soil</i>
High Contaminant					
After ISCO and Before GAC Addition-Week 7					
1	HC_Control	7.9	-	-	-
2	HC_Control_DUP	7.95	-	-	-
5	HC_P+GAC_High	7.72	268	16.59	20.48
6	HC_P+GAC_High_DUP	7.41	286	17.11	21.12
7	HC_P+GAC_Low	7.72	293	16.53	20.41
Final Measurment - Week 9					
17	HC_Control	7.53	53	-	-
18	HC_Control_DUP	7.72	52	-	-
5	HC_P+GAC_High	6.51	-244	-	-
6	HC_P+GAC_High_DUP	6.75	-199	-	-
7	HC_P+GAC_Low	6.60	-210	-	-
Low Contaminant					
After ISCO and Before GAC Addition - Week 7					
9	LC_Control	7.09	-	-	-
10	LC_Control_DUP	7.17	-	-	-
X3	LC_P+GAC_High_12.19.18	10.34	83	5.88	6.69
X4	LC_P+GAC_High_DUP_12.19.18	10.7	105	5.89	6.70
15	LC_P+GAC_Low	9.32	169	7.61	8.65
16	LC_P+GAC_Low_DUP	9.21	179	7.64	8.69
Final Measurment - Week 9					
23	LC_Control	6.92	15	-	-
24	LC_Control_DUP	6.88	15	-	-
X3	LC_P+GAC_High_12.19.18	5.24	-75	-	-
X4	LC_P+GAC_High_DUP_12.19.18	5.17	-92	-	-
7	HC_P+GAC_Low	6.60	-210	-	-
15	LC_P+GAC_Low	6.14	-160	-	-
16	LC_P+GAC_Low_DUP	6.21	-74	-	-

#REF!

Table L-1
Remedial Design Memorandum
ISCO and GAC Test Results- pH, ORP, SOD

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Notes:

-	N/A

g/kg: gram per kilogram

g/L: gram per liter

S.U.: Standard Units

1. pH and residual oxidant results were performed at NJIT.
2. The oxidant measurement calibration curve, residual oxidant results and SOD analysis details are provided in Attachment E.
3. The final pH is shown on the table.
4. Refer to Tables 1, 2, and 3 for descriptions of Treatment Jar IDs.

Table L-2A
Remedial Design Memorandum
High Contaminant ISCO and GAC Effectiveness Test Soil Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	1		2		5		6		7	
Treatment Jar ID				HC-Control (ISCO)		HC-Control-DUP (ISCO)		HC_P+GAC_High		HC_P+GAC_High_DUP		HC_P+GAC_Low	
Sampling Date				12/14/2018		12/14/2018		1/18/2019		1/18/2019		1/18/2019	
Client Matrix				Soil		Soil		Soil		Soil		Soil	
Compound	CAS Number			Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics, 8260 - Comprehensive		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Dilution Factor													
1,1,1,2-Tetrachloroethane	630-20-6	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,1,1-Trichloroethane	71-55-6	500	0.680	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,1,2,2-Tetrachloroethane	79-34-5	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,1,2-Trichloroethane	79-00-5	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,1-Dichloroethane	75-34-3	240	0.270	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,1-Dichloroethylene	75-35-4	500	0.330	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2,3-Trichlorobenzene	87-61-6	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2,3-Trichloropropane	96-18-4	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2,4-Trichlorobenzene	120-82-1	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2,4-Trimethylbenzene	95-63-6	190	3.600	9.30	D	6.20	D	0.58	D	1.30	D	1.40	D
1,2-Dibromo-3-chloropropane	96-12-8	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2-Dibromoethane	106-93-4	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2-Dichlorobenzene	95-50-1	500	1.100	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2-Dichloroethane	107-06-2	30	0.0200	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,2-Dichloropropane	78-87-5	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,3,5-Trimethylbenzene	108-67-8	190	8.400	4.20	D	2.70	D	0.37	JD	0.67	D	0.76	D
1,3-Dichlorobenzene	541-73-1	280	2.400	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,4-Dichlorobenzene	106-46-7	130	1.800	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
1,4-Dioxane	123-91-1	130	0.100	6.10	U	6.10	U	3.80	U	4.40	U	4.30	U
2-Butanone	78-93-3	500	0.120	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
2-Hexanone	591-78-6	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
4-Methyl-2-pentanone	108-10-1	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Acetone	67-64-1	500	0.0500	0.61	U	0.61	U	0.38	U	0.44	U	0.43	U
Acrolein	107-02-8	~		0.61	U	0.61	U	0.38	U	0.44	U	0.43	U
Acrylonitrile	107-13-1	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Benzene	71-43-2	44	0.0600	2.10	D	1.60	D	1.40	D	1.40	D	0.79	D
Bromochloromethane	74-97-5	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Bromodichloromethane	75-27-4	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Bromoform	75-25-2	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Bromomethane	74-83-9	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Carbon disulfide	75-15-0	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Carbon tetrachloride	56-23-5	22	0.760	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Chlorobenzene	108-90-7	500	1.100	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Chloroethane	75-00-3	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Chloroform	67-66-3	350	0.370	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Chloromethane	74-87-3	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
cis-1,2-Dichloroethylene	156-59-2	500	0.250	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
cis-1,3-Dichloropropylene	10061-01-5	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Cyclohexane	110-82-7	~		4.00	D	3.10	D	2.00	D	2.10	D	1.90	D
Dibromochloromethane	124-48-1	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Dibromomethane	74-95-3	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Dichlorodifluoromethane	75-71-8	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Ethyl Benzene	100-41-4	390	1	1.50	D	1.10	D	0.46	D	0.78	D	0.73	D
Hexachlorobutadiene	87-68-3	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Isopropylbenzene	98-82-8	~		0.89	D	0.63	D	0.29	JD	0.48	D	0.53	D
Methyl acetate	79-20-9	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Methyl tert-butyl ether (MTBE)	1634-04-4	500	0.930	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Methylcyclohexane	108-87-2	~		16.00	D	12.00	D	10.00	D	11.00	D	13.00	D
Methylene chloride	75-09-2	500	0.0500	0.61	U	0.61	U	0.38	U	0.44	U	0.43	U
n-Butylbenzene	104-51-8	500	12	0.90	D	0.57	JD	0.19	U	0.26	JD	0.32	JD
n-Propylbenzene	103-65-1	500	3.900	1.80	D	1.30	D	0.33	JD	0.67	D	0.77	D
o-Xylene	95-47-6	~		3.20	D	2.30	D	0.45	D	0.90	D	0.88	D
p- & m- Xylenes	179601-23-1	~		6.60	D	4.80	D	1.30	D	2.50	D	2.50	D
p-Isopropyltoluene	99-87-6	~		0.56	JD	0.40	JD	0.19	U	0.22	U	0.26	JD
sec-Butylbenzene	135-98-8	500	11	0.47	JD	0.31	JD	0.19	U	0.22	U	0.22	JD
Styrene	100-42-5	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
tert-Butyl alcohol (TBA)	75-65-0	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
tert-Butylbenzene	98-06-6	500	5.900	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Tetrachloroethylene	127-18-4	150	1.300	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Toluene	108-98-3	500	0.700	3.80	D	2.70	D	1.20	D	1.90	D	1.40	D
trans-1,2-Dichloroethylene	156-60-5	500	0.190	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
trans-1,3-Dichloropropylene	10061-02-6	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
trans-1,4-dichloro-2-butene	110-57-6	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Trichloroethylene	79-01-6	200	0.470	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Trichlorofluoromethane	75-69-4	~		0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Vinyl Chloride	75-01-4	13	0.0200	0.30	U	0.31	U	0.19	U	0.22	U	0.22	U
Xylenes, Total	1330-20-7	500	0.260	9.80	D	7.00	D	1.70	D	3.40	D	3.40	D
Total Solids				%		%		%		%		%	
Dilution Factor				1		1		1		1		1	
% Solids		solids	~	~		82.30		81.60		76.20		75.50	

NOTES:
mg/kg - milligram per kilogram
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar IDs.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
NT= the analyte was not a target for this sample
~= no regulatory limit has been established for this analyte

Table L-2B
Remedial Design Memorandum
High Contaminant ISCO and GAC Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC TOGS Standards and Guidance Values - GA	1		2		5		6		7	
Treatment Jar ID			HC-Control (ISCO)		HC-Control-DUP (ISCO)		HC_P+GAC_High		HC_P+GAC_High_DUP		HC_P+GAC_Low	
Sampling Date			12/14/2018		12/14/2018		1/18/2019		1/18/2019		1/18/2019	
Client Matrix			Water		Water		Water		Water		Water	
Compound	CAS Number		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
VOA, 8260 LOW MASTER		µg/L	µg/L		µg/L		µg/L		µg/L		µg/L	
Dilution Factor			50		50		50		50		50	
1,1,1,2-Tetrachloroethane	630-20-6	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,1,1-Trichloroethane	71-55-6	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,1,2,2-Tetrachloroethane	79-34-5	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,1,2-Trichloroethane	79-00-5	1	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,1-Dichloroethane	75-34-3	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,1-Dichloroethylene	75-35-4	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2,3-Trichlorobenzene	87-61-6	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2,3-Trichloropropane	96-18-4	0.0400	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2,4-Trichlorobenzene	120-82-1	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2,4-Trimethylbenzene	95-63-6	5	920	D	850	D	304	D	268	D	280	D
1,2-Dibromo-3-chloropropane	96-12-8	0.0400	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2-Dibromoethane	106-93-4	0.00060	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2-Dichlorobenzene	95-50-1	3	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2-Dichloroethane	107-06-2	0.600	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,2-Dichloropropane	78-87-5	1	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,3,5-Trimethylbenzene	108-67-8	5	2	U	280	D	110		103		107	
1,3-Dichlorobenzene	541-73-1	3	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,4-Dichlorobenzene	106-46-7	3	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
1,4-Dioxane	123-91-1	~	40	U	40	U	40	U	40	U	40	U
2-Butanone	78-93-3	50	29.00		26.00		33.90		48.90		57.90	
2-Hexanone	591-78-6	50	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
4-Methyl-2-pentanone	108-10-1	~	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Acetone	67-64-1	50	74		70		107		103		131	
Acrolein	107-02-8	~	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Acrylonitrile	107-13-1	~	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Benzene	71-43-2	1	5,500	D	5,300	D	986	D	1,060	D	1,370	D
Bromochloromethane	74-97-5	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Bromodichloromethane	75-27-4	50	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Bromoform	75-25-2	50	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Bromomethane	74-83-9	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Carbon disulfide	75-15-0	~	0.20	U	0.20	U	2.68		3.44		5.20	
Carbon tetrachloride	56-23-5	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Chlorobenzene	108-90-7	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Chloroethane	75-00-3	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Chloroform	67-66-3	7	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Chloromethane	74-87-3	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
cis-1,2-Dichloroethylene	156-59-2	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
cis-1,3-Dichloropropylene	10061-01-5	0.400	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Cyclohexane	110-82-7	~	390.00	D	390.00	D	291.00	D	324.00	D	340.00	D
Dibromochloromethane	124-48-1	50	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Dibromomethane	74-95-3	~	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Dichlorodifluoromethane	75-71-8	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Ethyl Benzene	100-41-4	5	540	D	510	D	153	D	170	D	173	D
Hexachlorobutadiene	87-68-3	0.500	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Isopropylbenzene	98-82-8	5	110		110		56		61		65	
Methyl acetate	79-20-9	~	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Methyl tert-butyl ether (MTBE)	1634-04-4	10	43		39		10.8		10.8		12.4	
Methylcyclohexane	108-87-2	~	390	D	460	D	486	D	404	D	451	D
Methylene chloride	75-09-2	5	11		4		2		2		3	
n-Butylbenzene	104-51-8	5	13		17		13		14		14	
n-Propylbenzene	103-65-1	5	160	E	150	D	82		87		93	
o-Xylene	95-47-6	5	1,200	DE	1,100	DE	299	D	312	D	319	D
p- & m- Xylenes	179601-23-1	5	2,300	DE	2,200	DE	666	D	707	D	715	D
p-Isopropyltoluene	99-87-6	5	21		20		11		12		13	
sec-Butylbenzene	135-98-8	5	14		14		9		9		10	
Styrene	100-42-5	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
tert-Butyl alcohol (TBA)	75-65-0	~	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
tert-Butylbenzene	98-06-6	5	3.40		3.30		1.94		1.99		2.25	
Tetrachloroethylene	127-18-4	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Toluene	108-88-3	5	3,000	DE	3,500	D	669	D	754	D	800	D
trans-1,2-Dichloroethylene	156-60-5	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropylene	10061-02-6	0.400	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Trichloroethylene	79-01-6	5	0.20	U	0.20	U	0.84		1.21		1.17	
Trichlorofluoromethane	75-69-4	5	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Vinyl Chloride	75-01-4	2	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Xylenes, Total	1330-20-7	5	3,500	D	3,300	D	964	D	1,020	D	1,030	D
Total Organic Carbon			µg/L		µg/L		µg/L		µg/L		µg/L	
Dilution Factor			10		10		50		50		50	
Total Organic Carbon (TOC)		~	33,800	D	35,000	D	1,900,000	D	1,480,000	D	2,110,000	D

NOTES:
µg/L - microgram per liter
Indicates that the detection limit exceeds the regulatory limit.
Indicates that the value exceeds the regulatory limit
Refer to Tables 1, 2, and 3 for descriptions of soil type and Jar IDs.
GAC jars were compared to the Control jars set up with the GAC test, and Persulfate + GAC jars were compared to the Control jars set up with the ISCO test.
Ascorbic acid was added to jars amended with persulfate and GAC, which contributed to the high TOC values for these jars.
Q is the Qualifier Column with definitions as follows:
D=result is from an analysis that required a dilution
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated
U=analyte not detected at or above the level indicated
B=analyte found in the analysis batch blank
E=result is estimated and cannot be accurately reported due to levels encountered or interferences
NT= the analyte was not a target for this sample
~=no regulatory limit has been established for this analyte

Table L-3A
Remedial Design Memorandum
Low Contaminant ISCO and GAC Effectiveness Test Soil Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC Part 376 Restricted Use Soil Cleanup Objectives-Commercial	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	23		24		25		26		27		28		9		10		X3		X4		15		16			
Treatment Jar ID				LC Control (GAC)		LC Control_DUP (GAC)		LC_GAC_High		LC_GAC_High_DUP		LC_GAC_Low		LC_GAC_Low_DUP		LC-Control (ISCO)		LC-Control-DUP (ISCO)		LC_P+GAC_High_12.19.18		LC_P+GAC_High_DUP_12.19.18		LC_P+GAC_Low		LC_P+GAC_Low_DUP			
Sampling Date				1/18/2019		1/18/2019		1/18/2019		1/18/2019		1/18/2019		1/18/2019		1/18/2019		12/14/2018		1/18/2019		1/18/2019		1/18/2019		1/18/2019			
Matrix				Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Compound	CAS Number			Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
Volatiles Organics, 8260 - Comprehensive		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg			
Dilution Factor		100		100		100		100		100		100		100		100		100		100		100		100		100			
1,1,1,2-Tetrachloroethane	630-20-6	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,1,1-Trichloroethane	71-55-6	500		0.680		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,1,2,2-Tetrachloroethane	79-34-5	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,1,2-Trichloroethane	79-00-5	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,1-Dichloroethane	75-34-3	240		0.270		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,1-Dichloroethylene	75-35-4	500		0.330		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2,3-Trichlorobenzene	87-61-6	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2,3-Trichloropropane	96-18-4	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2,4-Trichlorobenzene	120-82-1	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2,4-Trimethylbenzene	95-63-6	190		3.600		0.370	D	0.440	D	0.032	U	0.028	U	0.039	U	0.094	D	1.30	D	0.030	U	0.250	E	0.150	U	0.410	E		
1,2-Dibromo-3-chloropropane	96-12-8	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2-Dibromomethane	106-93-4	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2-Dichlorobenzene	95-50-1	500		1.100		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2-Dichloroethane	107-06-2	30		0.0200		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,2-Dichloropropane	78-87-5	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,3,5-Trimethylbenzene	108-67-8	190		8.400		0.058	U	0.150	U	0.011	U	0.014	U	0.015	U	0.080	U	0.430	JD	0.011	U	0.086	U	0.045	U	0.110	U		
1,3-Dichlorobenzene	541-73-1	280		2.400		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,4-Dichlorobenzene	106-46-7	130		1.800		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
1,4-Dioxane	123-91-1	130		0.100		0.040	U	0.050	U	0.035	U	0.041	U	0.046	U	0.041	U	0.059	U	0.043	U	0.048	U	0.041	U	0.032	U		
2-Butanone	78-93-3	500		0.120		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
2-Hexanone	591-78-6	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
4-Methyl-2-pentanone	108-10-1	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Acetone	67-64-1	500		0.0500		0.004	U	0.005	U	0.004	U	0.004	U	0.005	U	0.004	U	0.006	U	0.004	U	0.006	J	0.005	U	0.014	U		
Acrolein	107-02-8	~		~		0.004	U	0.005	U	0.004	U	0.004	U	0.005	U	0.004	U	0.006	U	0.004	U	0.005	U	0.004	U	0.003	U		
Acrylonitrile	107-13-1	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Benzene	71-43-2	44		0.0600		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Bromochloromethane	74-97-5	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Bromodichloromethane	75-27-4	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Bromoform	75-25-2	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Bromomethane	74-83-9	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Carbon disulfide	75-15-0	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Carbon tetrachloride	56-23-5	22		0.760		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Chlorobenzene	108-90-7	500		1.100		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Chloroethane	75-00-3	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Chloroform	67-66-3	350		0.370		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Chloromethane	74-87-3	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
cis-1,2-Dichloroethylene	156-59-2	500		0.250		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
cis-1,3-Dichloropropylene	10061-01-5	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Cyclohexane	110-82-7	~		~		0.002	J	0.003	J	0.002	J	0.002	J	0.002	J	0.120	J	0.510	JD	0.002	J	0.006	U	0.005	U	0.003	U		
Dibromochloromethane	124-48-1	~		~		0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U		
Dibromomethane	74-95-3	~		~		0.002	U	0.002	U	0.002	U	0.																	

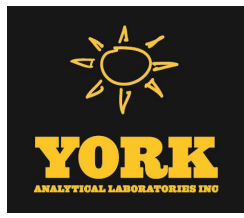
Table L-3B
Remedial Design Memorandum
Low Contaminant ISCO and GAC Effectiveness Test Groundwater Analytical Results

561 Greenwich Street
New York, New York
BCP Site No.: C231129
Langan Project No.: 190043701

Treatment Jar Number		NYSDEC TOGS Standards and Guidance Values - GA	23 LC Control (GAC) 1/18/2019 Water		24 LC Control_DUP (GAC) 1/18/2019 Water		25 LC_GAC_High 1/18/2019 Water		26 LC_GAC_High_DUP 1/18/2019 Water		27 LC_GAC_Low 1/18/2019 Water		28 LC_GAC_Low_DUP 1/18/2019 Water		9 LC-Control (ISCO) 12/14/2018 Water		10 LC-Control-DUP (ISCO) 12/14/2018 Water		X3 LC_P+GAC_High_12.19.18 1/18/2019 Water		X4 LC_P+GAC_High_DUP_12.19.18 1/18/2019 Water		15 LC_P+GAC_Low 1/18/2019 Water		16 LC_P+GAC_Low_DUP 1/18/2019 Water			
Treatment Jar ID			Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q		
Sampling Date			µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
Client Matrix			CAS Number																									
VOA, 8260 LOW MASTER																												
Dilution Factor																												
1,1,1,2-Tetrachloroethane		630-20-6	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,1,1-Trichloroethane		71-55-6	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,1,2,2-Tetrachloroethane		79-34-5	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		76-13-1	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,1,2-Trichloroethane		79-00-5	1	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,1-Dichloroethane		75-34-3	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,1-Dichloroethylene		75-35-4	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2,3-Trichlorobenzene		87-61-6	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2,3-Trichloropropane		96-18-4	0.0400	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2,4-Trichlorobenzene		120-82-1	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2,4-Trimethylbenzene		95-63-6	5	226	D	310	D	316	D	234	D	306	D	563	D	510	D	1,600	DE	273	D	220	D	150	D	205	D	
1,2-Dibromo-3-chloropropane		96-12-8	0.0400	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2-Dibromooethane		106-93-4	0.00060	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2-Dichlorobenzene		95-50-1	3	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2-Dichloroethane		107-06-2	0.600	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,2-Dichloropropane		78-87-5	1	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,3,5-Trimethylbenzene		108-67-8	5	68		90		91	D	118		105		138	D	160	E	200	D	79	D	71		35		48		
1,3-Dichlorobenzene		541-73-1	3	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,4-Dichlorobenzene		106-46-7	3	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
1,4-Dioxane		123-91-1	~	40	U	40	U	80	U	40	U	40	U	80	U	40	U	80	U	80	U	40	U	40	U	40	U	
2-Butanone		78-93-3	50	2.12		2.05		0.90	JD	0.68		0.67		1.52	D	0.20	U	0.40	U	17.50	D	22.10		29.00		29.40		
2-Hexanone		591-78-6	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	2.98	D	6.20		4.98		5.87		
4-Methyl-2-pentanone		108-10-1	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Acetone		67-64-1	50	6		6		4	JD	3		3		4	D	1	U	2	U	94	D	98		176	D	141		
Acrolein		107-02-8	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Acrylonitrile		107-13-1	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Benzene		71-43-2	1	0.54		0.78		0.86	JD	0.20		0.20		1.32	D	6.40		12				0.78	JD	1.16		0.97		
Bromochloromethane		74-97-5	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Bromodichloromethane		75-27-4	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Bromoform		75-25-2	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Bromomethane		74-83-9	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Carbon disulfide		75-15-0	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	2.34	D	2.14		3.80		4.70		
Carbon tetrachloride		56-23-5	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Chlorobenzene		108-90-7	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Chloroethane		75-00-3	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Chloroform		67-66-3	7	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Chloromethane		74-87-3	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
cis-1,2-Dichloroethylene		156-59-2	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
cis-1,3-Dichloropropylene		10061-01-5	0.400	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Cyclohexane		110-82-7	~	51		63		87	D	101		78		132	D	130	E	240	D	96	D	77		20		40		
Dibromochloromethane		124-48-1	50	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Dibromomethane		74-95-3	~	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U	0.20	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	
Dichlorodifluoromethane		75-71-8	5	0.20	U	0.20	U	0.40	U	0.20	U	0.20	U	0.40	U													

APPENDIX M

Laboratory Analytical Reports - Treatability



Technical Report

prepared for:

Langan Engineering & Environmental Services (WP)

707 Westchester Ave.
White Plains NY, 10604
Attention: Lingke Zeng

Report Date: 11/26/2018

Client Project ID: 190043701 551 Greenwich St.

York Project (SDG) No.: 18K0641

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
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132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 11/26/2018
Client Project ID: 190043701 551 Greenwich St.
York Project (SDG) No.: 18K0641

Langan Engineering & Environmental Services (WP)
707 Westchester Ave.
White Plains NY, 10604
Attention: Lingke Zeng

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 November 15, 2018 and listed below. The project was identified as your project: **190043701 551 Greenwich St.**

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18K0641-01	HC Soil	Soil	11/15/2018	11/15/2018
18K0641-02	HC Soil DUP	Soil	11/15/2018	11/15/2018
18K0641-03	LC Soil	Soil	11/15/2018	11/15/2018
18K0641-04	LC Soil DUP	Soil	11/15/2018	11/15/2018
18K0641-05	HC GW	Water	11/15/2018	11/15/2018
18K0641-06	LC GW	Water	11/15/2018	11/15/2018

General Notes for York Project (SDG) No.: 18K0641

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

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 11/26/2018





Sample Information

Client Sample ID: HC Soil

York Sample ID: 18K0641-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 12:00 pm

11/15/2018

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	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 15:47	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 15:47	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
95-63-6	1,2,4-Trimethylbenzene	18000		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
108-67-8	1,3,5-Trimethylbenzene	6700		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	8700	17000	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
78-93-3	2-Butanone	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
591-78-6	2-Hexanone	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS



Sample Information

Client Sample ID: HC Soil

York Sample ID: 18K0641-01

York Project (SDG) No.

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18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 12:00 pm

11/15/2018

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	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
67-64-1	Acetone	ND		ug/kg dry	870	1700	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
107-02-8	Acrolein	ND		ug/kg dry	870	1700	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
71-43-2	Benzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-25-2	Bromoform	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
74-83-9	Bromomethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-00-3	Chloroethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
67-66-3	Chloroform	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
74-87-3	Chloromethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
110-82-7	Cyclohexane	4200		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
74-95-3	Dibromomethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
100-41-4	Ethyl Benzene	4300		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS



Sample Information

Client Sample ID: HC Soil

York Sample ID: 18K0641-01

York Project (SDG) No.

18K0641

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

November 15, 2018 12:00 pm

Date Received

11/15/2018

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	1800		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
79-20-9	Methyl acetate	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
108-87-2	Methyleyclohexane	29000		ug/kg dry	440	870	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-09-2	Methylene chloride	ND		ug/kg dry	870	1700	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
104-51-8	n-Butylbenzene	1700		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
103-65-1	n-Propylbenzene	3600		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
95-47-6	o-Xylene	8700		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
179601-23-1	p- & m- Xylenes	21000		ug/kg dry	870	1700	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
99-87-6	p-Isopropyltoluene	1000		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
135-98-8	sec-Butylbenzene	810	J	ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
100-42-5	Styrene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	440	4400	250	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
108-88-3	Toluene	5500		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH	11/26/2018 07:30	11/26/2018 15:47	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	440	870	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:47	SS
1330-20-7	Xylenes, Total	30000		ug/kg dry	1300	2600	250	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 15:47	SS



Sample Information

Client Sample ID: HC Soil

York Sample ID: 18K0641-01

York Project (SDG) No.

18K0641

Client Project ID

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Matrix

Soil

Collection Date/Time

November 15, 2018 12:00 pm

Date Received

11/15/2018

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
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	42.8 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	100 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	108 %			76-130						

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-93-2	1,2,4,5-Tetramethylbenzene	4300	J, N	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
NA	dimethyl Cyclohexane isomer	7500	J	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
NA	Ethyl Dimethyl Benzene isomer	7300	J	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
NA	Ethyl Methyl Benzene isomer	10000	J	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
91-20-3	Naphthalene	8300	J, N	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
105-05-5	p-Diethylbenzene	6600	J, N	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
622-96-8	p-Ethyltoluene	6700	J, N	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
NA	unknown cyclic hydrocarbons	15000	J	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
NA	Unknown alkane isomers	43000	J	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS
NA	unknown alkyl subst. Benzene isomers	16000	J	ug/kg dry			250	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:47	SS

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
* Total EPH		149		mg/kg dry	60.7	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	11/21/2018 13:15	11/24/2018 01:37	TJD
Surrogate Recoveries		Result		Acceptance Range						
3386-33-2	Surrogate: 1-Chlorooctadecane	85.6 %		40-140						
84-15-1	Surrogate: o-Terphenyl	83.7 %		40-140						

Total Solids

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: HC Soil

York Sample ID: 18K0641-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 12:00 pm

11/15/2018

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	81.0		%	0.100	1	SM 2540G Certifications: CTDOH	11/26/2018 10:22	11/26/2018 13:22	TAJ

Sample Information

Client Sample ID: HC Soil DUP

York Sample ID: 18K0641-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 12:00 pm

11/15/2018

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	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/21/2018 12:38	11/21/2018 17:52	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/21/2018 12:38	11/21/2018 17:52	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
95-63-6	1,2,4-Trimethylbenzene	14000		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS



Sample Information

Client Sample ID: HC Soil DUP

York Sample ID: 18K0641-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 12:00 pm

11/15/2018

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
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
108-67-8	1,3,5-Trimethylbenzene	5400		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	47000	94000	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
78-93-3	2-Butanone	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
591-78-6	2-Hexanone	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
67-64-1	Acetone	ND		ug/kg dry	4700	9400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
107-02-8	Acrolein	ND		ug/kg dry	4700	9400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
71-43-2	Benzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-25-2	Bromoform	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
74-83-9	Bromomethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-00-3	Chloroethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
67-66-3	Chloroform	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
74-87-3	Chloromethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS



Sample Information

Client Sample ID: HC Soil DUP

York Sample ID: 18K0641-02

York Project (SDG) No.

18K0641

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

November 15, 2018 12:00 pm

Date Received

11/15/2018

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
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
110-82-7	Cyclohexane	6400		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
100-41-4	Ethyl Benzene	3200	J	ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
79-20-9	Methyl acetate	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
108-87-2	Methylcyclohexane	24000		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-09-2	Methylene chloride	ND		ug/kg dry	4700	9400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
103-65-1	n-Propylbenzene	2900	J	ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
95-47-6	o-Xylene	6200		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
179601-23-1	p- & m- Xylenes	15000		ug/kg dry	4700	9400	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
100-42-5	Styrene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
108-88-3	Toluene	3900	J	ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS



Sample Information

Client Sample ID: HC Soil DUP

York Sample ID: 18K0641-02

York Project (SDG) No.
18K0641

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
November 15, 2018 12:00 pm

Date Received
11/15/2018

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
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH	11/21/2018 12:38	11/21/2018 17:52	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	2300	4700	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/21/2018 12:38	11/21/2018 17:52	SS
1330-20-7	Xylenes, Total	22000		ug/kg dry	7000	14000	1000	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/21/2018 12:38	11/21/2018 17:52	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	81.6 %			77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	96.0 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %			76-130						

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Unknown aliphaic hydrocarbon	39000	J, N	ug/kg dry			1000	EPA 8260C Certifications:	11/21/2018 12:38	11/21/2018 17:52	SS

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	173		mg/kg dry	60.5	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	11/21/2018 13:15	11/24/2018 02:05	TJD
	Surrogate Recoveries	Result		Acceptance Range						
3386-33-2	Surrogate: 1-Chlorooctadecane	88.4 %		40-140						
84-15-1	Surrogate: o-Terphenyl	86.2 %		40-140						

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	81.8		%	0.100	1	SM 2540G Certifications: CTDOH	11/26/2018 10:22	11/26/2018 13:22	TAJ



Sample Information

Client Sample ID: HC Soil DUP

York Sample ID: 18K0641-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 12:00 pm

11/15/2018

Sample Information

Client Sample ID: LC Soil

York Sample ID: 18K0641-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 11:45 am

11/15/2018

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	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 15:20	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 15:20	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
95-63-6	1,2,4-Trimethylbenzene	2700		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
108-67-8	1,3,5-Trimethylbenzene	680		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS



Sample Information

Client Sample ID: LC Soil

York Sample ID: 18K0641-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 11:45 am

11/15/2018

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	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4100	8200	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
78-93-3	2-Butanone	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
591-78-6	2-Hexanone	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
67-64-1	Acetone	ND		ug/kg dry	410	820	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
107-02-8	Acrolein	ND		ug/kg dry	410	820	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
71-43-2	Benzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-25-2	Bromoform	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
74-83-9	Bromomethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-00-3	Chloroethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
67-66-3	Chloroform	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
74-87-3	Chloromethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
110-82-7	Cyclohexane	650		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS



Sample Information

Client Sample ID: LC Soil

York Sample ID: 18K0641-03

York Project (SDG) No.

18K0641

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

November 15, 2018 11:45 am

Date Received

11/15/2018

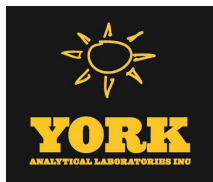
Volatile Organics, 8260 - Comprehensive

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	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
100-41-4	Ethyl Benzene	370	J	ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
79-20-9	Methyl acetate	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
108-87-2	Methylcyclohexane	2300		ug/kg dry	210	410	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-09-2	Methylene chloride	ND		ug/kg dry	410	820	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
103-65-1	n-Propylbenzene	310	J	ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
95-47-6	o-Xylene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
179601-23-1	p- & m- Xylenes	910		ug/kg dry	410	820	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
100-42-5	Styrene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-65-0	tert-Butyl alcohol (TBA)	590	J	ug/kg dry	210	2100	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
108-88-3	Toluene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH	11/26/2018 07:30	11/26/2018 15:20	SS



Sample Information

Client Sample ID: LC Soil

York Sample ID: 18K0641-03

York Project (SDG) No.

18K0641

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

November 15, 2018 11:45 am

Date Received

11/15/2018

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	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	210	410	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 15:20	SS
1330-20-7	Xylenes, Total	910	J	ug/kg dry	620	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 15:20	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	72.2 %	S-09								
2037-26-5	Surrogate: SURR: Toluene-d8	94.1 %									
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %									

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	1000	J, N	ug/kg dry			100	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:20	SS
105-05-5	p-Diethylbenzene	830	J, N	ug/kg dry			100	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:20	SS
NA	Unknown alkane isomers	5700	J	ug/kg dry			100	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:20	SS
NA	Unknown alkyl subst. Benzene isomer	1200	J	ug/kg dry			100	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 15:20	SS

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	56.3	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	11/21/2018 13:15	11/24/2018 02:33	TJD
Surrogate Recoveries		Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	77.4 %								
84-15-1	Surrogate: o-Terphenyl	75.7 %								

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.9		%	0.100	1	SM 2540G Certifications: CTDOH	11/26/2018 10:22	11/26/2018 13:22	TAJ



Sample Information

Client Sample ID: LC Soil

York Sample ID: 18K0641-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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18K0641

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Soil

November 15, 2018 11:45 am

11/15/2018

Sample Information

Client Sample ID: LC Soil DUP

York Sample ID: 18K0641-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 11:45 am

11/15/2018

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	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 14:53	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 14:53	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
95-63-6	1,2,4-Trimethylbenzene	2400		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
108-67-8	1,3,5-Trimethylbenzene	620		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS



Sample Information

Client Sample ID: LC Soil DUP

York Sample ID: 18K0641-04

York Project (SDG) No.

Client Project ID

Matrix

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18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 11:45 am

11/15/2018

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	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4200	8300	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
78-93-3	2-Butanone	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
591-78-6	2-Hexanone	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
67-64-1	Acetone	ND		ug/kg dry	420	830	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
107-02-8	Acrolein	ND		ug/kg dry	420	830	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
71-43-2	Benzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-25-2	Bromoform	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
74-83-9	Bromomethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-00-3	Chloroethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
67-66-3	Chloroform	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
74-87-3	Chloromethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
110-82-7	Cyclohexane	370	J	ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS



Sample Information

Client Sample ID: LC Soil DUP

York Sample ID: 18K0641-04

York Project (SDG) No.

18K0641

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

November 15, 2018 11:45 am

Date Received

11/15/2018

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	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
100-41-4	Ethyl Benzene	320	J	ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
79-20-9	Methyl acetate	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
108-87-2	Methylcyclohexane	2100		ug/kg dry	210	420	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-09-2	Methylene chloride	ND		ug/kg dry	420	830	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
103-65-1	n-Propylbenzene	270	J	ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
95-47-6	o-Xylene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
179601-23-1	p- & m- Xylenes	760	J	ug/kg dry	420	830	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
100-42-5	Styrene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-65-0	tert-Butyl alcohol (TBA)	1200	J	ug/kg dry	210	2100	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
108-88-3	Toluene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH	11/26/2018 07:30	11/26/2018 14:53	SS



Sample Information

Client Sample ID: LC Soil DUP

York Sample ID: 18K0641-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Soil

November 15, 2018 11:45 am

11/15/2018

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	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	210	420	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	11/26/2018 07:30	11/26/2018 14:53	SS
1330-20-7	Xylenes, Total	760	J	ug/kg dry	620	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	11/26/2018 07:30	11/26/2018 14:53	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	71.8 %	S-09								
2037-26-5	Surrogate: SURR: Toluene-d8	96.0 %									
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %									

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	870	J, N	ug/kg dry			100	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 14:53	SS
NA	Unknown alkane isomers	5800	J	ug/kg dry			100	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 14:53	SS
NA	Unknown alkyl subst. Benzene isomer	1000	J	ug/kg dry			100	EPA 8260C Certifications:	11/26/2018 07:30	11/26/2018 14:53	SS

NJDEP EPH (Cat. 2 Non-Fractionated)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3545A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	* Total EPH	ND		mg/kg dry	56.0	1	NJDEP EPH Rev 3.0 Certifications: NJDEP	11/21/2018 13:15	11/24/2018 03:01	TJD
Surrogate Recoveries		Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	87.0 %								
84-15-1	Surrogate: o-Terphenyl	87.3 %								

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	88.0		%	0.100	1	SM 2540G Certifications: CTDOH	11/26/2018 10:22	11/26/2018 13:22	TAJ



Sample Information

Client Sample ID: HC GW

York Sample ID: 18K0641-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18K0641

190043701 551 Greenwich St.

Water

November 15, 2018 11:40 am

11/15/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	ND		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-39-3	Barium	0.124		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-70-2	Calcium	168	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-47-3	Chromium	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-48-4	Cobalt	ND		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-50-8	Copper	ND		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7439-89-6	Iron	6.47		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7439-92-1	Lead	0.0150		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7439-95-4	Magnesium	105		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7439-96-5	Manganese	3.54		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-02-0	Nickel	ND		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-09-7	Potassium	39.1		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-23-5	Sodium	412		mg/L	0.556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-62-2	Vanadium	ND		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML
7440-66-6	Zinc	ND		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:15	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:24	RQB
7440-38-2	Arsenic	12.7		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:24	RQB
7440-41-7	Beryllium	ND		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:24	RQB



Sample Information

Client Sample ID: HC GW

York Sample ID: 18K0641-05

York Project (SDG) No.
18K0641

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
November 15, 2018 11:40 am

Date Received
11/15/2018

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-43-9	Cadmium	ND		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:24	RQB
7782-49-2	Selenium	13.1	B	ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:24	RQB
7440-28-0	Thallium	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:24	RQB

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/19/2018 13:28	11/19/2018 14:09	SY

Sample Information

Client Sample ID: LC GW

York Sample ID: 18K0641-06

York Project (SDG) No.
18K0641

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
November 15, 2018 11:35 am

Date Received
11/15/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	0.0823	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-39-3	Barium	0.0890		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-70-2	Calcium	129	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-47-3	Chromium	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-48-4	Cobalt	ND		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-50-8	Copper	ND		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7439-89-6	Iron	ND		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7439-92-1	Lead	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML



Sample Information

Client Sample ID: LC GW

York Sample ID: 18K0641-06

York Project (SDG) No.
18K0641

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
November 15, 2018 11:35 am

Date Received
11/15/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-95-4	Magnesium	20.5		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7439-96-5	Manganese	0.565		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-02-0	Nickel	ND		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-09-7	Potassium	21.4		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-23-5	Sodium	122		mg/L	0.556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-62-2	Vanadium	ND		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML
7440-66-6	Zinc	ND		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:37	11/21/2018 13:18	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:29	RQB
7440-38-2	Arsenic	3.83		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:29	RQB
7440-41-7	Beryllium	ND		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:29	RQB
7440-43-9	Cadmium	ND		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:29	RQB
7782-49-2	Selenium	9.53	B	ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:29	RQB
7440-28-0	Thallium	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/20/2018 12:38	11/20/2018 21:29	RQB

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	11/19/2018 13:28	11/19/2018 14:20	SY



Analytical Batch Summary

Batch ID: BK81027 **Preparation Method:** EPA 7473 water **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18K0641-05	HC GW	11/19/18
18K0641-06	LC GW	11/19/18
BK81027-BLK1	Blank	11/19/18
BK81027-SRM1	Reference	11/19/18

Batch ID: BK81097 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18K0641-05	HC GW	11/20/18
18K0641-06	LC GW	11/20/18
BK81097-BLK1	Blank	11/20/18
BK81097-BS1	LCS	11/20/18

Batch ID: BK81098 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18K0641-05	HC GW	11/20/18
18K0641-06	LC GW	11/20/18
BK81098-BLK1	Blank	11/20/18
BK81098-BS1	LCS	11/20/18

Batch ID: BK81168 **Preparation Method:** EPA 5035A **Prepared By:** SS

YORK Sample ID	Client Sample ID	Preparation Date
18K0641-02	HC Soil DUP	11/21/18
BK81168-BLK1	Blank	11/21/18
BK81168-BLK2	Blank	11/21/18
BK81168-BS1	LCS	11/21/18
BK81168-BSD1	LCS Dup	11/21/18

Batch ID: BK81170 **Preparation Method:** EPA 3545A **Prepared By:** MAT

YORK Sample ID	Client Sample ID	Preparation Date
18K0641-01	HC Soil	11/21/18
18K0641-02	HC Soil DUP	11/21/18
18K0641-03	LC Soil	11/21/18
18K0641-04	LC Soil DUP	11/21/18
BK81170-BLK1	Blank	11/21/18
BK81170-BS1	LCS	11/21/18
BK81170-BSD1	LCS Dup	11/21/18



Batch ID: BK81224

Preparation Method: EPA 5035A

Prepared By: RDS

YORK Sample ID	Client Sample ID	Preparation Date
18K0641-01	HC Soil	11/26/18
18K0641-03	LC Soil	11/26/18
18K0641-04	LC Soil DUP	11/26/18
BK81224-BLK1	Blank	11/26/18
BK81224-BLK2	Blank	11/26/18
BK81224-BS1	LCS	11/26/18
BK81224-BSD1	LCS Dup	11/26/18

Batch ID: BK81252

Preparation Method: % Solids Prep

Prepared By: TAJ

YORK Sample ID	Client Sample ID	Preparation Date
18K0641-01	HC Soil	11/26/18
18K0641-02	HC Soil DUP	11/26/18
18K0641-03	LC Soil	11/26/18
18K0641-04	LC Soil DUP	11/26/18



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 BK81168 - EPA 5035A

Blank (BK81168-BLK1)

Prepared & Analyzed: 11/21/2018

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,2,3-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	"



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 BK81168 - EPA 5035A

Blank (BK81168-BLK1)

Prepared & Analyzed: 11/21/2018

Methylene chloride	ND	10	ug/kg wet
n-Butylbenzene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-Butyl alcohol (TBA)	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
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: SURR: 1,2-Dichloroethane-d4	49.4	ug/L	50.0	98.9	77-125
Surrogate: SURR: Toluene-d8	48.0	"	50.0	96.0	85-120
Surrogate: SURR: p-Bromofluorobenzene	52.6	"	50.0	105	76-130

Blank (BK81168-BLK2)

Prepared & Analyzed: 11/21/2018

1,1,1,2-Tetrachloroethane	ND	500	ug/kg wet
Tentatively Identified Compounds	0.0	"	
1,1,1-Trichloroethane	ND	500	"
1,1,2,2-Tetrachloroethane	ND	500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	"
1,1,2-Trichloroethane	ND	500	"
1,1-Dichloroethane	ND	500	"
1,1-Dichloroethylene	ND	500	"
1,2,3-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	"



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 BK81168 - EPA 5035A

Blank (BK81168-BLK2)

Prepared & Analyzed: 11/21/2018

Benzene	ND	500	ug/kg wet								
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	"								
n-Propylbenzene	ND	500	"								
o-Xylene	ND	500	"								
p- & m- Xylenes	ND	1000	"								
p-Isopropyltoluene	ND	500	"								
sec-Butylbenzene	ND	500	"								
Styrene	ND	500	"								
tert-Butyl alcohol (TBA)	ND	500	"								
tert-Butylbenzene	ND	500	"								
Tetrachloroethylene	ND	500	"								
Toluene	ND	500	"								
trans-1,2-Dichloroethylene	ND	500	"								
trans-1,3-Dichloropropylene	ND	500	"								
trans-1,4-dichloro-2-butene	ND	500	"								
Trichloroethylene	ND	500	"								
Trichlorofluoromethane	ND	500	"								
Vinyl Chloride	ND	500	"								
Xylenes, Total	ND	1500	"								
Surrogate: SURRE: 1,2-Dichloroethane-d4	49.2		ug/L	50.0		98.4	77-125				
Surrogate: SURRE: Toluene-d8	47.8		"	50.0		95.6	85-120				
Surrogate: SURRE: p-Bromofluorobenzene	52.6		"	50.0		105	76-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK81168 - EPA 5035A											
LCS (BK81168-BS1)						Prepared & Analyzed: 11/21/2018					
1,1,1,2-Tetrachloroethane	53		ug/L	50.0		105	75-129				
1,1,1-Trichloroethane	51		"	50.0		102	71-137				
1,1,2,2-Tetrachloroethane	49		"	50.0		98.7	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	53		"	50.0		107	58-146				
1,1,2-Trichloroethane	48		"	50.0		96.4	83-123				
1,1-Dichloroethane	49		"	50.0		97.5	75-130				
1,1-Dichloroethylene	49		"	50.0		98.7	64-137				
1,2,3-Trichlorobenzene	59		"	50.0		117	81-140				
1,2,3-Trichloropropane	50		"	50.0		100	81-126				
1,2,4-Trichlorobenzene	58		"	50.0		115	80-141				
1,2,4-Trimethylbenzene	49		"	50.0		97.7	84-125				
1,2-Dibromo-3-chloropropane	52		"	50.0		103	74-142				
1,2-Dibromoethane	53		"	50.0		106	86-123				
1,2-Dichlorobenzene	51		"	50.0		102	85-122				
1,2-Dichloroethane	48		"	50.0		95.7	71-133				
1,2-Dichloropropane	45		"	50.0		90.7	81-122				
1,3,5-Trimethylbenzene	48		"	50.0		96.2	82-126				
1,3-Dichlorobenzene	52		"	50.0		104	84-124				
1,4-Dichlorobenzene	52		"	50.0		103	84-124				
1,4-Dioxane	1100		"	1050		109	10-228				
2-Butanone	49		"	50.0		98.3	58-147				
2-Hexanone	47		"	50.0		93.6	70-139				
4-Methyl-2-pentanone	46		"	50.0		91.7	72-132				
Acetone	47		"	50.0		93.7	36-155				
Acrolein	43		"	50.0		86.8	10-238				
Acrylonitrile	48		"	50.0		95.1	66-141				
Benzene	49		"	50.0		98.6	77-127				
Bromochloromethane	45		"	50.0		90.2	74-129				
Bromodichloromethane	50		"	50.0		99.9	81-124				
Bromoform	60		"	50.0		121	80-136				
Bromomethane	39		"	50.0		78.7	32-177				
Carbon disulfide	57		"	50.0		113	10-136				
Carbon tetrachloride	53		"	50.0		107	66-143				
Chlorobenzene	49		"	50.0		98.3	86-120				
Chloroethane	42		"	50.0		83.6	51-142				
Chloroform	50		"	50.0		99.2	76-131				
Chloromethane	49		"	50.0		97.7	49-132				
cis-1,2-Dichloroethylene	49		"	50.0		97.5	74-132				
cis-1,3-Dichloropropylene	50		"	50.0		101	81-129				
Cyclohexane	46		"	50.0		91.4	70-130				
Dibromochloromethane	56		"	50.0		112	10-200				
Dibromomethane	48		"	50.0		95.8	83-124				
Dichlorodifluoromethane	70		"	50.0		140	28-158				
Ethyl Benzene	48		"	50.0		95.8	84-125				
Hexachlorobutadiene	60		"	50.0		119	83-133				
Isopropylbenzene	47		"	50.0		94.3	81-127				
Methyl acetate	45		"	50.0		90.0	41-143				
Methyl tert-butyl ether (MTBE)	52		"	50.0		104	74-131				
Methylcyclohexane	46		"	50.0		92.8	70-130				
Methylene chloride	47		"	50.0		94.0	57-141				
n-Butylbenzene	50		"	50.0		100	80-130				



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 BK81168 - EPA 5035A

LCS (BK81168-BS1)

Prepared & Analyzed: 11/21/2018

n-Propylbenzene	47		ug/L	50.0		93.8	74-136				
o-Xylene	48		"	50.0		96.9	83-123				
p- & m- Xylenes	95		"	100		95.4	82-128				
p-Isopropyltoluene	50		"	50.0		101	85-125				
sec-Butylbenzene	50		"	50.0		101	83-125				
Styrene	48		"	50.0		95.1	86-126				
tert-Butyl alcohol (TBA)	270		"	250		109	70-130				
tert-Butylbenzene	44		"	50.0		87.7	80-127				
Tetrachloroethylene	51		"	50.0		102	80-129				
Toluene	47		"	50.0		94.7	85-121				
trans-1,2-Dichloroethylene	49		"	50.0		97.4	72-132				
trans-1,3-Dichloropropylene	50		"	50.0		100	78-132				
trans-1,4-dichloro-2-butene	51		"	50.0		102	75-135				
Trichloroethylene	49		"	50.0		99.0	84-123				
Trichlorofluoromethane	36		"	50.0		72.8	62-140				
Vinyl Chloride	44		"	50.0		88.2	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	48.7		"	50.0		97.3	77-125				
Surrogate: SURR: Toluene-d8	47.6		"	50.0		95.3	85-120				
Surrogate: SURR: p-Bromofluorobenzene	49.7		"	50.0		99.4	76-130				

LCS Dup (BK81168-BS1)

Prepared & Analyzed: 11/21/2018

1,1,1,2-Tetrachloroethane	51		ug/L	50.0		103	75-129		2.63	30	
1,1,1-Trichloroethane	50		"	50.0		99.7	71-137		2.46	30	
1,1,2,2-Tetrachloroethane	47		"	50.0		94.3	79-129		4.56	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	52		"	50.0		104	58-146		2.70	30	
1,1,2-Trichloroethane	47		"	50.0		94.4	83-123		2.10	30	
1,1-Dichloroethane	47		"	50.0		94.5	75-130		3.15	30	
1,1-Dichloroethylene	48		"	50.0		96.4	64-137		2.34	30	
1,2,3-Trichlorobenzene	58		"	50.0		116	81-140		0.858	30	
1,2,3-Trichloropropane	49		"	50.0		98.2	81-126		2.06	30	
1,2,4-Trichlorobenzene	56		"	50.0		113	80-141		2.33	30	
1,2,4-Trimethylbenzene	48		"	50.0		95.5	84-125		2.34	30	
1,2-Dibromo-3-chloropropane	51		"	50.0		102	74-142		1.82	30	
1,2-Dibromoethane	51		"	50.0		102	86-123		2.92	30	
1,2-Dichlorobenzene	50		"	50.0		101	85-122		1.36	30	
1,2-Dichloroethane	47		"	50.0		93.5	71-133		2.35	30	
1,2-Dichloropropane	45		"	50.0		89.7	81-122		1.15	30	
1,3,5-Trimethylbenzene	47		"	50.0		93.6	82-126		2.66	30	
1,3-Dichlorobenzene	51		"	50.0		102	84-124		1.67	30	
1,4-Dichlorobenzene	51		"	50.0		102	84-124		1.51	30	
1,4-Dioxane	1100		"	1050		101	10-228		7.50	30	
2-Butanone	46		"	50.0		92.1	58-147		6.56	30	
2-Hexanone	45		"	50.0		90.4	70-139		3.57	30	
4-Methyl-2-pentanone	44		"	50.0		88.3	72-132		3.80	30	
Acetone	44		"	50.0		87.5	36-155		6.84	30	
Acrolein	40		"	50.0		80.0	10-238		8.10	30	
Acrylonitrile	45		"	50.0		89.9	66-141		5.58	30	
Benzene	48		"	50.0		95.7	77-127		2.92	30	
Bromochloromethane	44		"	50.0		88.2	74-129		2.29	30	
Bromodichloromethane	49		"	50.0		97.4	81-124		2.55	30	
Bromoform	58		"	50.0		117	80-136		3.59	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 BK81168 - EPA 5035A

LCS Dup (BK81168-BSD1)

Prepared & Analyzed: 11/21/2018

Bromomethane	38		ug/L	50.0		76.6	32-177		2.78	30	
Carbon disulfide	55		"	50.0		110	10-136		3.16	30	
Carbon tetrachloride	52		"	50.0		104	66-143		3.08	30	
Chlorobenzene	48		"	50.0		95.8	86-120		2.60	30	
Chloroethane	40		"	50.0		79.7	51-142		4.70	30	
Chloroform	48		"	50.0		96.7	76-131		2.59	30	
Chloromethane	48		"	50.0		96.3	49-132		1.36	30	
cis-1,2-Dichloroethylene	48		"	50.0		95.8	74-132		1.70	30	
cis-1,3-Dichloropropylene	49		"	50.0		98.3	81-129		2.41	30	
Cyclohexane	45		"	50.0		89.1	70-130		2.59	30	
Dibromochloromethane	54		"	50.0		109	10-200		3.01	30	
Dibromomethane	46		"	50.0		92.8	83-124		3.10	30	
Dichlorodifluoromethane	68		"	50.0		136	28-158		2.89	30	
Ethyl Benzene	47		"	50.0		94.6	84-125		1.32	30	
Hexachlorobutadiene	59		"	50.0		118	83-133		0.978	30	
Isopropylbenzene	46		"	50.0		92.1	81-127		2.38	30	
Methyl acetate	42		"	50.0		84.4	41-143		6.40	30	
Methyl tert-butyl ether (MTBE)	50		"	50.0		101	74-131		3.31	30	
Methylcyclohexane	46		"	50.0		91.1	70-130		1.76	30	
Methylene chloride	45		"	50.0		89.9	57-141		4.52	30	
n-Butylbenzene	51		"	50.0		102	80-130		1.74	30	
n-Propylbenzene	45		"	50.0		90.8	74-136		3.27	30	
o-Xylene	48		"	50.0		95.1	83-123		1.85	30	
p- & m- Xylenes	94		"	100		93.8	82-128		1.69	30	
p-Isopropyltoluene	49		"	50.0		98.5	85-125		2.29	30	
sec-Butylbenzene	49		"	50.0		98.6	83-125		2.07	30	
Styrene	47		"	50.0		94.1	86-126		0.973	30	
tert-Butyl alcohol (TBA)	260		"	250		104	70-130		4.38	30	
tert-Butylbenzene	43		"	50.0		85.4	80-127		2.61	30	
Tetrachloroethylene	51		"	50.0		101	80-129		0.767	30	
Toluene	46		"	50.0		92.6	85-121		2.24	30	
trans-1,2-Dichloroethylene	47		"	50.0		94.6	72-132		2.98	30	
trans-1,3-Dichloropropylene	49		"	50.0		98.1	78-132		2.08	30	
trans-1,4-dichloro-2-butene	57		"	50.0		114	75-135		11.2	30	
Trichloroethylene	49		"	50.0		97.2	84-123		1.84	30	
Trichlorofluoromethane	35		"	50.0		69.2	62-140		5.10	30	
Vinyl Chloride	43		"	50.0		85.2	52-130		3.41	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	48.8		"	50.0		97.7	77-125				
Surrogate: SURR: Toluene-d8	47.9		"	50.0		95.8	85-120				
Surrogate: SURR: p-Bromofluorobenzene	50.5		"	50.0		101	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 BK81224 - EPA 5035A

Blank (BK81224-BLK1)

Prepared & Analyzed: 11/26/2018

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,2,3-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 BK81224 - EPA 5035A

Blank (BK81224-BLK1)

Prepared & Analyzed: 11/26/2018

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	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
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: SURRE: 1,2-Dichloroethane-d4	46.8	ug/L	50.0	93.5	77-125
Surrogate: SURRE: Toluene-d8	47.8	"	50.0	95.7	85-120
Surrogate: SURRE: p-Bromofluorobenzene	53.1	"	50.0	106	76-130

Blank (BK81224-BLK2)

Prepared & Analyzed: 11/26/2018

1,1,1,2-Tetrachloroethane	ND	500	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	500	"
1,1,2,2-Tetrachloroethane	ND	500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	500	"
1,1,2-Trichloroethane	ND	500	"
1,1-Dichloroethane	ND	500	"
1,1-Dichloroethylene	ND	500	"
1,2,3-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	"



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 BK81224 - EPA 5035A

Blank (BK81224-BLK2)

Prepared & Analyzed: 11/26/2018

Bromochloromethane	ND	500	ug/kg wet								
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	"								
n-Propylbenzene	ND	500	"								
o-Xylene	ND	500	"								
p- & m- Xylenes	ND	1000	"								
p-Isopropyltoluene	ND	500	"								
sec-Butylbenzene	ND	500	"								
Styrene	ND	500	"								
tert-Butyl alcohol (TBA)	ND	500	"								
tert-Butylbenzene	ND	500	"								
Tetrachloroethylene	ND	500	"								
Toluene	ND	500	"								
trans-1,2-Dichloroethylene	ND	500	"								
trans-1,3-Dichloropropylene	ND	500	"								
trans-1,4-dichloro-2-butene	ND	500	"								
Trichloroethylene	ND	500	"								
Trichlorofluoromethane	ND	500	"								
Vinyl Chloride	ND	500	"								
Xylenes, Total	ND	1500	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	47.6		ug/L	50.0		95.2	77-125				
Surrogate: SURR: Toluene-d8	47.6		"	50.0		95.2	85-120				
Surrogate: SURR: p-Bromofluorobenzene	52.5		"	50.0		105	76-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK81224 - EPA 5035A											
LCS (BK81224-BS1)						Prepared & Analyzed: 11/26/2018					
1,1,1,2-Tetrachloroethane	54		ug/L	50.0		109	75-129				
1,1,1-Trichloroethane	52		"	50.0		105	71-137				
1,1,2,2-Tetrachloroethane	48		"	50.0		96.5	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	54		"	50.0		107	58-146				
1,1,2-Trichloroethane	48		"	50.0		96.6	83-123				
1,1-Dichloroethane	49		"	50.0		98.9	75-130				
1,1-Dichloroethylene	49		"	50.0		98.7	64-137				
1,2,3-Trichlorobenzene	60		"	50.0		120	81-140				
1,2,3-Trichloropropane	49		"	50.0		98.5	81-126				
1,2,4-Trichlorobenzene	59		"	50.0		119	80-141				
1,2,4-Trimethylbenzene	51		"	50.0		101	84-125				
1,2-Dibromo-3-chloropropane	51		"	50.0		101	74-142				
1,2-Dibromoethane	53		"	50.0		106	86-123				
1,2-Dichlorobenzene	52		"	50.0		104	85-122				
1,2-Dichloroethane	47		"	50.0		95.0	71-133				
1,2-Dichloropropane	47		"	50.0		93.7	81-122				
1,3,5-Trimethylbenzene	50		"	50.0		99.8	82-126				
1,3-Dichlorobenzene	54		"	50.0		107	84-124				
1,4-Dichlorobenzene	53		"	50.0		105	84-124				
1,4-Dioxane	1100		"	1050		104	10-228				
2-Butanone	46		"	50.0		92.9	58-147				
2-Hexanone	45		"	50.0		89.5	70-139				
4-Methyl-2-pentanone	46		"	50.0		91.8	72-132				
Acetone	46		"	50.0		91.3	36-155				
Acrolein	40		"	50.0		80.8	10-238				
Acrylonitrile	46		"	50.0		91.8	66-141				
Benzene	50		"	50.0		100	77-127				
Bromochloromethane	44		"	50.0		88.9	74-129				
Bromodichloromethane	50		"	50.0		101	81-124				
Bromoform	61		"	50.0		121	80-136				
Bromomethane	35		"	50.0		70.0	32-177				
Carbon disulfide	56		"	50.0		112	10-136				
Carbon tetrachloride	54		"	50.0		107	66-143				
Chlorobenzene	50		"	50.0		101	86-120				
Chloroethane	37		"	50.0		74.8	51-142				
Chloroform	50		"	50.0		101	76-131				
Chloromethane	47		"	50.0		94.4	49-132				
cis-1,2-Dichloroethylene	49		"	50.0		98.6	74-132				
cis-1,3-Dichloropropylene	52		"	50.0		104	81-129				
Cyclohexane	47		"	50.0		93.3	70-130				
Dibromochloromethane	56		"	50.0		111	10-200				
Dibromomethane	48		"	50.0		95.0	83-124				
Dichlorodifluoromethane	60		"	50.0		120	28-158				
Ethyl Benzene	50		"	50.0		100	84-125				
Hexachlorobutadiene	64		"	50.0		129	83-133				
Isopropylbenzene	49		"	50.0		98.7	81-127				
Methyl acetate	45		"	50.0		89.8	41-143				
Methyl tert-butyl ether (MTBE)	52		"	50.0		104	74-131				
Methylcyclohexane	48		"	50.0		96.8	70-130				
Methylene chloride	47		"	50.0		93.3	57-141				
n-Butylbenzene	54		"	50.0		109	80-130				



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 BK81224 - EPA 5035A											
LCS (BK81224-BS1)						Prepared & Analyzed: 11/26/2018					
n-Propylbenzene	48		ug/L	50.0		97.0	74-136				
o-Xylene	50		"	50.0		100	83-123				
p- & m- Xylenes	100		"	100		99.9	82-128				
p-Isopropyltoluene	52		"	50.0		105	85-125				
sec-Butylbenzene	52		"	50.0		105	83-125				
Styrene	50		"	50.0		99.2	86-126				
tert-Butyl alcohol (TBA)	290		"	250		115	70-130				
tert-Butylbenzene	46		"	50.0		92.3	80-127				
Tetrachloroethylene	55		"	50.0		109	80-129				
Toluene	49		"	50.0		97.9	85-121				
trans-1,2-Dichloroethylene	49		"	50.0		98.7	72-132				
trans-1,3-Dichloropropylene	53		"	50.0		106	78-132				
trans-1,4-dichloro-2-butene	54		"	50.0		108	75-135				
Trichloroethylene	51		"	50.0		103	84-123				
Trichlorofluoromethane	31		"	50.0		62.3	62-140				
Vinyl Chloride	41		"	50.0		81.5	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	46.6		"	50.0		93.1	77-125				
Surrogate: SURR: Toluene-d8	47.6		"	50.0		95.2	85-120				
Surrogate: SURR: p-Bromofluorobenzene	51.1		"	50.0		102	76-130				
LCS Dup (BK81224-BS1)						Prepared & Analyzed: 11/26/2018					
1,1,1,2-Tetrachloroethane	55		ug/L	50.0		109	75-129		0.460	30	
1,1,1-Trichloroethane	52		"	50.0		104	71-137		0.766	30	
1,1,2,2-Tetrachloroethane	49		"	50.0		97.9	79-129		1.36	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	53		"	50.0		107	58-146		0.692	30	
1,1,2-Trichloroethane	50		"	50.0		99.2	83-123		2.66	30	
1,1-Dichloroethane	49		"	50.0		98.4	75-130		0.466	30	
1,1-Dichloroethylene	49		"	50.0		98.0	64-137		0.732	30	
1,2,3-Trichlorobenzene	59		"	50.0		119	81-140		0.789	30	
1,2,3-Trichloropropane	50		"	50.0		99.5	81-126		1.01	30	
1,2,4-Trichlorobenzene	59		"	50.0		118	80-141		0.490	30	
1,2,4-Trimethylbenzene	50		"	50.0		99.6	84-125		1.57	30	
1,2-Dibromo-3-chloropropane	52		"	50.0		103	74-142		2.11	30	
1,2-Dibromoethane	54		"	50.0		107	86-123		1.05	30	
1,2-Dichlorobenzene	52		"	50.0		104	85-122		0.539	30	
1,2-Dichloroethane	48		"	50.0		96.2	71-133		1.32	30	
1,2-Dichloropropane	47		"	50.0		93.3	81-122		0.428	30	
1,3,5-Trimethylbenzene	49		"	50.0		97.3	82-126		2.48	30	
1,3-Dichlorobenzene	53		"	50.0		106	84-124		1.39	30	
1,4-Dichlorobenzene	52		"	50.0		105	84-124		0.399	30	
1,4-Dioxane	1100		"	1050		106	10-228		1.92	30	
2-Butanone	48		"	50.0		96.4	58-147		3.74	30	
2-Hexanone	45		"	50.0		91.0	70-139		1.57	30	
4-Methyl-2-pentanone	47		"	50.0		94.5	72-132		2.90	30	
Acetone	46		"	50.0		91.8	36-155		0.590	30	
Acrolein	40		"	50.0		80.1	10-238		0.895	30	
Acrylonitrile	47		"	50.0		94.6	66-141		3.07	30	
Benzene	50		"	50.0		99.6	77-127		0.700	30	
Bromochloromethane	45		"	50.0		90.4	74-129		1.58	30	
Bromodichloromethane	51		"	50.0		102	81-124		0.948	30	
Bromoform	62		"	50.0		124	80-136		2.12	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 BK81224 - EPA 5035A

LCS Dup (BK81224-BSD1)

Prepared & Analyzed: 11/26/2018

Bromomethane	35		ug/L	50.0		70.2	32-177		0.342	30	
Carbon disulfide	56		"	50.0		111	10-136		0.753	30	
Carbon tetrachloride	53		"	50.0		107	66-143		0.0561	30	
Chlorobenzene	50		"	50.0		101	86-120		0.218	30	
Chloroethane	37		"	50.0		74.1	51-142		0.860	30	
Chloroform	51		"	50.0		101	76-131		0.535	30	
Chloromethane	46		"	50.0		91.2	49-132		3.53	30	
cis-1,2-Dichloroethylene	49		"	50.0		98.6	74-132		0.0406	30	
cis-1,3-Dichloropropylene	52		"	50.0		103	81-129		0.694	30	
Cyclohexane	47		"	50.0		93.2	70-130		0.129	30	
Dibromochloromethane	57		"	50.0		113	10-200		1.60	30	
Dibromomethane	49		"	50.0		97.2	83-124		2.29	30	
Dichlorodifluoromethane	59		"	50.0		118	28-158		1.48	30	
Ethyl Benzene	49		"	50.0		99.0	84-125		1.19	30	
Hexachlorobutadiene	62		"	50.0		124	83-133		3.58	30	
Isopropylbenzene	48		"	50.0		96.3	81-127		2.50	30	
Methyl acetate	47		"	50.0		93.9	41-143		4.42	30	
Methyl tert-butyl ether (MTBE)	54		"	50.0		108	74-131		3.30	30	
Methylcyclohexane	47		"	50.0		94.7	70-130		2.21	30	
Methylene chloride	47		"	50.0		94.5	57-141		1.21	30	
n-Butylbenzene	52		"	50.0		103	80-130		5.49	30	
n-Propylbenzene	47		"	50.0		94.8	74-136		2.25	30	
o-Xylene	50		"	50.0		99.9	83-123		0.539	30	
p- & m- Xylenes	98		"	100		98.2	82-128		1.66	30	
p-Isopropyltoluene	51		"	50.0		103	85-125		2.10	30	
sec-Butylbenzene	51		"	50.0		103	83-125		2.25	30	
Styrene	50		"	50.0		99.0	86-126		0.222	30	
tert-Butyl alcohol (TBA)	290		"	250		116	70-130		1.03	30	
tert-Butylbenzene	45		"	50.0		89.8	80-127		2.72	30	
Tetrachloroethylene	54		"	50.0		107	80-129		1.85	30	
Toluene	48		"	50.0		96.3	85-121		1.69	30	
trans-1,2-Dichloroethylene	49		"	50.0		97.4	72-132		1.35	30	
trans-1,3-Dichloropropylene	53		"	50.0		106	78-132		0.132	30	
trans-1,4-dichloro-2-butene	60		"	50.0		120	75-135		10.4	30	
Trichloroethylene	50		"	50.0		100	84-123		2.09	30	
Trichlorofluoromethane	31		"	50.0		62.1	62-140		0.322	30	
Vinyl Chloride	40		"	50.0		80.7	52-130		1.01	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	47.8		"	50.0		95.6	77-125				
Surrogate: SURR: Toluene-d8	47.6		"	50.0		95.2	85-120				
Surrogate: SURR: p-Bromofluorobenzene	50.4		"	50.0		101	76-130				



Gas Chromatography/Flame Ionization Detector - 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 BK81170 - EPA 3545A

Blank (BK81170-BLK1)

Prepared: 11/21/2018 Analyzed: 11/24/2018

Total EPH	ND	50.0	mg/kg wet								
Surrogate: 1-Chlorooctadecane	9.34		"	10.0		93.4	40-140				
Surrogate: o-Terphenyl	9.61		"	10.0		96.1	40-140				

LCS (BK81170-BS1)

Prepared: 11/21/2018 Analyzed: 11/24/2018

Total EPH	270	50.0	mg/kg wet	360		75.0	40-140				
Surrogate: 1-Chlorooctadecane	8.90		"	10.0		89.0	40-140				
Surrogate: o-Terphenyl	8.03		"	10.0		80.3	40-140				

LCS Dup (BK81170-BSD1)

Prepared: 11/21/2018 Analyzed: 11/24/2018

Total EPH	262	50.0	mg/kg wet	360		72.9	40-140		2.95	30	
Surrogate: 1-Chlorooctadecane	8.86		"	10.0		88.6	40-140				
Surrogate: o-Terphenyl	7.97		"	10.0		79.7	40-140				



Metals by ICP - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK81097 - EPA 3015A

Blank (BK81097-BLK1)

Prepared: 11/20/2018 Analyzed: 11/21/2018

Aluminum	0.0838	0.0556	mg/L
Barium	ND	0.0278	"
Calcium	0.0760	0.0556	"
Chromium	ND	0.00556	"
Cobalt	ND	0.00444	"
Copper	ND	0.0222	"
Iron	ND	0.278	"
Lead	ND	0.00556	"
Magnesium	ND	0.0556	"
Manganese	ND	0.00556	"
Nickel	ND	0.0111	"
Potassium	ND	0.0556	"
Silver	ND	0.00556	"
Sodium	ND	0.556	"
Vanadium	ND	0.0111	"
Zinc	ND	0.0278	"

LCS (BK81097-BS1)

Prepared: 11/20/2018 Analyzed: 11/21/2018

Aluminum	2.02	ug/mL	2.00	101	80-120
Barium	2.08	"	2.00	104	80-120
Calcium	1.07	"	1.00	107	80-120
Chromium	0.213	"	0.200	107	80-120
Cobalt	0.541	"	0.500	108	80-120
Copper	0.266	"	0.250	106	80-120
Iron	1.04	"	1.00	104	80-120
Lead	0.506	"	0.500	101	80-120
Magnesium	1.02	"	1.00	102	80-120
Manganese	0.523	"	0.500	105	80-120
Nickel	0.531	"	0.500	106	80-120
Potassium	1.00	"	0.500	201	80-120
Silver	0.0492	"	0.0500	98.5	80-120
Sodium	1.06	"	1.00	106	80-120
Vanadium	0.501	"	0.500	100	80-120
Zinc	0.502	"	0.500	100	80-120

High Bias



Metals by ICP/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 BK81098 - EPA 3015A

Blank (BK81098-BLK1)

Prepared & Analyzed: 11/20/2018

Antimony	ND	1.11	ug/L
Arsenic	ND	1.11	"
Beryllium	ND	0.333	"
Cadmium	ND	0.556	"
Selenium	2.06	1.11	"
Thallium	ND	1.11	"

LCS (BK81098-BS1)

Prepared & Analyzed: 11/20/2018

Antimony	37.8	ug/L	50.0	75.7	80-120	Low Bias
Arsenic	49.7	"	50.0	99.4	80-120	
Beryllium	48.1	"	50.0	96.1	80-120	
Cadmium	44.8	"	50.0	89.6	80-120	
Selenium	49.9	"	50.0	99.7	80-120	
Thallium	46.5	"	50.0	93.1	80-120	



Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK81027 - EPA 7473 water

Blank (BK81027-BLK1)

Prepared & Analyzed: 11/19/2018

Mercury	ND	0.00020	mg/L

Reference (BK81027-SRM1)

Prepared & Analyzed: 11/19/2018

Mercury	0.0100		mg/L	0.0100	100	70-130



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18K0641-01	HC Soil	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
18K0641-02	HC Soil DUP	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
18K0641-03	LC Soil	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
18K0641-04	LC Soil DUP	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C

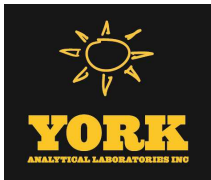


Sample and Data Qualifiers Relating to This Work Order

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.
N	The Tentatively Identified Compound reported indicates the presence of an possible analyte or class of analyte that has been 'tentatively identified' and the associated numerical value represents its estimated concentration.
M-MBLk	Analyte was detected in the batch method blank above the Reporting Limit.
M-ICV2	The recovery for this element in the ICV was outside the 90-110% recovery criteria.
M-CRL	The RL check for this element recovered outside of control limits.
M-BS	The recovery for this element in the batch blank spike recovered slightly outside of control limits
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

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.

Field Chain-of-Custody Record

YORK Project No.

SK0641

ANALYTICAL LABORATORIES INC.

YOUR INFORMATION

Company:	Longan
Address:	300 Kimball Drive Parsippany, NJ
Phone:	215 491 6519
Contact:	Lingre Zeng
Email:	

Report To: _____

Company: Landon

Address: 300 Kimball
Parsippany

Phone: 215 491

Contact: Lingke

E-mail: 300

Invoice To:	Langdon
Company:	300 Kimball
Address:	Parsippany
Phone:	215 491
Contact:	Lindie Zee
e-mail:	lindie.zee@langdon.com

YOUR Project Number	19004370
YOUR Project Name	51 Greenhill

Turn-Around Time					X
RUSH - Next Day					
RUSH - Two Day					
RUSH - Three Day					
RUSH - Four Day					
Standard (5-7 Day)					

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.

Page

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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.

Aranya Buddham

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



Sample Identification

HC soil
HC soil DUP
LC soil
LC soil DUP
HC GW
LC GW

Sample Matrix
S
S
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GW
GW

Date/Time Sampled
11/15/18 12:00
11/15/18 12:00
11/15/18 11:45
11/15/18 11:45
11/15/18 11:40
11/15/18 11:35

Analysis Requested	
TCL VOCs + TICs	total EPH (m
TCL VOCs + TICs	total EPH
	"
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TAL metals	
TAL metals	

Container Description
400mL vials + 400 jars
"
"
"
250 mL jar
250 mL jar

Comments:

Preservation: (check all that apply)

HCl ☒ MeOH ☒ HNO ₃ ☒ H ₂ SO ₄ _____ NaOH _____ ZnAc _____ Ascorbic Acid _____ Other: _____	Field Filtered _____ Lab to Filter _____

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Page 15

Sample is Relinquished by / Company

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Date/Time	Remarks
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44 of 44

Samples Received by Company

Date/Time
Apr. 81 81-91-11

Samples Received in LAB by		Date/Time

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Technical Report

prepared for:

Langan Engineering & Environmental Services (WP)

707 Westchester Ave.
White Plains NY, 10604
Attention: Lingke Zeng

Report Date: 01/11/2019

Client Project ID: 190043701

York Project (SDG) No.: 18L0847

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
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STRATFORD, CT 06615
(203) 325-1371



132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Langan Engineering & Environmental Services (WP)

707 Westchester Ave.
White Plains NY, 10604
Attention: Lingke Zeng

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 December 19, 2018 and listed below. The project was identified as your project: **190043701**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18L0847-01	HC-Control	Water	12/14/2018	12/19/2018
18L0847-02	HC-Control-DUP	Water	12/14/2018	12/19/2018
18L0847-03	HC-PS	Water	12/14/2018	12/19/2018
18L0847-04	HC-Control	Soil	12/14/2018	12/19/2018
18L0847-05	HC-Control-DUP	Soil	12/14/2018	12/19/2018
18L0847-06	HC-PS	Soil	12/14/2018	12/19/2018
18L0847-07	LC-Control	Water	12/14/2018	12/19/2018
18L0847-08	LC-Control-DUP	Water	12/14/2018	12/19/2018
18L0847-09	LC-PS	Water	12/14/2018	12/19/2018
18L0847-10	LC-PS-DUP	Water	12/14/2018	12/19/2018
18L0847-11	LC-Control	Soil	12/14/2018	12/19/2018
18L0847-12	LC-Control-DUP	Soil	12/14/2018	12/19/2018
18L0847-13	LC-PS	Soil	12/14/2018	12/19/2018
18L0847-14	LC-PS-DUP	Soil	12/14/2018	12/19/2018
18L0847-15	Trip Blank	Water	12/14/2018	12/19/2018

General Notes for York Project (SDG) No.: 18L0847

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

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 01/11/2019





Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Water

December 14, 2018 1:45 pm

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	920		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 13:45	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 13:45	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	29		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-01

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 1:45 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

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
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	74		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	5500		ug/L	10	25	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/26/2018 12:48	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	390		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 13:45	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	540		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 13:45	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-01

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 1:45 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-82-8	Isopropylbenzene	110		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	43		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	390		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 13:45	LLJ
75-09-2	Methylene chloride	11		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	13		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	160		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	1200		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/24/2018 12:30	12/24/2018 13:45	LLJ
179601-23-1	p- & m- Xylenes	2300		ug/L	5.0	10	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/24/2018 12:30	12/24/2018 13:45	LLJ
99-87-6	p-Isopropyltoluene	21		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	14		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	3.4		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	3000		ug/L	4.0	10	20	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:12	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-01

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 1:45 pm

Date Received
12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1330-20-7	Xylenes, Total	3500		ug/L	6.0	15	10	EPA 8260C	12/24/2018 12:30	12/24/2018 13:45	LLJ
Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP											
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	98.5 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	95.6 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	112 %	79-122								

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	82		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
NA	Alkyl substituted cyclohexane isomers	59		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
NA	Alkyl Substituted Cyclopentane isomers	65		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
NA	Alkyl Substituted Cyclopentene isomers	47		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
NA	Cyclopentene	13	N	ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
NA	Hexane (TIC)	16	N	ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
NA	methyl Butane isomer	12		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
NA	methyl butene isomers	48		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										
108-87-2	methyl cyclohexene isomer	15		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
Certifications:										

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	205		mg/L	0.0556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:34	KML
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP										
7440-39-3	Barium	2.54		mg/L	0.0278	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:34	KML
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP										
7440-70-2	Calcium	426		mg/L	0.0556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:34	KML
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP										
7440-47-3	Chromium	0.259		mg/L	0.00556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:34	KML
Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP										



Sample Information

Client Sample ID: HC-Control

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York Project (SDG) No.
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December 14, 2018 1:45 pm

Date Received
12/19/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-48-4	Cobalt	0.0805		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7440-50-8	Copper	0.335		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7439-89-6	Iron	267		mg/L	2.78	10	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 14:42	KML
7439-92-1	Lead	1.72		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7439-95-4	Magnesium	135		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7439-96-5	Manganese	3.05		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7440-02-0	Nickel	0.238		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7440-09-7	Potassium	84.9	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7440-23-5	Sodium	1690		mg/L	5.56	10	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 14:42	KML
7440-62-2	Vanadium	0.348		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML
7440-66-6	Zinc	1.50		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:34	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	4.82		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:46	BML
7440-38-2	Arsenic	86.5		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:46	BML
7440-41-7	Beryllium	1.07		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:46	BML
7440-43-9	Cadmium	2.38		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:46	BML
7782-49-2	Selenium	186		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:46	BML
7440-28-0	Thallium	1.83		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:46	BML



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-01

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 1:45 pm

Date Received
12/19/2018

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2018 09:48	12/20/2018 10:21	SY

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	33.8		mg/L	10.0	10	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/26/2018 09:11	12/26/2018 15:59	AD

Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-02

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 2:15 pm

Date Received
12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-02

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:15 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	850		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	280		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	26		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	70		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	5300		ug/L	10	25	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/26/2018 13:15	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-02

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:15 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

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 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	390		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	510		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	110		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	39		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	460		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
75-09-2	Methylene chloride	4.1		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	17		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	150		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
95-47-6	o-Xylene	1100		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
179601-23-1	p- & m- Xylenes	2200		ug/L	5.0	10	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 14:39	LLJ
99-87-6	p-Isopropyltoluene	20		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-02

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:15 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
135-98-8	sec-Butylbenzene	14		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	3.3		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	3500		ug/L	10	25	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/26/2018 13:15	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	3300		ug/L	6.0	15	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/24/2018 12:30	12/24/2018 14:39	LLJ

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	86.9 %	69-130
2037-26-5	Surrogate: SURR: Toluene-d8	89.8 %	81-117
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	118 %	79-122

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	93		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl substituted cyclohexane isomers	50		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl Substituted Cyclopentane isomers	64		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl Substituted Cyclopentene isomers	47		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Cyclopentene (TIC)	12	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-02

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 2:15 pm

Date Received
12/19/2018

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Hexane (TIC)	15	N	ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
							Certifications:			
NA	methyl Butane isomer	12		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
							Certifications:			
NA	methyl butene isomers	25		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
							Certifications:			
108-87-2	methyl cyclohexene isomer	13		ug/L		1	EPA 8260C	12/21/2018 07:30	12/27/2018 15:46	RQB
							Certifications:			

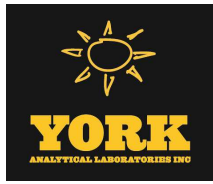
Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	6.68		mg/L	0.0556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-39-3	Barium	0.197		mg/L	0.0278	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-70-2	Calcium	298		mg/L	0.0556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-47-3	Chromium	0.0101		mg/L	0.00556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-48-4	Cobalt	ND		mg/L	0.00444	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-50-8	Copper	ND		mg/L	0.0222	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-89-6	Iron	4.45		mg/L	0.278	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-92-1	Lead	0.0552		mg/L	0.00556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-95-4	Magnesium	94.2		mg/L	0.0556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7439-96-5	Manganese	0.734		mg/L	0.00556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-02-0	Nickel	ND		mg/L	0.0111	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-09-7	Potassium	60.5	B	mg/L	0.0556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-23-5	Sodium	1530		mg/L	5.56	10	EPA 6010D	12/21/2018 12:25	12/26/2018 14:44	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7440-62-2	Vanadium	0.0329		mg/L	0.0111	1	EPA 6010D	12/21/2018 12:25	12/21/2018 14:36	KML
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-02

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:15 pm

Date Received

12/19/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc	0.0557		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:36	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	4.57		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:51	BML
7440-38-2	Arsenic	26.2		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:51	BML
7440-41-7	Beryllium	ND		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:51	BML
7440-43-9	Cadmium	ND		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:51	BML
7782-49-2	Selenium	41.8		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:51	BML
7440-28-0	Thallium	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:51	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2018 09:48	12/20/2018 10:32	SY

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	35.0		mg/L	10.0	10	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/26/2018 09:11	12/26/2018 15:59	AD

Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-03

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-03

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	320		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	110		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	130		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-03

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

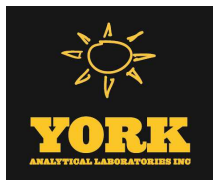
Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	460		ug/L	10	20	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	1600		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	1.3		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	320		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	220		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	63		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-03

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	19		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	340		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
75-09-2	Methylene chloride	7.4		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	11		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	95		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	380		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
179601-23-1	p- & m- Xylenes	720		ug/L	5.0	10	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
99-87-6	p-Isopropyltoluene	12		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	9.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	2.6		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	740		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	1.7		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	1100		ug/L	6.0	15	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/24/2018 12:30	12/24/2018 15:32	LLJ
Surrogate Recoveries		Result	Acceptance Range								



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-03

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	110 %			69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	97.9 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %			79-122						

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	61		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl substituted cyclohexane isomers	87		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl Substituted Cyclopentane isomers	150		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Butane (TIC)	23	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Heptane (TIC)	24	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Hexane (TIC)	34	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	methyl Butane isomer	24		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	methyl hexane isomers	29		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Pentane (TIC)	23	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	737		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-39-3	Barium	4.57		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-70-2	Calcium	670		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-47-3	Chromium	0.876		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-48-4	Cobalt	0.269		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-50-8	Copper	1.31		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-03

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	654		mg/L	2.78	10	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 14:46	KML
7439-92-1	Lead	5.84		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7439-95-4	Magnesium	213		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7439-96-5	Manganese	10.2		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-02-0	Nickel	0.835		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-09-7	Potassium	177	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-23-5	Sodium	9120		mg/L	5.56	10	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 14:46	KML
7440-62-2	Vanadium	1.27		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML
7440-66-6	Zinc	7.52		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:39	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	5.86		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:56	BML
7440-38-2	Arsenic	272		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:56	BML
7440-41-7	Beryllium	1.36		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:56	BML
7440-43-9	Cadmium	11.8		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:56	BML
7782-49-2	Selenium	464		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:56	BML
7440-28-0	Thallium	1.65		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 15:56	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

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



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-03

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.00088		mg/L	0.00020	1	EPA 7473	12/20/2018 09:48	12/20/2018 10:42	SY
							Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	335		mg/L	10.0	10	SM 5310C	12/26/2018 09:11	12/26/2018 15:59	AD
							Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		

Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 1:45 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

Report prepared by Chemical Services, Inc.											
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	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications:	12/21/2018 07:30 NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Soil

December 14, 2018 1:45 pm

12/19/2018

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	9300		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	4200	CCV-E	ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/kg dry	6100	12000	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	ND		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-02-8	Acrolein	ND		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	2100		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 1:45 pm

Date Received

12/19/2018

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		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	4000		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	1500		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	890		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	16000		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	ND		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	900		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	1800		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	3200		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	6600		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	560	J	ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	470	J	ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

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December 14, 2018 1:45 pm

Date Received

12/19/2018

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		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	3800		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/kg dry	300	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	9800		ug/kg dry	910	1800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	88.5 %	77-125								
2037-26-5	Surrogate: SURR: Toluene-d8	101 %	85-120								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %	76-130								

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	12000		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Alkyl substituted cyclohexane isomers	12000		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Heptane (TIC)	3900	N	ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl Heptane isomers	8400		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl octane isomers	6100		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Nonane (TIC)	4100	N	ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.

Client Project ID

Matrix

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18L0847

190043701

Soil

December 14, 2018 1:45 pm

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
95-57-8	2-Chlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
91-57-6	2-Methylnaphthalene	997		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
95-48-7	2-Methylphenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
88-74-4	2-Nitroaniline	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
88-75-5	2-Nitrophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.

18L0847

Client Project ID

190043701

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December 14, 2018 1:45 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-09-2	3-Nitroaniline	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
106-47-8	4-Chloroaniline	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
100-01-6	4-Nitroaniline	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
100-02-7	4-Nitrophenol	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
83-32-9	Acenaphthene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
98-86-2	Acetophenone	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
62-53-3	Aniline	ND		ug/kg dry	203	406	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
120-12-7	Anthracene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
1912-24-9	Atrazine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
100-52-7	Benzaldehyde	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
92-87-5	Benzidine	ND		ug/kg dry	203	406	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
65-85-0	Benzoic acid	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
100-51-6	Benzyl alcohol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.

18L0847

Client Project ID

190043701

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December 14, 2018 1:45 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
105-60-2	Caprolactam	ND		ug/kg dry	101	202	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
86-74-8	Carbazole	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
218-01-9	Chrysene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
132-64-9	Dibenzofuran	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
84-66-2	Diethyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
131-11-3	Dimethyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
206-44-0	Fluoranthene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
86-73-7	Fluorene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
118-74-1	Hexachlorobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
67-72-1	Hexachloroethane	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
78-59-1	Isophorone	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
91-20-3	Naphthalene	968		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 1:45 pm

Date Received
12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-95-3	Nitrobenzene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
87-86-5	Pentachlorophenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
85-01-8	Phenanthrene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
108-95-2	Phenol	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
129-00-0	Pyrene	ND		ug/kg dry	50.8	101	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 15:46	OW
Surrogate Recoveries		Result		Acceptance Range							
367-12-4	Surrogate: SURR: 2-Fluorophenol	79.4 %									
4165-62-2	Surrogate: SURR: Phenol-d5	68.1 %									
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	88.1 %									
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	68.6 %									
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	74.1 %									
1718-51-0	Surrogate: SURR: Terphenyl-d14	69.8 %									

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	dimethyl Heptane isomer	1300	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 15:46	OW
111-84-2	Nonane	1380	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 15:46	OW

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	82.3		%	0.100	1	SM 2540G Certifications: CTDOH	12/27/2018 09:57	12/27/2018 17:44	TAJ

Analyzed by: Phoenix Environmental Laboratories, Inc. S



Sample Information

Client Sample ID: HC-Control

York Sample ID: 18L0847-04

York Project (SDG) No.
18L0847

Client Project ID
190043701

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Soil

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December 14, 2018 1:45 pm

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12/19/2018

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)	11200		mg/kg	1660	1	SW9060A MOD Certifications:	12/20/2018 00:00	01/10/2019 00:00	PHO

Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 2:15 pm

Date Received
12/19/2018

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	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	6200		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 2:15 pm

Date Received

12/19/2018

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	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	2700	CCV-E	ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/kg dry	6100	12000	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	ND		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-02-8	Acrolein	ND		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	1600		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 2:15 pm

Date Received

12/19/2018

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	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	3100		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	1100		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	630		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	12000		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	ND		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	570	J	ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	1300		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	2300		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	4800		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	400	J	ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	310	J	ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

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Collection Date/Time

December 14, 2018 2:15 pm

Date Received

12/19/2018

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	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	2700		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/kg dry	310	610	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	7000		ug/kg dry	920	1800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	91.4 %	77-125
2037-26-5	Surrogate: SURR: Toluene-d8	104 %	85-120
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.4 %	76-130

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	9800		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Alkyl substituted cyclohexane isomers	7800		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Heptane (TIC)	2900	N	ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl Heptane isomers	7000		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl octane isomers	4800		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Nonane (TIC)	3400	N	ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Unknown alkyl substituted hexene isomer	1800		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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18L0847

190043701

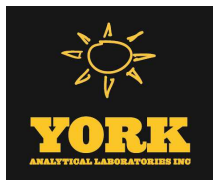
Soil

December 14, 2018 2:15 pm

12/19/2018

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
95-57-8	2-Chlorophenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
91-57-6	2-Methylnaphthalene	1000		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
95-48-7	2-Methylphenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
88-74-4	2-Nitroaniline	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
88-75-5	2-Nitrophenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
99-09-2	3-Nitroaniline	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 2:15 pm

Date Received
12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
106-47-8	4-Chloroaniline	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
100-01-6	4-Nitroaniline	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
100-02-7	4-Nitrophenol	ND		ug/kg dry	102	204	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
83-32-9	Acenaphthene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
98-86-2	Acetophenone	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
62-53-3	Aniline	ND		ug/kg dry	205	409	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
120-12-7	Anthracene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
1912-24-9	Atrazine	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
100-52-7	Benzaldehyde	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
92-87-5	Benzidine	ND		ug/kg dry	205	409	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
65-85-0	Benzoic acid	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
100-51-6	Benzyl alcohol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

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December 14, 2018 2:15 pm

Date Received
12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
105-60-2	Caprolactam	ND		ug/kg dry	102	204	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
86-74-8	Carbazole	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
218-01-9	Chrysene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
132-64-9	Dibenzofuran	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
84-66-2	Diethyl phthalate	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
131-11-3	Dimethyl phthalate	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
206-44-0	Fluoranthene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
86-73-7	Fluorene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
118-74-1	Hexachlorobenzene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
67-72-1	Hexachloroethane	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
78-59-1	Isophorone	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
91-20-3	Naphthalene	977		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW
98-95-3	Nitrobenzene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 16:33	OW



Sample Information

Client Sample ID: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 2:15 pm

Date Received
12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
87-86-5	Pentachlorophenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
85-01-8	Phenanthrene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
108-95-2	Phenol	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
129-00-0	Pyrene	ND		ug/kg dry	51.2	102	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 16:33	OW
Surrogate Recoveries		Result			Acceptance Range						
367-12-4	Surrogate: SURR: 2-Fluorophenol	75.6 %			20-108						
4165-62-2	Surrogate: SURR: Phenol-d5	66.2 %			23-114						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	83.7 %			22-108						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	65.5 %			21-113						
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	73.4 %			19-110						
1718-51-0	Surrogate: SURR: Terphenyl-d14	65.1 %			24-116						

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	decahydro naphthalene isomer	1470	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 16:33	OW
NA	methyl ethyl heptane isomer	1060	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 16:33	OW
NA	methyl Octane isomer	1140	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 16:33	OW
111-84-2	Nonane	1230	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 16:33	OW
NA	Tetramethyl Benzene isomer	1550	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 16:33	OW

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: HC-Control-DUP

York Sample ID: 18L0847-05

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 2:15 pm

Date Received
12/19/2018

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	81.6		%	0.100	1	SM 2540G	12/27/2018 09:57	12/27/2018 17:44	TAJ
							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)	18700		mg/kg	1940	1	SW9060A MOD	12/21/2018 00:00	01/09/2019 00:00	PHO
							Certifications:			

Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 2:30 pm

Date Received
12/19/2018

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	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Soil

December 14, 2018 2:30 pm

12/19/2018

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	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	5700		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	2500	CCV-E	ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/kg dry	6000	12000	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	ND		ug/kg dry	600	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-02-8	Acrolein	ND		ug/kg dry	600	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	660		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

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	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	2900		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	820		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	570	J	ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	11000		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	ND		ug/kg dry	600	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	570	J	ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	1200		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	1700		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	3600		ug/kg dry	600	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

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	370	J	ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	320	J	ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	1300		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/kg dry	300	600	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	5300		ug/kg dry	900	1800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	95.8 %	77-125								
2037-26-5	Surrogate: SURR: Toluene-d8	103 %	85-120								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.7 %	76-130								

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	9100		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Alkyl substituted cyclohexane isomers	9800		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Heptane (TIC)	2700	N	ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl Heptane isomers	7100		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	methyl octane isomers	5100		ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ
NA	Nonane (TIC)	3500	N	ug/kg dry			100	EPA 8260C Certifications:	12/21/2018 07:30	12/21/2018 07:30	LLJ

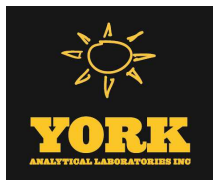
Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
95-57-8	2-Chlorophenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
91-57-6	2-Methylnaphthalene	980		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-48-7	2-Methylphenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
88-74-4	2-Nitroaniline	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
88-75-5	2-Nitrophenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
99-09-2	3-Nitroaniline	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
106-47-8	4-Chloroaniline	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
100-01-6	4-Nitroaniline	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
100-02-7	4-Nitrophenol	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
83-32-9	Acenaphthene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
98-86-2	Acetophenone	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
62-53-3	Aniline	ND		ug/kg dry	200	399	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
120-12-7	Anthracene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
1912-24-9	Atrazine	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
100-52-7	Benzaldehyde	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
92-87-5	Benzidine	ND		ug/kg dry	200	399	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 2:30 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
65-85-0	Benzoic acid	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
100-51-6	Benzyl alcohol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
105-60-2	Caprolactam	ND		ug/kg dry	99.7	199	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
86-74-8	Carbazole	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
218-01-9	Chrysene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
132-64-9	Dibenzofuran	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
84-66-2	Diethyl phthalate	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
131-11-3	Dimethyl phthalate	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
206-44-0	Fluoranthene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
86-73-7	Fluorene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
118-74-1	Hexachlorobenzene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 17:21	OW



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
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December 14, 2018 2:30 pm

Date Received
12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
67-72-1	Hexachloroethane	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
78-59-1	Isophorone	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
91-20-3	Naphthalene	892		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
98-95-3	Nitrobenzene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
87-86-5	Pentachlorophenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
85-01-8	Phenanthrene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
108-95-2	Phenol	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
129-00-0	Pyrene	ND		ug/kg dry	50.0	99.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 17:21	OW
Surrogate Recoveries		Result	Acceptance Range								
367-12-4	Surrogate: SURR: 2-Fluorophenol	75.6 %	20-108								
4165-62-2	Surrogate: SURR: Phenol-d5	67.1 %	23-114								
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	84.3 %	22-108								
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	78.9 %	21-113								
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	75.6 %	19-110								
1718-51-0	Surrogate: SURR: Terphenyl-d14	74.2 %	24-116								

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	butene Phenyl isomer	1270	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 17:21	OW
NA	decahydro naphthalene isomer	1430	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 17:21	OW
124-18-5	Decane	1430	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 17:21	OW



Sample Information

Client Sample ID: HC-PS

York Sample ID: 18L0847-06

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 2:30 pm

Date Received
12/19/2018

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	dimethyl octane isomer	1120	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 17:21	OW
NA	methyl ethyl heptane isomer	1200	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 17:21	OW
NA	methyl Octane isomer	1040	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 17:21	OW
111-84-2	Nonane	1040	J, N	ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 17:21	OW

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	83.7		%	0.100	1	SM 2540G Certifications: CTDOH	12/27/2018 09:57	12/27/2018 17:44	TAJ

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)	8410		mg/kg	1660	1	SW9060A MOD Certifications:	12/22/2018 00:00	01/09/2019 00:00	PHO

Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-07

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 12:00 pm

Date Received
12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-07

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	510		ug/L	1.0	2.5	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:58	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	160		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-07

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

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
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	6.4		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	130	CCV-E	ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	110		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	18		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-07

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

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
108-87-2	Methylcyclohexane	230		ug/L	1.0	2.5	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 15:58	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	9.6		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	60		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	70		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	290		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	5.4		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	42		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	360		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	103 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	113 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	95.1 %	79-122								



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-07

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 12:00 pm

Date Received
12/19/2018

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	870		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	alkyl substituted cyclohexane isomer	29		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl Substituted Cyclopentane isomers	78		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl substituted pentane isomers	23		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	unknown alkenes	44		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB

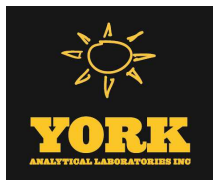
Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	155		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-39-3	Barium	0.814		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-70-2	Calcium	117		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-47-3	Chromium	0.199		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-48-4	Cobalt	0.0530		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-50-8	Copper	0.289		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7439-89-6	Iron	156		mg/L	2.78	10	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 14:49	KML
7439-92-1	Lead	0.193		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7439-95-4	Magnesium	66.6		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7439-96-5	Manganese	1.78		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-02-0	Nickel	0.166		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-09-7	Potassium	56.4	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-23-5	Sodium	1220		mg/L	0.556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-07

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-62-2	Vanadium	0.289		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML
7440-66-6	Zinc	0.428		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:41	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	1.12		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:10	BML
7440-38-2	Arsenic	55.2		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:10	BML
7440-41-7	Beryllium	1.31		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:10	BML
7440-43-9	Cadmium	0.823		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:10	BML
7782-49-2	Selenium	215		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:10	BML
7440-28-0	Thallium	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:10	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2018 09:48	12/20/2018 11:07	SY

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	12.5		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/26/2018 09:11	12/26/2018 15:59	AD



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-08

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

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	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	1600		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 16:25	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	200		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	80	80	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-08

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/L	2.0	4.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-02-8	Acrolein	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	12		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	240	CCV-E	ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	190		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	30		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-08

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	540		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 16:25	LLJ
75-09-2	Methylene chloride	ND		ug/L	2.0	4.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	11		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	85		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	200		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	540		ug/L	1.0	2.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	5.8		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	1.0	2.0	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	120		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.40	1.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	740		ug/L	1.2	3.0	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ

Surrogate Recoveries

Result

Acceptance Range



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-08

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	105 %			69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	111 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %			79-122						

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	1100		ug/L		2	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl substituted cyclohexane isomers	22		ug/L		2	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl Substituted Cyclopentene isomers	150		ug/L		2	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Hexane (TIC)	22	N	ug/L		2	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	150		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-39-3	Barium	1.17		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-70-2	Calcium	131		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-47-3	Chromium	0.175		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-48-4	Cobalt	0.0470		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-50-8	Copper	0.277		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7439-89-6	Iron	97.3		mg/L	0.278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7439-92-1	Lead	0.266		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7439-95-4	Magnesium	60.5		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7439-96-5	Manganese	2.01		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-02-0	Nickel	0.121		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-08

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 12:30 pm

Date Received
12/19/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-09-7	Potassium	55.0	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-23-5	Sodium	1270		mg/L	0.556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-62-2	Vanadium	0.375		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML
7440-66-6	Zinc	0.378		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:48	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:15	BML
7440-38-2	Arsenic	43.9		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:15	BML
7440-41-7	Beryllium	2.59		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:15	BML
7440-43-9	Cadmium	1.16		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:15	BML
7782-49-2	Selenium	264		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:15	BML
7440-28-0	Thallium	ND		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:15	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2018 09:48	12/20/2018 11:15	SY

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	11.0		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/26/2018 09:11	12/26/2018 15:59	AD



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-09

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	150		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	20		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	53		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-09

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

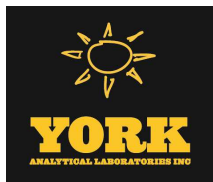
Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	250		ug/L	5.0	10	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 16:52	LLJ
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	1.9		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	9.9		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	58	CCV-E	ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	15		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	6.0		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-09

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	150		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	5.0		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	6.9		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	20		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	4.7		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	37		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	2.6		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	6.6		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	0.35	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	1.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	0.51		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	42		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
Surrogate Recoveries		Result	Acceptance Range								



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-09

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %			69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	96.2 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	103 %			79-122						

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	220		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Alkyl Substituted Cyclopentane isomers	27		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	dimethyl Cyclohexane isomer	22		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Heptane (TIC)	19	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Hexane (TIC)	18	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	methyl Cyclopentane isomer	16		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	methyl hexane isomers	30		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	methyl Pentane isomer	11		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	octane (TIC)	13	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	1030		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-39-3	Barium	3.30		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-70-2	Calcium	190		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-47-3	Chromium	1.25		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-48-4	Cobalt	0.316		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-50-8	Copper	1.72		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-09

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-89-6	Iron	963		mg/L	13.9	50	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 17:09	KML
7439-92-1	Lead	0.743		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7439-95-4	Magnesium	155		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7439-96-5	Manganese	6.61		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-02-0	Nickel	1.02		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-09-7	Potassium	171	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-23-5	Sodium	4660		mg/L	27.8	50	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 17:09	KML
7440-62-2	Vanadium	1.77		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML
7440-66-6	Zinc	2.32		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:51	KML

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	3.12		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:24	BML
7440-38-2	Arsenic	328		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:24	BML
7440-41-7	Beryllium	1.40		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:24	BML
7440-43-9	Cadmium	4.61		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:24	BML
7782-49-2	Selenium	511		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:24	BML
7440-28-0	Thallium	1.85		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:24	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

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



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Water

December 14, 2018 12:55 pm

12/19/2018

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2018 09:48	12/20/2018 11:25	SY

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	229		mg/L	10.0	10	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/26/2018 09:11	12/26/2018 15:59	AD

Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Water

December 14, 2018 1:20 pm

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-10

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 1:20 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	170		ug/L	1.0	2.5	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 17:18	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	34		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	45		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	340		ug/L	5.0	10	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 17:18	LLJ
107-02-8	Acrolein	13		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	2.2		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	11		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-10

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 1:20 pm

Date Received
12/19/2018

Volatile Organics, 8260 - Comprehensive

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 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	71	CCV-E	ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	20		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	7.2		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	130		ug/L	1.0	2.5	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/24/2018 12:30	12/24/2018 17:18	LLJ
75-09-2	Methylene chloride	3.1		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	8.6		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	25		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	6.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	55		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	3.2		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-10

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 1:20 pm

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	3.1		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	2.8		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	0.42	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	61		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	96.9 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	106 %	79-122								

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	370		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	dimethyl Cyclohexane isomer	28		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Dimethyl Cyclopentane isomer	20		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Heptane (TIC)	27	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	Hexane (TIC)	24	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	methyl Cyclohexane isomer	22		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-10

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 1:20 pm

Date Received

12/19/2018

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	methyl Cyclopentane isomer	21		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB
NA	octane (TIC)	18	N	ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB

Metals, Target Analyte, ICP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	Aluminum	1570		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-39-3	Barium	5.30		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-70-2	Calcium	187		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-47-3	Chromium	1.85		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-48-4	Cobalt	0.438		mg/L	0.00444	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-50-8	Copper	2.47		mg/L	0.0222	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7439-89-6	Iron	1780		mg/L	13.9	50	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 17:11	KML
7439-92-1	Lead	1.16		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7439-95-4	Magnesium	212		mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7439-96-5	Manganese	8.71		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-02-0	Nickel	1.56		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-09-7	Potassium	234	B	mg/L	0.0556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-22-4	Silver	ND		mg/L	0.00556	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-23-5	Sodium	5110		mg/L	27.8	50	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/26/2018 17:11	KML
7440-62-2	Vanadium	2.59		mg/L	0.0111	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML
7440-66-6	Zinc	3.41		mg/L	0.0278	1	EPA 6010D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:25	12/21/2018 14:53	KML



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-10

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 1:20 pm

Date Received

12/19/2018

Metals, Target Analyte, ICPMS

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	3.74		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:28	BML
7440-38-2	Arsenic	492		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:28	BML
7440-41-7	Beryllium	1.24		ug/L	0.333	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:28	BML
7440-43-9	Cadmium	5.86		ug/L	0.556	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:28	BML
7782-49-2	Selenium	562		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:28	BML
7440-28-0	Thallium	2.72		ug/L	1.11	1	EPA 6020B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/21/2018 12:27	12/21/2018 16:28	BML

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/20/2018 09:48	12/20/2018 11:36	SY

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	268		mg/L	10.0	10	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	12/26/2018 09:11	12/26/2018 15:59	AD

Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

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	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

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	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
95-63-6	1,2,4-Trimethylbenzene	660		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
108-67-8	1,3,5-Trimethylbenzene	80	CCV-E, QL-02	ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
123-91-1	1,4-Dioxane	ND		ug/kg dry	59	120	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
78-93-3	2-Butanone	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
591-78-6	2-Hexanone	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
67-64-1	Acetone	18		ug/kg dry	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

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	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
107-13-1	Acrylonitrile	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
71-43-2	Benzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
74-97-5	Bromochloromethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-25-2	Bromoform	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
74-83-9	Bromomethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-15-0	Carbon disulfide	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
108-90-7	Chlorobenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-00-3	Chloroethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
67-66-3	Chloroform	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
74-87-3	Chloromethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
110-82-7	Cyclohexane	120		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
74-95-3	Dibromomethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
100-41-4	Ethyl Benzene	36		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
98-82-8	Isopropylbenzene	11		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
79-20-9	Methyl acetate	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

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	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
108-87-2	Methylcyclohexane	700		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
104-51-8	n-Butylbenzene	15		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
103-65-1	n-Propylbenzene	38		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
95-47-6	o-Xylene	24		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
179601-23-1	p- & m- Xylenes	110		ug/kg dry	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
99-87-6	p-Isopropyltoluene	6.0		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
100-42-5	Styrene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
108-88-3	Toluene	8.4		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH	12/20/2018 07:30	12/22/2018 04:12	LLJ
79-01-6	Trichloroethylene	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.9	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
1330-20-7	Xylenes, Total	130		ug/kg dry	8.8	18	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 04:12	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	89.4 %	77-125								
2037-26-5	Surrogate: SURR: Toluene-d8	94.5 %	85-120								



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

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
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	102 %			76-130						

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	550		ug/kg dry			1	EPA 8260C	12/20/2018 07:30	12/21/2018 07:30	LLJ
								Certifications:			
NA	dimethyl Cyclohexane isomer	120		ug/kg dry			1	EPA 8260C	12/20/2018 07:30	12/21/2018 07:30	LLJ
								Certifications:			
NA	Heptane (TIC)	130	N	ug/kg dry			1	EPA 8260C	12/20/2018 07:30	12/21/2018 07:30	LLJ
								Certifications:			
NA	methyl Heptane isomers	250		ug/kg dry			1	EPA 8260C	12/20/2018 07:30	12/21/2018 07:30	LLJ
								Certifications:			
NA	methyl hexane isomers	200		ug/kg dry			1	EPA 8260C	12/20/2018 07:30	12/21/2018 07:30	LLJ
								Certifications:			
NA	methyl Octane isomer	87		ug/kg dry			1	EPA 8260C	12/20/2018 07:30	12/21/2018 07:30	LLJ
								Certifications:			
111-84-2	Nonane	95	N	ug/kg dry			1	EPA 8260C	12/20/2018 07:30	12/21/2018 07:30	LLJ
								Certifications:			

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	97.7	195	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	NELAC-NY10854,PADEP		
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	NELAC-NY10854,PADEP		
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	NELAC-NY10854,PADEP		
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	97.7	195	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D	12/27/2018 08:17	12/27/2018 18:09	OW
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

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December 14, 2018 12:00 pm

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Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	97.7	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
95-57-8	2-Chlorophenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
91-57-6	2-Methylnaphthalene	172		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
95-48-7	2-Methylphenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
88-74-4	2-Nitroaniline	ND		ug/kg dry	97.7	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
88-75-5	2-Nitrophenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
99-09-2	3-Nitroaniline	ND		ug/kg dry	97.7	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	97.7	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
106-47-8	4-Chloroaniline	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
100-01-6	4-Nitroaniline	ND		ug/kg dry	97.7	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
100-02-7	4-Nitrophenol	ND		ug/kg dry	97.7	195	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
83-32-9	Acenaphthene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-86-2	Acetophenone	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
62-53-3	Aniline	ND		ug/kg dry	196	391	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
120-12-7	Anthracene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
1912-24-9	Atrazine	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
100-52-7	Benzaldehyde	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
92-87-5	Benzidine	ND		ug/kg dry	196	391	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
65-85-0	Benzoic acid	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
100-51-6	Benzyl alcohol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
105-60-2	Caprolactam	ND		ug/kg dry	97.7	195	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
86-74-8	Carbazole	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
218-01-9	Chrysene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
132-64-9	Dibenzofuran	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
84-66-2	Diethyl phthalate	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
131-11-3	Dimethyl phthalate	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
206-44-0	Fluoranthene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
86-73-7	Fluorene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
118-74-1	Hexachlorobenzene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
67-72-1	Hexachloroethane	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
78-59-1	Isophorone	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
91-20-3	Naphthalene	78.9	J	ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
98-95-3	Nitrobenzene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
87-86-5	Pentachlorophenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
85-01-8	Phenanthrene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
108-95-2	Phenol	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
129-00-0	Pyrene	ND		ug/kg dry	49.0	97.7	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:09	OW
Surrogate Recoveries		Result	Acceptance Range								
367-12-4	Surrogate: SURR: 2-Fluorophenol	78.6 %	20-108								
4165-62-2	Surrogate: SURR: Phenol-d5	73.3 %	23-114								
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	85.2 %	22-108								



Sample Information

Client Sample ID: LC-Control

York Sample ID: 18L0847-11

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:00 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	69.7 %			21-113						
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	79.0 %			19-110						
1718-51-0	Surrogate: SURR: Terphenyl-d14	74.9 %			24-116						

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 18:09	OW

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	85.1		%	0.100	1	SM 2540G Certifications: CTDOH	12/27/2018 09:57	12/27/2018 17:44	TAJ

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)	1540		mg/kg	1400	1	SW9060A MOD Certifications:	12/23/2018 00:00	01/09/2019 00:00	PHO

Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

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



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

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 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
95-63-6	1,2,4-Trimethylbenzene	1300		ug/kg dry	290	570	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
108-67-8	1,3,5-Trimethylbenzene	430	J, CCV-E	ug/kg dry	290	570	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
123-91-1	1,4-Dioxane	ND		ug/kg dry	57	110	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
78-93-3	2-Butanone	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
591-78-6	2-Hexanone	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.
18L0847

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190043701

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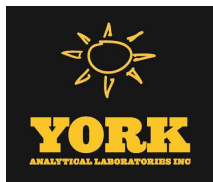
Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
107-02-8	Acrolein	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
107-13-1	Acrylonitrile	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
71-43-2	Benzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
74-97-5	Bromochloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-25-2	Bromoform	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
74-83-9	Bromomethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-15-0	Carbon disulfide	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
108-90-7	Chlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-00-3	Chloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
67-66-3	Chloroform	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
74-87-3	Chloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
110-82-7	Cyclohexane	510	J	ug/kg dry	290	570	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
74-95-3	Dibromomethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
100-41-4	Ethyl Benzene	180		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
98-82-8	Isopropylbenzene	40		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.

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Client Project ID

190043701

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Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
108-87-2	Methylcyclohexane	1400		ug/kg dry	290	570	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
103-65-1	n-Propylbenzene	130		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
95-47-6	o-Xylene	150		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	570	1100	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	12		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
100-42-5	Styrene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
108-88-3	Toluene	42		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH	12/20/2018 07:30	12/22/2018 04:39	LLJ
79-01-6	Trichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 04:39	LLJ
1330-20-7	Xylenes, Total	ND		ug/kg dry	860	1700	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	77.1 %	77-125								



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.
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Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2037-26-5	Surrogate: SURR: Toluene-d8	97.8 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	103 %			76-130						

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	methyl Heptane isomer	6.9		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	octane (TIC)	8.0	N	ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW



Sample Information

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Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
95-57-8	2-Chlorophenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
91-57-6	2-Methylnaphthalene	182		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
95-48-7	2-Methylphenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
88-74-4	2-Nitroaniline	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
88-75-5	2-Nitrophenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
99-09-2	3-Nitroaniline	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
106-47-8	4-Chloroaniline	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
100-01-6	4-Nitroaniline	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
100-02-7	4-Nitrophenol	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
83-32-9	Acenaphthene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
98-86-2	Acetophenone	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
62-53-3	Aniline	ND		ug/kg dry	191	383	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
120-12-7	Anthracene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW
1912-24-9	Atrazine	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 18:56	OW



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-52-7	Benzaldehyde	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
92-87-5	Benzidine	ND		ug/kg dry	191	383	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
65-85-0	Benzoic acid	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
100-51-6	Benzyl alcohol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
105-60-2	Caprolactam	ND		ug/kg dry	95.5	191	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
86-74-8	Carbazole	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
218-01-9	Chrysene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
132-64-9	Dibenzofuran	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
84-66-2	Diethyl phthalate	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
131-11-3	Dimethyl phthalate	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:30 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

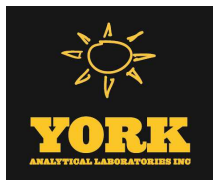
Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	Fluoranthene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
86-73-7	Fluorene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
118-74-1	Hexachlorobenzene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
67-72-1	Hexachloroethane	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
78-59-1	Isophorone	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
91-20-3	Naphthalene	111		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
98-95-3	Nitrobenzene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
87-86-5	Pentachlorophenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
85-01-8	Phenanthrene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
108-95-2	Phenol	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
129-00-0	Pyrene	ND		ug/kg dry	47.9	95.5	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 18:56	OW
Surrogate Recoveries		Result	Acceptance Range								
367-12-4	Surrogate: SURR: 2-Fluorophenol	78.4 %	20-108								
4165-62-2	Surrogate: SURR: Phenol-d5	73.0 %	23-114								
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	83.4 %	22-108								
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	78.2 %	21-113								
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	79.3 %	19-110								
1718-51-0	Surrogate: SURR: Terphenyl-d14	78.4 %	24-116								

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: LC-Control-DUP

York Sample ID: 18L0847-12

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Soil

December 14, 2018 12:30 pm

12/19/2018

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 18:56	OW

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.3		%	0.100	1	SM 2540G Certifications: CTDOH	12/27/2018 09:57	12/27/2018 17:44	TAJ

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)	1890		mg/kg	1820	1	SW9060A MOD Certifications:	12/24/2018 00:00	01/09/2019 00:00	PHO

Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Soil

December 14, 2018 12:55 pm

12/19/2018

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	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

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	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
95-63-6	1,2,4-Trimethylbenzene	140		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
108-67-8	1,3,5-Trimethylbenzene	25	CCV-E, QL-02	ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
123-91-1	1,4-Dioxane	ND		ug/kg dry	59	120	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
78-93-3	2-Butanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
591-78-6	2-Hexanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
67-64-1	Acetone	39		ug/kg dry	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
107-02-8	Acrolein	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
107-13-1	Acrylonitrile	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
71-43-2	Benzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
74-97-5	Bromochloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

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	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-25-2	Bromoform	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
74-83-9	Bromomethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-15-0	Carbon disulfide	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
108-90-7	Chlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-00-3	Chloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
67-66-3	Chloroform	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
74-87-3	Chloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
110-82-7	Cyclohexane	30		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
74-95-3	Dibromomethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
100-41-4	Ethyl Benzene	5.9	J	ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
98-82-8	Isopropylbenzene	3.5	J	ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
79-20-9	Methyl acetate	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
108-87-2	Methylcyclohexane	99		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-09-2	Methylene chloride	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
104-51-8	n-Butylbenzene	8.9		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 12:55 pm

Date Received

12/19/2018

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	14		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
95-47-6	o-Xylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
179601-23-1	p- & m- Xylenes	16		ug/kg dry	5.9	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
99-87-6	p-Isopropyltoluene	3.1	J	ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
135-98-8	sec-Butylbenzene	3.6	J	ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
100-42-5	Styrene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
127-18-4	Tetrachloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
108-88-3	Toluene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH	12/20/2018 07:30	12/22/2018 05:06	LLJ
79-01-6	Trichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
1330-20-7	Xylenes, Total	19		ug/kg dry	8.9	18	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 05:06	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	96.1 %	77-125								
2037-26-5	Surrogate: SURRE: Toluene-d8	98.5 %	85-120								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	103 %	76-130								

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	260		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

18L0847

Client Project ID

190043701

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December 14, 2018 12:55 pm

Date Received

12/19/2018

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	dimethyl Cyclohexane isomer	90		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	Heptane (TIC)	46	N	ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl Heptane isomers	90		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	Methyl Hexane isomer	27		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl Octane isomer	36		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	Nonane (TIC)	26	N	ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	Unknown Alkane	36		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

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December 14, 2018 12:55 pm

Date Received

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Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
95-57-8	2-Chlorophenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
91-57-6	2-Methylnaphthalene	67.2	J	ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
95-48-7	2-Methylphenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
88-74-4	2-Nitroaniline	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
88-75-5	2-Nitrophenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
99-09-2	3-Nitroaniline	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
106-47-8	4-Chloroaniline	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
100-01-6	4-Nitroaniline	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
100-02-7	4-Nitrophenol	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
83-32-9	Acenaphthene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
98-86-2	Acetophenone	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
62-53-3	Aniline	ND		ug/kg dry	198	396	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW
120-12-7	Anthracene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 19:43	OW



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
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December 14, 2018 12:55 pm

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Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1912-24-9	Atrazine	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
100-52-7	Benzaldehyde	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
92-87-5	Benzidine	ND		ug/kg dry	198	396	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
65-85-0	Benzoic acid	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
100-51-6	Benzyl alcohol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
105-60-2	Caprolactam	ND		ug/kg dry	98.9	198	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
86-74-8	Carbazole	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
218-01-9	Chrysene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
132-64-9	Dibenzofuran	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
84-66-2	Diethyl phthalate	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
131-11-3	Dimethyl phthalate	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Soil

December 14, 2018 12:55 pm

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
206-44-0	Fluoranthene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
86-73-7	Fluorene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
118-74-1	Hexachlorobenzene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
67-72-1	Hexachloroethane	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
78-59-1	Isophorone	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
91-20-3	Naphthalene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
98-95-3	Nitrobenzene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
87-86-5	Pentachlorophenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
85-01-8	Phenanthrene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
108-95-2	Phenol	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
129-00-0	Pyrene	ND		ug/kg dry	49.6	98.9	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 19:43	OW
Surrogate Recoveries		Result	Acceptance Range								
367-12-4	Surrogate: SURR: 2-Fluorophenol	77.6 %	20-108								
4165-62-2	Surrogate: SURR: Phenol-d5	72.7 %	23-114								
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	81.8 %	22-108								
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	71.7 %	21-113								
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	73.4 %	19-110								
1718-51-0	Surrogate: SURR: Terphenyl-d14	77.2 %	24-116								



Sample Information

Client Sample ID: LC-PS

York Sample ID: 18L0847-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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18L0847

190043701

Soil

December 14, 2018 12:55 pm

12/19/2018

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 19:43	OW

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	84.1		%	0.100	1	SM 2540G Certifications: CTDOH	12/27/2018 09:57	12/27/2018 17:44	TAJ

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)	2220		mg/kg	470	1	SW9060A MOD Certifications:	12/25/2018 00:00	01/10/2019 00:00	PHO

Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Soil

December 14, 2018 1:20 pm

12/19/2018

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	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 05:32	LLJ



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Soil

December 14, 2018 1:20 pm

12/19/2018

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	23		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
95-63-6	1,2,4-Trimethylbenzene	160		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
108-67-8	1,3,5-Trimethylbenzene	26	CCV-E, QL-02	ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
123-91-1	1,4-Dioxane	ND		ug/kg dry	58	120	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
78-93-3	2-Butanone	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
591-78-6	2-Hexanone	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
67-64-1	Acetone	44		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
107-02-8	Acrolein	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
107-13-1	Acrylonitrile	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
71-43-2	Benzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 1:20 pm

Date Received

12/19/2018

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	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-25-2	Bromoform	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
74-83-9	Bromomethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-15-0	Carbon disulfide	3.3	J	ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
108-90-7	Chlorobenzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-00-3	Chloroethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
67-66-3	Chloroform	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
74-87-3	Chloromethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
110-82-7	Cyclohexane	75		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
74-95-3	Dibromomethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
100-41-4	Ethyl Benzene	7.4		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
98-82-8	Isopropylbenzene	4.4	J	ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
79-20-9	Methyl acetate	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
108-87-2	Methylcyclohexane	380	J	ug/kg dry	290	580	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	ND		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 1:20 pm

Date Received
12/19/2018

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	26		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
103-65-1	n-Propylbenzene	17		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
95-47-6	o-Xylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
179601-23-1	p- & m- Xylenes	21		ug/kg dry	5.8	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
135-98-8	sec-Butylbenzene	4.9	J	ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
100-42-5	Styrene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
108-88-3	Toluene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH	12/20/2018 07:30	12/22/2018 05:32	LLJ
79-01-6	Trichloroethylene	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.9	5.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
1330-20-7	Xylenes, Total	24		ug/kg dry	8.7	17	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/20/2018 07:30	12/22/2018 05:32	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	93.7 %	77-125								
2037-26-5	Surrogate: SURR: Toluene-d8	96.7 %	85-120								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	103 %	76-130								

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

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



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.

18L0847

Client Project ID

190043701

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December 14, 2018 1:20 pm

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Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
NA	Alkyl substituted benzene isomers	140		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	Decane (TIC)	65	N	ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	dimethyl Cyclohexane isomer	120		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	dimethyl Heptane isomer	46		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	ethyl cyclohexane	38		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	Heptane (TIC)	140	N	ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl Heptane isomer	270		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl hexane isomers	140		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	methyl octane isomers	170		ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ
NA	Nonane (TIC)	170	N	ug/kg dry			1	EPA 8260C Certifications:	12/20/2018 07:30	12/21/2018 07:30	LLJ

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
92-52-4	1,1-Biphenyl	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.

18L0847

Client Project ID

190043701

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December 14, 2018 1:20 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
95-57-8	2-Chlorophenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
95-48-7	2-Methylphenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
88-74-4	2-Nitroaniline	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
88-75-5	2-Nitrophenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
91-94-1	3,3-Dichlorobenzidine	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
99-09-2	3-Nitroaniline	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
106-47-8	4-Chloroaniline	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
100-01-6	4-Nitroaniline	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
100-02-7	4-Nitrophenol	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW
83-32-9	Acenaphthene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications:	12/27/2018 08:17 CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 20:31	OW



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Soil

Collection Date/Time
December 14, 2018 1:20 pm

Date Received
12/19/2018

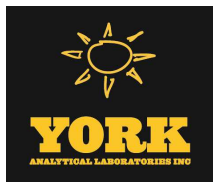
Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
208-96-8	Acenaphthylene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
98-86-2	Acetophenone	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
62-53-3	Aniline	ND		ug/kg dry	194	388	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
120-12-7	Anthracene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
1912-24-9	Atrazine	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
100-52-7	Benzaldehyde	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
92-87-5	Benzidine	ND		ug/kg dry	194	388	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
65-85-0	Benzoic acid	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
100-51-6	Benzyl alcohol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
105-60-2	Caprolactam	ND		ug/kg dry	96.8	193	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
86-74-8	Carbazole	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
218-01-9	Chrysene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 1:20 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
132-64-9	Dibenzofuran	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
84-66-2	Diethyl phthalate	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
131-11-3	Dimethyl phthalate	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
206-44-0	Fluoranthene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
86-73-7	Fluorene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
118-74-1	Hexachlorobenzene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
67-72-1	Hexachloroethane	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
78-59-1	Isophorone	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
91-20-3	Naphthalene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
98-95-3	Nitrobenzene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
87-86-5	Pentachlorophenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
85-01-8	Phenanthrene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
108-95-2	Phenol	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
129-00-0	Pyrene	ND		ug/kg dry	48.5	96.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	12/27/2018 08:17	12/27/2018 20:31	OW
Surrogate Recoveries		Result	Acceptance Range								
367-12-4	Surrogate: SURR: 2-Fluorophenol	76.2 %	20-108								
4165-62-2	Surrogate: SURR: Phenol-d5	72.4 %	23-114								



Sample Information

Client Sample ID: LC-PS-DUP

York Sample ID: 18L0847-14

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Soil

Collection Date/Time

December 14, 2018 1:20 pm

Date Received

12/19/2018

Semi-Volatiles, 8270 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	77.0 %			22-108						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	74.9 %			21-113						
118-79-6	Surrogate: SURR: 2,4,6-Tribromophenol	75.6 %			19-110						
1718-51-0	Surrogate: SURR: Terphenyl-d14	78.6 %			24-116						

Semi-Volatiles, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.00		ug/kg dry			2	EPA 8270D Certifications:	12/27/2018 08:17	12/27/2018 20:31	OW

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.1		%	0.100	1	SM 2540G Certifications: CTDOH	12/27/2018 09:57	12/27/2018 17:44	TAJ

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)	2120		mg/kg	1440	1	SW9060A MOD Certifications:	12/26/2018 00:00	01/09/2019 00:00	PHO

Sample Information

Client Sample ID: Trip Blank

York Sample ID: 18L0847-15

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:00 am

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 18L0847-15

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Water

December 14, 2018 12:00 am

12/19/2018

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 18L0847-15

York Project (SDG) No.

18L0847

Client Project ID

190043701

Matrix

Water

Collection Date/Time

December 14, 2018 12:00 am

Date Received

12/19/2018

Volatile Organics, 8260 - Comprehensive

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
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 18L0847-15

York Project (SDG) No.
18L0847

Client Project ID
190043701

Matrix
Water

Collection Date/Time
December 14, 2018 12:00 am

Date Received
12/19/2018

Volatile Organics, 8260 - Comprehensive

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 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	12/21/2018 07:30	12/21/2018 07:30	LLJ
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.8 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	99.6 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	117 %	79-122								



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 18L0847-15

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18L0847

190043701

Water

December 14, 2018 12:00 am

12/19/2018

Volatile Organics, Tentatively Identified Cmpds.

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Tentatively Identified Compounds	0.0		ug/L		1	EPA 8260C Certifications:	12/21/2018 07:30	12/27/2018 15:46	RQB



Analytical Batch Summary

Batch ID: 1/10/2019

Preparation Method: *** DEFAULT PREP ***

Prepared By:

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-04	HC-Control	12/20/18
18L0847-13	LC-PS	12/25/18

Batch ID: 1/9/2019

Preparation Method: *** DEFAULT PREP ***

Prepared By:

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-05	HC-Control-DUP	12/21/18
18L0847-06	HC-PS	12/22/18
18L0847-11	LC-Control	12/23/18
18L0847-12	LC-Control-DUP	12/24/18
18L0847-14	LC-PS-DUP	12/26/18

Batch ID: BL81067

Preparation Method: EPA 7473 water

Prepared By: SY

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-01	HC-Control	12/20/18
18L0847-02	HC-Control-DUP	12/20/18
18L0847-03	HC-PS	12/20/18
18L0847-07	LC-Control	12/20/18
18L0847-08	LC-Control-DUP	12/20/18
18L0847-09	LC-PS	12/20/18
18L0847-10	LC-PS-DUP	12/20/18
BL81067-BLK1	Blank	12/20/18
BL81067-SRM1	Reference	12/20/18

Batch ID: BL81168

Preparation Method: EPA 5035A

Prepared By: LLJ

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-11	LC-Control	12/20/18
18L0847-12	LC-Control-DUP	12/20/18
18L0847-13	LC-PS	12/20/18
18L0847-14	LC-PS-DUP	12/20/18
BL81168-BLK1	Blank	12/20/18
BL81168-BS1	LCS	12/20/18
BL81168-BSD1	LCS Dup	12/20/18

Batch ID: BL81171

Preparation Method: EPA 5030B

Prepared By: LLJ

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-01	HC-Control	12/21/18
18L0847-02	HC-Control-DUP	12/21/18
18L0847-03	HC-PS	12/21/18
18L0847-07	LC-Control	12/21/18



18L0847-08	LC-Control-DUP	12/21/18
18L0847-09	LC-PS	12/21/18
18L0847-10	LC-PS-DUP	12/21/18
18L0847-15	Trip Blank	12/21/18
BL81171-BLK1	Blank	12/22/18
BL81171-BS1	LCS	12/22/18
BL81171-BSD1	LCS Dup	12/22/18

Batch ID: BL81172 **Preparation Method:** EPA 5030B **Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-01RE1	HC-Control	12/24/18
18L0847-01RE2	HC-Control	12/24/18
18L0847-02RE1	HC-Control-DUP	12/24/18
18L0847-02RE2	HC-Control-DUP	12/24/18
18L0847-03RE1	HC-PS	12/24/18
18L0847-07RE1	LC-Control	12/24/18
18L0847-08RE1	LC-Control-DUP	12/24/18
18L0847-09RE1	LC-PS	12/24/18
18L0847-10RE1	LC-PS-DUP	12/24/18
BL81172-BLK1	Blank	12/24/18
BL81172-BS1	LCS	12/24/18
BL81172-BSD1	LCS Dup	12/24/18

Batch ID: BL81186 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-01	HC-Control	12/21/18
18L0847-01RE1	HC-Control	12/21/18
18L0847-02	HC-Control-DUP	12/21/18
18L0847-02RE1	HC-Control-DUP	12/21/18
18L0847-03	HC-PS	12/21/18
18L0847-03RE1	HC-PS	12/21/18
18L0847-07	LC-Control	12/21/18
18L0847-07RE1	LC-Control	12/21/18
18L0847-08	LC-Control-DUP	12/21/18
18L0847-09	LC-PS	12/21/18
18L0847-09RE1	LC-PS	12/21/18
18L0847-10	LC-PS-DUP	12/21/18
18L0847-10RE1	LC-PS-DUP	12/21/18
BL81186-BLK1	Blank	12/21/18
BL81186-BS1	LCS	12/21/18

Batch ID: BL81187 **Preparation Method:** EPA 3015A **Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-01	HC-Control	12/21/18
18L0847-02	HC-Control-DUP	12/21/18
18L0847-03	HC-PS	12/21/18
18L0847-07	LC-Control	12/21/18



18L0847-08	LC-Control-DUP	12/21/18
18L0847-09	LC-PS	12/21/18
18L0847-10	LC-PS-DUP	12/21/18
BL81187-BLK1	Blank	12/21/18
BL81187-BS1	LCS	12/21/18

Batch ID: BL81300 **Preparation Method:** Analysis Preparation **Prepared By:** AD

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-01	HC-Control	12/26/18
18L0847-02	HC-Control-DUP	12/26/18
18L0847-03	HC-PS	12/26/18
18L0847-07	LC-Control	12/26/18
18L0847-08	LC-Control-DUP	12/26/18
18L0847-09	LC-PS	12/26/18
18L0847-10	LC-PS-DUP	12/26/18
BL81300-BLK1	Blank	12/26/18
BL81300-BS1	LCS	12/26/18

Batch ID: BL81328 **Preparation Method:** EPA 5030B **Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-01RE3	HC-Control	12/24/18
18L0847-02RE3	HC-Control-DUP	12/24/18
BL81328-BLK1	Blank	12/25/18
BL81328-BS1	LCS	12/25/18
BL81328-BSD1	LCS Dup	12/25/18

Batch ID: BL81372 **Preparation Method:** EPA 3550C **Prepared By:** SGM

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-04	HC-Control	12/27/18
18L0847-04	HC-Control	12/27/18
18L0847-05	HC-Control-DUP	12/27/18
18L0847-05	HC-Control-DUP	12/27/18
18L0847-06	HC-PS	12/27/18
18L0847-06	HC-PS	12/27/18
18L0847-11	LC-Control	12/27/18
18L0847-11	LC-Control	12/27/18
18L0847-12	LC-Control-DUP	12/27/18
18L0847-12	LC-Control-DUP	12/27/18
18L0847-13	LC-PS	12/27/18
18L0847-13	LC-PS	12/27/18
18L0847-14	LC-PS-DUP	12/27/18
18L0847-14	LC-PS-DUP	12/27/18
BL81372-BLK1	Blank	12/27/18
BL81372-BS1	LCS	12/27/18

Batch ID: BL81383 **Preparation Method:** % Solids Prep **Prepared By:** TAJ



YORK Sample ID	Client Sample ID	Preparation Date
18L0847-04	HC-Control	12/27/18
18L0847-05	HC-Control-DUP	12/27/18
18L0847-06	HC-PS	12/27/18
18L0847-11	LC-Control	12/27/18
18L0847-12	LC-Control-DUP	12/27/18
18L0847-13	LC-PS	12/27/18
18L0847-14	LC-PS-DUP	12/27/18
BL81383-DUP1	Duplicate	12/27/18

Batch ID: BL81394 **Preparation Method:** EPA 5035A **Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
18L0847-04	HC-Control	12/21/18
18L0847-05	HC-Control-DUP	12/21/18
18L0847-06	HC-PS	12/21/18
18L0847-11RE1	LC-Control	12/21/18
18L0847-12RE1	LC-Control-DUP	12/21/18
18L0847-14RE1	LC-PS-DUP	12/21/18
BL81394-BLK1	Blank	12/21/18
BL81394-BS1	LCS	12/21/18
BL81394-BSD1	LCS Dup	12/21/18



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 BL81168 - EPA 5035A

Blank (BL81168-BLK1)

Prepared: 12/20/2018 Analyzed: 12/22/2018

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet
Tentatively Identified Compounds	0.0		"
1,1,1-Trichloroethane	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,1-Dichloroethylene	ND	5.0	"
1,2,3-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	"



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 BL81168 - EPA 5035A

Blank (BL81168-BLK1)

Prepared: 12/20/2018 Analyzed: 12/22/2018

Methylene chloride	ND	10	ug/kg wet
n-Butylbenzene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-Butyl alcohol (TBA)	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
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: SURR: 1,2-Dichloroethane-d4	47.8	ug/L	50.0	95.6	77-125
Surrogate: SURR: Toluene-d8	49.9	"	50.0	99.9	85-120
Surrogate: SURR: p-Bromofluorobenzene	53.4	"	50.0	107	76-130

LCS (BL81168-BS1)

Prepared: 12/20/2018 Analyzed: 12/21/2018

1,1,1,2-Tetrachloroethane	50	ug/L	50.0	99.8	75-129
1,1,1-Trichloroethane	47	"	50.0	94.4	71-137
1,1,2,2-Tetrachloroethane	49	"	50.0	98.0	79-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	45	"	50.0	90.7	58-146
1,1,2-Trichloroethane	48	"	50.0	95.8	83-123
1,1-Dichloroethane	48	"	50.0	95.2	75-130
1,1-Dichloroethylene	44	"	50.0	88.3	64-137
1,2,3-Trichlorobenzene	50	"	50.0	100	81-140
1,2,3-Trichloropropane	50	"	50.0	99.2	81-126
1,2,4-Trichlorobenzene	47	"	50.0	94.4	80-141
1,2,4-Trimethylbenzene	47	"	50.0	94.5	84-125
1,2-Dibromo-3-chloropropane	50	"	50.0	99.9	74-142
1,2-Dibromoethane	50	"	50.0	99.1	86-123
1,2-Dichlorobenzene	50	"	50.0	99.5	85-122
1,2-Dichloroethane	49	"	50.0	97.2	71-133
1,2-Dichloropropane	47	"	50.0	94.9	81-122
1,3,5-Trimethylbenzene	38	"	50.0	75.2	82-126
1,3-Dichlorobenzene	49	"	50.0	98.7	84-124
1,4-Dichlorobenzene	49	"	50.0	97.4	84-124
1,4-Dioxane	680	"	1050	64.8	10-228
2-Butanone	43	"	50.0	85.2	58-147
2-Hexanone	46	"	50.0	92.6	70-139
4-Methyl-2-pentanone	48	"	50.0	96.4	72-132
Acetone	36	"	50.0	71.4	36-155
Acrolein	44	"	125	35.1	10-238
Acrylonitrile	49	"	50.0	99.0	66-141
Benzene	49	"	50.0	97.5	77-127

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 BL81168 - EPA 5035A

LCS (BL81168-BS1)

Prepared: 12/20/2018 Analyzed: 12/21/2018

Bromochloromethane	48		ug/L	50.0		96.9	74-129				
Bromodichloromethane	48		"	50.0		96.5	81-124				
Bromoform	50		"	50.0		99.0	80-136				
Bromomethane	42		"	50.0		84.6	32-177				
Carbon disulfide	47		"	50.0		94.6	10-136				
Carbon tetrachloride	47		"	50.0		95.0	66-143				
Chlorobenzene	48		"	50.0		96.3	86-120				
Chloroethane	44		"	50.0		88.7	51-142				
Chloroform	49		"	50.0		97.4	76-131				
Chloromethane	43		"	50.0		85.4	49-132				
cis-1,2-Dichloroethylene	49		"	50.0		98.4	74-132				
cis-1,3-Dichloropropylene	48		"	50.0		95.8	81-129				
Cyclohexane	50		"	50.0		99.5	70-130				
Dibromochloromethane	50		"	50.0		99.6	10-200				
Dibromomethane	48		"	50.0		96.7	83-124				
Dichlorodifluoromethane	42		"	50.0		83.1	28-158				
Ethyl Benzene	47		"	50.0		94.9	84-125				
Hexachlorobutadiene	50		"	50.0		101	83-133				
Isopropylbenzene	47		"	50.0		93.1	81-127				
Methyl acetate	42		"	50.0		83.1	41-143				
Methyl tert-butyl ether (MTBE)	49		"	50.0		97.7	74-131				
Methylcyclohexane	47		"	50.0		93.6	70-130				
Methylene chloride	47		"	50.0		93.2	57-141				
n-Butylbenzene	48		"	50.0		95.1	80-130				
n-Propylbenzene	46		"	50.0		92.5	74-136				
o-Xylene	48		"	50.0		96.1	83-123				
p- & m- Xylenes	93		"	100		92.7	82-128				
p-Isopropyltoluene	49		"	50.0		97.2	85-125				
sec-Butylbenzene	51		"	50.0		101	83-125				
Styrene	49		"	50.0		97.5	86-126				
tert-Butyl alcohol (TBA)	260		"	250		102	70-130				
tert-Butylbenzene	48		"	50.0		95.7	80-127				
Tetrachloroethylene	46		"	50.0		92.4	80-129				
Toluene	48		"	50.0		96.0	85-121				
trans-1,2-Dichloroethylene	47		"	50.0		93.3	72-132				
trans-1,3-Dichloropropylene	47		"	50.0		93.9	78-132				
trans-1,4-dichloro-2-butene	47		"	50.0		93.1	75-135				
Trichloroethylene	48		"	50.0		96.5	84-123				
Trichlorofluoromethane	46		"	50.0		92.4	62-140				
Vinyl Chloride	43		"	50.0		86.9	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	48.3		"	50.0		96.5	77-125				
Surrogate: SURR: Toluene-d8	49.4		"	50.0		98.8	85-120				
Surrogate: SURR: p-Bromofluorobenzene	49.1		"	50.0		98.1	76-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL81168 - EPA 5035A											
LCS Dup (BL81168-BSD1)						Prepared: 12/20/2018 Analyzed: 12/22/2018					
1,1,1,2-Tetrachloroethane	51		ug/L	50.0		102	75-129		2.08	30	
1,1,1-Trichloroethane	48		"	50.0		96.8	71-137		2.45	30	
1,1,2,2-Tetrachloroethane	51		"	50.0		101	79-129		3.37	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	47		"	50.0		93.8	58-146		3.30	30	
1,1,2-Trichloroethane	49		"	50.0		98.0	83-123		2.21	30	
1,1-Dichloroethane	49		"	50.0		98.1	75-130		2.92	30	
1,1-Dichloroethylene	45		"	50.0		90.2	64-137		2.15	30	
1,2,3-Trichlorobenzene	50		"	50.0		100	81-140		0.339	30	
1,2,3-Trichloropropane	51		"	50.0		101	81-126		1.92	30	
1,2,4-Trichlorobenzene	47		"	50.0		93.8	80-141		0.701	30	
1,2,4-Trimethylbenzene	48		"	50.0		96.4	84-125		2.01	30	
1,2-Dibromo-3-chloropropane	50		"	50.0		100	74-142		0.400	30	
1,2-Dibromoethane	50		"	50.0		101	86-123		1.76	30	
1,2-Dichlorobenzene	50		"	50.0		101	85-122		1.28	30	
1,2-Dichloroethane	50		"	50.0		99.9	71-133		2.70	30	
1,2-Dichloropropane	48		"	50.0		97.0	81-122		2.17	30	
1,3,5-Trimethylbenzene	39		"	50.0		77.7	82-126	Low Bias	3.24	30	
1,3-Dichlorobenzene	50		"	50.0		100	84-124		1.49	30	
1,4-Dichlorobenzene	49		"	50.0		98.8	84-124		1.39	30	
1,4-Dioxane	730		"	1050		69.2	10-228		6.61	30	
2-Butanone	42		"	50.0		83.8	58-147		1.70	30	
2-Hexanone	48		"	50.0		95.2	70-139		2.83	30	
4-Methyl-2-pentanone	49		"	50.0		98.4	72-132		2.01	30	
Acetone	36		"	50.0		72.3	36-155		1.22	30	
Acrolein	44		"	125		35.1	10-238		0.0228	30	
Acrylonitrile	52		"	50.0		105	66-141		5.81	30	
Benzene	50		"	50.0		99.5	77-127		2.03	30	
Bromochloromethane	50		"	50.0		99.8	74-129		2.89	30	
Bromodichloromethane	50		"	50.0		100	81-124		3.80	30	
Bromoform	50		"	50.0		101	80-136		1.90	30	
Bromomethane	46		"	50.0		92.5	32-177		8.97	30	
Carbon disulfide	48		"	50.0		96.2	10-136		1.64	30	
Carbon tetrachloride	49		"	50.0		98.4	66-143		3.56	30	
Chlorobenzene	49		"	50.0		98.2	86-120		1.93	30	
Chloroethane	45		"	50.0		90.5	51-142		2.01	30	
Chloroform	50		"	50.0		99.7	76-131		2.37	30	
Chloromethane	44		"	50.0		88.4	49-132		3.41	30	
cis-1,2-Dichloroethylene	50		"	50.0		100	74-132		2.05	30	
cis-1,3-Dichloropropylene	49		"	50.0		97.4	81-129		1.68	30	
Cyclohexane	50		"	50.0		101	70-130		1.48	30	
Dibromochloromethane	51		"	50.0		102	10-200		2.32	30	
Dibromomethane	49		"	50.0		98.2	83-124		1.54	30	
Dichlorodifluoromethane	43		"	50.0		86.4	28-158		3.92	30	
Ethyl Benzene	49		"	50.0		97.9	84-125		3.17	30	
Hexachlorobutadiene	52		"	50.0		105	83-133		3.66	30	
Isopropylbenzene	48		"	50.0		96.9	81-127		4.02	30	
Methyl acetate	41		"	50.0		82.3	41-143		1.04	30	
Methyl tert-butyl ether (MTBE)	49		"	50.0		98.9	74-131		1.22	30	
Methylcyclohexane	48		"	50.0		96.7	70-130		3.24	30	
Methylene chloride	48		"	50.0		96.1	57-141		3.02	30	
n-Butylbenzene	41		"	50.0		81.7	80-130		15.1	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 BL81168 - EPA 5035A

LCS Dup (BL81168-BSD1)

Prepared: 12/20/2018 Analyzed: 12/22/2018

n-Propylbenzene	48		ug/L	50.0		95.1	74-136		2.77	30	
o-Xylene	50		"	50.0		99.3	83-123		3.29	30	
p- & m- Xylenes	96		"	100		95.6	82-128		3.09	30	
p-Isopropyltoluene	50		"	50.0		99.6	85-125		2.44	30	
sec-Butylbenzene	52		"	50.0		104	83-125		2.56	30	
Styrene	50		"	50.0		101	86-126		3.07	30	
tert-Butyl alcohol (TBA)	240		"	250		96.4	70-130		5.91	30	
tert-Butylbenzene	50		"	50.0		100	80-127		4.54	30	
Tetrachloroethylene	47		"	50.0		93.9	80-129		1.63	30	
Toluene	50		"	50.0		99.2	85-121		3.34	30	
trans-1,2-Dichloroethylene	48		"	50.0		95.7	72-132		2.56	30	
trans-1,3-Dichloropropylene	48		"	50.0		96.1	78-132		2.31	30	
trans-1,4-dichloro-2-butene	47		"	50.0		94.5	75-135		1.54	30	
Trichloroethylene	50		"	50.0		100	84-123		3.64	30	
Trichlorofluoromethane	47		"	50.0		94.3	62-140		2.06	30	
Vinyl Chloride	44		"	50.0		88.5	52-130		1.82	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	47.6		"	50.0		95.3	77-125				
Surrogate: SURR: Toluene-d8	49.6		"	50.0		99.2	85-120				
Surrogate: SURR: p-Bromofluorobenzene	49.5		"	50.0		99.0	76-130				

Batch BL81171 - EPA 5030B

Blank (BL81171-BLK1)

Prepared & Analyzed: 12/22/2018

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L
Tentatively Identified Compounds	0.0		"
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	"
1,2,3-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	"
1,4-Dichlorobenzene	ND	0.50	"
1,4-Dioxane	ND	40	"
2-Butanone	ND	0.50	"
2-Hexanone	ND	0.50	"
4-Methyl-2-pentanone	ND	0.50	"
Acetone	ND	2.0	"
Acrolein	ND	0.50	"
Acrylonitrile	ND	0.50	"
Benzene	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 BL81171 - EPA 5030B

Blank (BL81171-BLK1)

Prepared & Analyzed: 12/22/2018

Bromochloromethane	ND	0.50	ug/L								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon disulfide	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Cyclohexane	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 acetate	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylcyclohexane	ND	0.50	"								
Methylene chloride	ND	2.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
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	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	9.28		"	10.0		92.8	69-130				
Surrogate: SURR: Toluene-d8	9.93		"	10.0		99.3	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.82		"	10.0		98.2	79-122				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

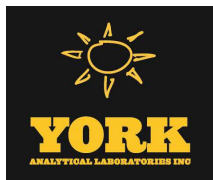
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL81171 - EPA 5030B											
LCS (BL81171-BS1)						Prepared & Analyzed: 12/22/2018					
1,1,1,2-Tetrachloroethane	11		ug/L	10.0		106	82-126				
1,1,1-Trichloroethane	12		"	10.0		118	78-136				
1,1,2,2-Tetrachloroethane	13		"	10.0		127	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14		"	10.0		144	54-165				
1,1,2-Trichloroethane	10		"	10.0		102	82-123				
1,1-Dichloroethane	12		"	10.0		121	82-129				
1,1-Dichloroethylene	14		"	10.0		138	68-138				
1,2,3-Trichlorobenzene	12		"	10.0		122	76-136				
1,2,3-Trichloropropane	12		"	10.0		123	77-128				
1,2,4-Trichlorobenzene	11		"	10.0		108	76-137				
1,2,4-Trimethylbenzene	12		"	10.0		116	82-132				
1,2-Dibromo-3-chloropropane	10		"	10.0		101	45-147				
1,2-Dibromoethane	11		"	10.0		106	83-124				
1,2-Dichlorobenzene	10		"	10.0		105	79-123				
1,2-Dichloroethane	10		"	10.0		105	73-132				
1,2-Dichloropropane	8.1		"	10.0		81.4	78-126				
1,3,5-Trimethylbenzene	12		"	10.0		119	80-131				
1,3-Dichlorobenzene	12		"	10.0		115	86-122				
1,4-Dichlorobenzene	11		"	10.0		110	85-124				
1,4-Dioxane	160		"	210		75.9	10-349				
2-Butanone	8.8		"	10.0		88.5	49-152				
2-Hexanone	12		"	10.0		117	51-146				
4-Methyl-2-pentanone	12		"	10.0		116	57-145				
Acetone	11		"	10.0		108	14-150				
Acrolein	9.9		"	25.0		39.7	10-153				
Acrylonitrile	10		"	10.0		101	51-150				
Benzene	11		"	10.0		108	85-126				
Bromochloromethane	12		"	10.0		117	77-128				
Bromodichloromethane	10		"	10.0		101	79-128				
Bromoform	9.9		"	10.0		99.4	78-133				
Bromomethane	8.1		"	10.0		81.4	43-168				
Carbon disulfide	12		"	10.0		124	68-146				
Carbon tetrachloride	13		"	10.0		130	77-141				
Chlorobenzene	11		"	10.0		105	88-120				
Chloroethane	13		"	10.0		134	65-136				
Chloroform	12		"	10.0		124	82-128				
Chloromethane	12		"	10.0		124	43-155				
cis-1,2-Dichloroethylene	12		"	10.0		120	83-129				
cis-1,3-Dichloropropylene	11		"	10.0		107	80-131				
Cyclohexane	11		"	10.0		115	63-149				
Dibromochloromethane	10		"	10.0		100	80-130				
Dibromomethane	9.7		"	10.0		96.9	72-134				
Dichlorodifluoromethane	12		"	10.0		120	44-144				
Ethyl Benzene	11		"	10.0		110	80-131				
Hexachlorobutadiene	9.5		"	10.0		95.2	67-146				
Isopropylbenzene	12		"	10.0		121	76-140				
Methyl acetate	11		"	10.0		114	51-139				
Methyl tert-butyl ether (MTBE)	12		"	10.0		123	76-135				
Methylcyclohexane	8.8		"	10.0		88.3	72-143				
Methylene chloride	11		"	10.0		114	55-137				
n-Butylbenzene	9.4		"	10.0		94.4	79-132				



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 BL81171 - EPA 5030B											
LCS (BL81171-BS1)						Prepared & Analyzed: 12/22/2018					
n-Propylbenzene	12		ug/L	10.0		122	78-133				
o-Xylene	11		"	10.0		108	78-130				
p- & m- Xylenes	22		"	20.0		109	77-133				
p-Isopropyltoluene	11		"	10.0		114	81-136				
sec-Butylbenzene	12		"	10.0		118	79-137				
Styrene	11		"	10.0		106	67-132				
tert-Butyl alcohol (TBA)	54		"	50.0		107	25-162				
tert-Butylbenzene	12		"	10.0		117	77-138				
Tetrachloroethylene	9.4		"	10.0		93.8	82-131				
Toluene	11		"	10.0		106	80-127				
trans-1,2-Dichloroethylene	12		"	10.0		120	80-132				
trans-1,3-Dichloropropylene	11		"	10.0		105	78-131				
trans-1,4-dichloro-2-butene	13		"	10.0		126	63-141				
Trichloroethylene	8.8		"	10.0		87.5	82-128				
Trichlorofluoromethane	14		"	10.0		140	67-139	High Bias			
Vinyl Chloride	8.3		"	10.0		82.9	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	11.0		"	10.0		110	69-130				
Surrogate: SURR: Toluene-d8	9.86		"	10.0		98.6	81-117				
Surrogate: SURR: p-Bromofluorobenzene	11.3		"	10.0		113	79-122				
LCS Dup (BL81171-BS1)						Prepared & Analyzed: 12/22/2018					
1,1,1,2-Tetrachloroethane	11		ug/L	10.0		109	82-126		1.95	30	
1,1,1-Trichloroethane	10		"	10.0		102	78-136		14.6	30	
1,1,2,2-Tetrachloroethane	12		"	10.0		118	76-129		6.61	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10		"	10.0		103	54-165		33.2	30	Non-dir.
1,1,2-Trichloroethane	11		"	10.0		107	82-123		5.35	30	
1,1-Dichloroethane	9.4		"	10.0		94.3	82-129		25.1	30	
1,1-Dichloroethylene	9.7		"	10.0		96.9	68-138		35.2	30	Non-dir.
1,2,3-Trichlorobenzene	12		"	10.0		116	76-136		4.53	30	
1,2,3-Trichloropropane	11		"	10.0		108	77-128		12.5	30	
1,2,4-Trichlorobenzene	11		"	10.0		109	76-137		0.826	30	
1,2,4-Trimethylbenzene	11		"	10.0		106	82-132		9.39	30	
1,2-Dibromo-3-chloropropane	9.5		"	10.0		95.1	45-147		5.62	30	
1,2-Dibromoethane	11		"	10.0		111	83-124		4.98	30	
1,2-Dichlorobenzene	11		"	10.0		107	79-123		1.89	30	
1,2-Dichloroethane	11		"	10.0		107	73-132		2.08	30	
1,2-Dichloropropane	9.6		"	10.0		96.2	78-126		16.7	30	
1,3,5-Trimethylbenzene	11		"	10.0		109	80-131		8.57	30	
1,3-Dichlorobenzene	11		"	10.0		107	86-122		7.65	30	
1,4-Dichlorobenzene	10		"	10.0		103	85-124		6.74	30	
1,4-Dioxane	160		"	210		74.3	10-349		2.19	30	
2-Butanone	11		"	10.0		111	49-152		22.7	30	
2-Hexanone	12		"	10.0		122	51-146		4.85	30	
4-Methyl-2-pentanone	12		"	10.0		119	57-145		2.90	30	
Acetone	8.7		"	10.0		87.0	14-150		21.4	30	
Acrolein	8.3		"	25.0		33.3	10-153		17.4	30	
Acrylonitrile	9.7		"	10.0		96.6	51-150		4.65	30	
Benzene	11		"	10.0		107	85-126		1.67	30	
Bromochloromethane	11		"	10.0		107	77-128		8.92	30	
Bromodichloromethane	9.8		"	10.0		98.5	79-128		2.41	30	
Bromoform	10		"	10.0		101	78-133		1.50	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 BL81171 - EPA 5030B											
LCS Dup (BL81171-BSID)						Prepared & Analyzed: 12/22/2018					
Bromomethane	8.3		ug/L	10.0		82.6	43-168		1.46	30	
Carbon disulfide	10		"	10.0		103	68-146		17.8	30	
Carbon tetrachloride	10		"	10.0		102	77-141		24.6	30	
Chlorobenzene	10		"	10.0		104	88-120		1.63	30	
Chloroethane	9.0		"	10.0		90.4	65-136		39.2	30	Non-dir.
Chloroform	11		"	10.0		106	82-128		15.8	30	
Chloromethane	7.7		"	10.0		76.9	43-155		46.9	30	Non-dir.
cis-1,2-Dichloroethylene	11		"	10.0		107	83-129		10.8	30	
cis-1,3-Dichloropropylene	11		"	10.0		114	80-131		5.70	30	
Cyclohexane	11		"	10.0		112	63-149		2.38	30	
Dibromochloromethane	11		"	10.0		105	80-130		4.57	30	
Dibromomethane	10		"	10.0		103	72-134		6.10	30	
Dichlorodifluoromethane	8.9		"	10.0		89.0	44-144		29.6	30	
Ethyl Benzene	11		"	10.0		105	80-131		4.45	30	
Hexachlorobutadiene	9.9		"	10.0		98.9	67-146		3.81	30	
Isopropylbenzene	11		"	10.0		110	76-140		9.36	30	
Methyl acetate	9.1		"	10.0		90.6	51-139		23.2	30	
Methyl tert-butyl ether (MTBE)	9.6		"	10.0		96.5	76-135		23.9	30	
Methylcyclohexane	10		"	10.0		101	72-143		13.2	30	
Methylene chloride	11		"	10.0		105	55-137		7.67	30	
n-Butylbenzene	10		"	10.0		102	79-132		7.35	30	
n-Propylbenzene	11		"	10.0		111	78-133		9.76	30	
o-Xylene	10		"	10.0		102	78-130		5.34	30	
p- & m- Xylenes	21		"	20.0		103	77-133		5.61	30	
p-Isopropyltoluene	10		"	10.0		105	81-136		8.85	30	
sec-Butylbenzene	11		"	10.0		110	79-137		7.71	30	
Styrene	10		"	10.0		102	67-132		4.62	30	
tert-Butyl alcohol (TBA)	47		"	50.0		93.2	25-162		13.8	30	
tert-Butylbenzene	11		"	10.0		107	77-138		9.46	30	
Tetrachloroethylene	9.8		"	10.0		97.8	82-131		4.18	30	
Toluene	11		"	10.0		112	80-127		5.60	30	
trans-1,2-Dichloroethylene	9.2		"	10.0		92.3	80-132		26.4	30	
trans-1,3-Dichloropropylene	11		"	10.0		112	78-131		5.90	30	
trans-1,4-dichloro-2-butene	12		"	10.0		115	63-141		8.96	30	
Trichloroethylene	9.8		"	10.0		98.5	82-128		11.8	30	
Trichlorofluoromethane	9.8		"	10.0		97.5	67-139		35.7	30	Non-dir.
Vinyl Chloride	7.6		"	10.0		76.3	58-145		8.29	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.53		"	10.0		95.3	69-130				
Surrogate: SURR: Toluene-d8	10.5		"	10.0		105	81-117				
Surrogate: SURR: p-Bromofluorobenzene	10.5		"	10.0		105	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 BL81172 - EPA 5030B

Blank (BL81172-BLK1)

Prepared & Analyzed: 12/24/2018

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	"
1,2,3-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	"
1,4-Dichlorobenzene	ND	0.50	"
1,4-Dioxane	ND	40	"
2-Butanone	ND	0.50	"
2-Hexanone	ND	0.50	"
4-Methyl-2-pentanone	ND	0.50	"
Acetone	ND	2.0	"
Acrolein	ND	0.50	"
Acrylonitrile	ND	0.50	"
Benzene	ND	0.50	"
Bromochloromethane	ND	0.50	"
Bromodichloromethane	ND	0.50	"
Bromoform	ND	0.50	"
Bromomethane	ND	0.50	"
Carbon disulfide	ND	0.50	"
Carbon tetrachloride	ND	0.50	"
Chlorobenzene	ND	0.50	"
Chloroethane	ND	0.50	"
Chloroform	ND	0.50	"
Chloromethane	ND	0.50	"
cis-1,2-Dichloroethylene	ND	0.50	"
cis-1,3-Dichloropropylene	ND	0.50	"
Cyclohexane	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 acetate	ND	0.50	"
Methyl tert-butyl ether (MTBE)	ND	0.50	"
Methylcyclohexane	ND	0.50	"
Methylene chloride	ND	2.0	"
n-Butylbenzene	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 BL81172 - EPA 5030B

Blank (BL81172-BLK1)

Prepared & Analyzed: 12/24/2018

n-Propylbenzene	ND	0.50	ug/L								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
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	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	9.86		"	10.0		98.6	69-130				
Surrogate: SURR: Toluene-d8	9.79		"	10.0		97.9	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.81		"	10.0		98.1	79-122				

LCS (BL81172-BS1)

Prepared & Analyzed: 12/24/2018

1,1,1,2-Tetrachloroethane	10		ug/L	10.0		99.6	82-126				
1,1,1-Trichloroethane	10		"	10.0		103	78-136				
1,1,2,2-Tetrachloroethane	8.8		"	10.0		88.5	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10		"	10.0		103	54-165				
1,1,2-Trichloroethane	9.3		"	10.0		92.6	82-123				
1,1-Dichloroethane	9.4		"	10.0		94.2	82-129				
1,1-Dichloroethylene	9.4		"	10.0		94.0	68-138				
1,2,3-Trichlorobenzene	11		"	10.0		113	76-136				
1,2,3-Trichloropropane	9.4		"	10.0		93.7	77-128				
1,2,4-Trichlorobenzene	10		"	10.0		103	76-137				
1,2,4-Trimethylbenzene	9.2		"	10.0		92.4	82-132				
1,2-Dibromo-3-chloropropane	7.6		"	10.0		75.7	45-147				
1,2-Dibromoethane	9.3		"	10.0		92.8	83-124				
1,2-Dichlorobenzene	9.6		"	10.0		95.7	79-123				
1,2-Dichloroethane	8.8		"	10.0		88.2	73-132				
1,2-Dichloropropane	7.9		"	10.0		78.8	78-126				
1,3,5-Trimethylbenzene	9.4		"	10.0		94.2	80-131				
1,3-Dichlorobenzene	9.8		"	10.0		97.6	86-122				
1,4-Dichlorobenzene	9.5		"	10.0		95.3	85-124				
1,4-Dioxane	120		"	210		58.6	10-349				
2-Butanone	9.3		"	10.0		93.1	49-152				
2-Hexanone	9.9		"	10.0		99.1	51-146				
4-Methyl-2-pentanone	10		"	10.0		99.8	57-145				
Acetone	7.8		"	10.0		78.5	14-150				
Acrolein	10		"	25.0		41.4	10-153				
Acrylonitrile	8.6		"	10.0		86.3	51-150				
Benzene	11		"	10.0		105	85-126				
Bromochloromethane	9.8		"	10.0		98.3	77-128				
Bromodichloromethane	8.9		"	10.0		88.6	79-128				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BL81172 - EPA 5030B

LCS (BL81172-BS1)

Prepared & Analyzed: 12/24/2018

Bromoform	8.6		ug/L	10.0		86.3	78-133				
Bromomethane	11		"	10.0		108	43-168				
Carbon disulfide	0.99		"	10.0		9.90	68-146	Low Bias			
Carbon tetrachloride	11		"	10.0		107	77-141				
Chlorobenzene	9.1		"	10.0		90.9	88-120				
Chloroethane	9.0		"	10.0		90.1	65-136				
Chloroform	10		"	10.0		103	82-128				
Chloromethane	10		"	10.0		101	43-155				
cis-1,2-Dichloroethylene	10		"	10.0		104	83-129				
cis-1,3-Dichloropropylene	10		"	10.0		100	80-131				
Cyclohexane	12		"	10.0		118	63-149				
Dibromochloromethane	9.5		"	10.0		95.4	80-130				
Dibromomethane	8.2		"	10.0		81.9	72-134				
Dichlorodifluoromethane	11		"	10.0		105	44-144				
Ethyl Benzene	9.8		"	10.0		98.1	80-131				
Hexachlorobutadiene	9.3		"	10.0		92.6	67-146				
Isopropylbenzene	9.8		"	10.0		98.3	76-140				
Methyl acetate	110		"	10.0		NR	51-139	High Bias			
Methyl tert-butyl ether (MTBE)	8.9		"	10.0		88.9	76-135				
Methylcyclohexane	9.5		"	10.0		94.6	72-143				
Methylene chloride	9.0		"	10.0		89.7	55-137				
n-Butylbenzene	8.2		"	10.0		82.3	79-132				
n-Propylbenzene	9.4		"	10.0		94.0	78-133				
o-Xylene	8.6		"	10.0		86.4	78-130				
p- & m- Xylenes	19		"	20.0		96.4	77-133				
p-Isopropyltoluene	9.1		"	10.0		90.9	81-136				
sec-Butylbenzene	9.4		"	10.0		94.0	79-137				
Styrene	8.7		"	10.0		86.6	67-132				
tert-Butyl alcohol (TBA)	40		"	50.0		80.7	25-162				
tert-Butylbenzene	9.6		"	10.0		96.1	77-138				
Tetrachloroethylene	9.2		"	10.0		92.3	82-131				
Toluene	10		"	10.0		102	80-127				
trans-1,2-Dichloroethylene	8.6		"	10.0		86.3	80-132				
trans-1,3-Dichloropropylene	9.9		"	10.0		98.6	78-131				
trans-1,4-dichloro-2-butene	8.6		"	10.0		86.4	63-141				
Trichloroethylene	8.5		"	10.0		85.2	82-128				
Trichlorofluoromethane	11		"	10.0		107	67-139				
Vinyl Chloride	11		"	10.0		107	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.77		"	10.0		97.7	69-130				
Surrogate: SURR: Toluene-d8	10.4		"	10.0		104	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.83		"	10.0		98.3	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 BL81172 - EPA 5030B											
LCS Dup (BL81172-BSD1)						Prepared & Analyzed: 12/24/2018					
1,1,1,2-Tetrachloroethane	9.5		ug/L	10.0		94.7	82-126		5.04	30	
1,1,1-Trichloroethane	9.9		"	10.0		98.7	78-136		4.65	30	
1,1,2,2-Tetrachloroethane	8.1		"	10.0		81.1	76-129		8.73	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.7		"	10.0		96.8	54-165		5.82	30	
1,1,2-Trichloroethane	8.8		"	10.0		87.8	82-123		5.32	30	
1,1-Dichloroethane	8.8		"	10.0		88.4	82-129		6.35	30	
1,1-Dichloroethylene	8.8		"	10.0		87.9	68-138		6.71	30	
1,2,3-Trichlorobenzene	9.9		"	10.0		98.7	76-136		13.6	30	
1,2,3-Trichloropropane	8.4		"	10.0		83.5	77-128		11.5	30	
1,2,4-Trichlorobenzene	9.5		"	10.0		94.6	76-137		8.11	30	
1,2,4-Trimethylbenzene	9.7		"	10.0		97.0	82-132		4.86	30	
1,2-Dibromo-3-chloropropane	8.1		"	10.0		80.9	45-147		6.64	30	
1,2-Dibromoethane	8.8		"	10.0		87.6	83-124		5.76	30	
1,2-Dichlorobenzene	9.5		"	10.0		95.4	79-123		0.314	30	
1,2-Dichloroethane	8.8		"	10.0		87.8	73-132		0.455	30	
1,2-Dichloropropane	7.3		"	10.0		72.8	78-126	Low Bias	7.92	30	
1,3,5-Trimethylbenzene	9.0		"	10.0		90.2	80-131		4.34	30	
1,3-Dichlorobenzene	9.9		"	10.0		99.1	86-122		1.53	30	
1,4-Dichlorobenzene	9.7		"	10.0		96.6	85-124		1.35	30	
1,4-Dioxane	110		"	210		53.6	10-349		8.93	30	
2-Butanone	9.1		"	10.0		90.9	49-152		2.39	30	
2-Hexanone	9.2		"	10.0		92.4	51-146		7.00	30	
4-Methyl-2-pentanone	9.5		"	10.0		94.8	57-145		5.14	30	
Acetone	7.5		"	10.0		75.3	14-150		4.16	30	
Acrolein	9.9		"	25.0		39.5	10-153		4.74	30	
Acrylonitrile	8.3		"	10.0		82.6	51-150		4.38	30	
Benzene	10		"	10.0		101	85-126		3.88	30	
Bromochloromethane	9.4		"	10.0		93.9	77-128		4.58	30	
Bromodichloromethane	8.0		"	10.0		80.0	79-128		10.2	30	
Bromoform	8.0		"	10.0		80.0	78-133		7.58	30	
Bromomethane	11		"	10.0		112	43-168		3.90	30	
Carbon disulfide	1.5		"	10.0		14.7	68-146	Low Bias	39.0	30	Non-dir.
Carbon tetrachloride	10		"	10.0		102	77-141		4.77	30	
Chlorobenzene	9.5		"	10.0		94.9	88-120		4.31	30	
Chloroethane	8.5		"	10.0		85.3	65-136		5.47	30	
Chloroform	9.8		"	10.0		97.8	82-128		5.47	30	
Chloromethane	9.6		"	10.0		96.3	43-155		4.67	30	
cis-1,2-Dichloroethylene	8.8		"	10.0		88.4	83-129		16.6	30	
cis-1,3-Dichloropropylene	9.5		"	10.0		95.0	80-131		5.63	30	
Cyclohexane	11		"	10.0		109	63-149		8.29	30	
Dibromochloromethane	9.0		"	10.0		89.5	80-130		6.38	30	
Dibromomethane	7.5		"	10.0		75.0	72-134		8.80	30	
Dichlorodifluoromethane	9.8		"	10.0		97.8	44-144		7.29	30	
Ethyl Benzene	9.8		"	10.0		98.2	80-131		0.102	30	
Hexachlorobutadiene	8.5		"	10.0		85.2	67-146		8.32	30	
Isopropylbenzene	9.0		"	10.0		90.4	76-140		8.37	30	
Methyl acetate	64		"	10.0		643	51-139	High Bias	49.6	30	Non-dir.
Methyl tert-butyl ether (MTBE)	9.5		"	10.0		94.9	76-135		6.53	30	
Methylcyclohexane	9.1		"	10.0		91.1	72-143		3.77	30	
Methylene chloride	8.8		"	10.0		88.0	55-137		1.91	30	
n-Butylbenzene	9.1		"	10.0		90.6	79-132		9.60	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 BL81172 - EPA 5030B

LCS Dup (BL81172-BS1)

Prepared & Analyzed: 12/24/2018

n-Propylbenzene	8.8		ug/L	10.0		88.0	78-133		6.59	30	
o-Xylene	8.3		"	10.0		82.6	78-130		4.50	30	
p- & m- Xylenes	19		"	20.0		97.0	77-133		0.620	30	
p-Isopropyltoluene	9.7		"	10.0		96.8	81-136		6.29	30	
sec-Butylbenzene	10		"	10.0		100	79-137		6.58	30	
Styrene	8.3		"	10.0		83.4	67-132		3.76	30	
tert-Butyl alcohol (TBA)	44		"	50.0		87.9	25-162		8.57	30	
tert-Butylbenzene	9.9		"	10.0		98.9	77-138		2.87	30	
Tetrachloroethylene	8.7		"	10.0		87.4	82-131		5.45	30	
Toluene	9.5		"	10.0		95.2	80-127		6.90	30	
trans-1,2-Dichloroethylene	9.3		"	10.0		92.9	80-132		7.37	30	
trans-1,3-Dichloropropylene	9.2		"	10.0		92.1	78-131		6.82	30	
trans-1,4-dichloro-2-butene	8.1		"	10.0		80.8	63-141		6.70	30	
Trichloroethylene	8.5		"	10.0		85.2	82-128		0.00	30	
Trichlorofluoromethane	9.7		"	10.0		96.6	67-139		10.6	30	
Vinyl Chloride	10		"	10.0		102	58-145		4.51	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.36		"	10.0		93.6	69-130				
Surrogate: SURR: Toluene-d8	9.79		"	10.0		97.9	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.25		"	10.0		92.5	79-122				

Batch BL81328 - EPA 5030B

Blank (BL81328-BLK1)

Prepared: 12/25/2018 Analyzed: 12/26/2018

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	"								
1,2,3-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	"								
1,4-Dichlorobenzene	ND	0.50	"								
1,4-Dioxane	ND	40	"								
2-Butanone	ND	0.50	"								
2-Hexanone	ND	0.50	"								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	ND	2.0	"								
Acrolein	ND	0.50	"								
Acrylonitrile	ND	0.50	"								
Benzene	ND	0.50	"								
Bromochloromethane	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 BL81328 - EPA 5030B

Blank (BL81328-BLK1)

Prepared: 12/25/2018 Analyzed: 12/26/2018

Bromodichloromethane	ND	0.50	ug/L								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon disulfide	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Cyclohexane	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 acetate	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylcyclohexane	ND	0.50	"								
Methylene chloride	ND	2.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
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	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	8.76		"	10.0		87.6	69-130				
Surrogate: SURR: Toluene-d8	9.77		"	10.0		97.7	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.52		"	10.0		95.2	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 BL81328 - EPA 5030B

LCS (BL81328-BS1)

Prepared: 12/25/2018 Analyzed: 12/26/2018

1,1,1,2-Tetrachloroethane	10		ug/L	10.0		103	82-126				
1,1,1-Trichloroethane	10		"	10.0		102	78-136				
1,1,2,2-Tetrachloroethane	9.4		"	10.0		94.4	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10		"	10.0		104	54-165				
1,1,2-Trichloroethane	8.8		"	10.0		87.7	82-123				
1,1-Dichloroethane	9.0		"	10.0		90.3	82-129				
1,1-Dichloroethylene	10		"	10.0		105	68-138				
1,2,3-Trichlorobenzene	10		"	10.0		100	76-136				
1,2,3-Trichloropropane	9.5		"	10.0		94.8	77-128				
1,2,4-Trichlorobenzene	9.6		"	10.0		96.5	76-137				
1,2,4-Trimethylbenzene	10		"	10.0		100	82-132				
1,2-Dibromo-3-chloropropane	8.2		"	10.0		81.7	45-147				
1,2-Dibromoethane	9.0		"	10.0		90.3	83-124				
1,2-Dichlorobenzene	10		"	10.0		101	79-123				
1,2-Dichloroethane	9.5		"	10.0		95.1	73-132				
1,2-Dichloropropane	11		"	10.0		113	78-126				
1,3,5-Trimethylbenzene	10		"	10.0		104	80-131				
1,3-Dichlorobenzene	10		"	10.0		104	86-122				
1,4-Dichlorobenzene	10		"	10.0		101	85-124				
1,4-Dioxane	160		"	210		74.1	10-349				
2-Butanone	9.2		"	10.0		92.3	49-152				
2-Hexanone	8.0		"	10.0		80.2	51-146				
4-Methyl-2-pentanone	11		"	10.0		111	57-145				
Acetone	9.5		"	10.0		94.9	14-150				
Acrolein	11		"	25.0		42.2	10-153				
Acrylonitrile	8.3		"	10.0		83.4	51-150				
Benzene	11		"	10.0		105	85-126				
Bromochloromethane	9.6		"	10.0		96.5	77-128				
Bromodichloromethane	11		"	10.0		107	79-128				
Bromoform	9.1		"	10.0		90.6	78-133				
Bromomethane	9.8		"	10.0		98.1	43-168				
Carbon disulfide	5.3		"	10.0		52.9	68-146	Low Bias			
Carbon tetrachloride	10		"	10.0		102	77-141				
Chlorobenzene	9.9		"	10.0		98.7	88-120				
Chloroethane	8.9		"	10.0		88.6	65-136				
Chloroform	10		"	10.0		102	82-128				
Chloromethane	9.5		"	10.0		95.2	43-155				
cis-1,2-Dichloroethylene	9.0		"	10.0		90.1	83-129				
cis-1,3-Dichloropropylene	11		"	10.0		112	80-131				
Cyclohexane	12		"	10.0		120	63-149				
Dibromochloromethane	9.5		"	10.0		94.6	80-130				
Dibromomethane	10		"	10.0		101	72-134				
Dichlorodifluoromethane	8.8		"	10.0		88.0	44-144				
Ethyl Benzene	10		"	10.0		101	80-131				
Hexachlorobutadiene	9.8		"	10.0		97.6	67-146				
Isopropylbenzene	11		"	10.0		106	76-140				
Methyl acetate	8.0		"	10.0		80.1	51-139				
Methyl tert-butyl ether (MTBE)	8.9		"	10.0		88.9	76-135				
Methylcyclohexane	12		"	10.0		122	72-143				
Methylene chloride	8.3		"	10.0		82.8	55-137				
n-Butylbenzene	9.6		"	10.0		95.5	79-132				



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 BL81328 - EPA 5030B											
LCS (BL81328-BS1)						Prepared: 12/25/2018 Analyzed: 12/26/2018					
n-Propylbenzene	10		ug/L	10.0		103	78-133				
o-Xylene	9.9		"	10.0		99.2	78-130				
p- & m- Xylenes	20		"	20.0		101	77-133				
p-Isopropyltoluene	10		"	10.0		102	81-136				
sec-Butylbenzene	10		"	10.0		104	79-137				
Styrene	9.8		"	10.0		97.8	67-132				
tert-Butyl alcohol (TBA)	41		"	50.0		82.3	25-162				
tert-Butylbenzene	10		"	10.0		105	77-138				
Tetrachloroethylene	9.2		"	10.0		92.3	82-131				
Toluene	11		"	10.0		113	80-127				
trans-1,2-Dichloroethylene	8.8		"	10.0		87.8	80-132				
trans-1,3-Dichloropropylene	10		"	10.0		99.8	78-131				
trans-1,4-dichloro-2-butene	9.1		"	10.0		91.1	63-141				
Trichloroethylene	11		"	10.0		111	82-128				
Trichlorofluoromethane	11		"	10.0		107	67-139				
Vinyl Chloride	9.6		"	10.0		95.6	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	8.97		"	10.0		89.7	69-130				
Surrogate: SURR: Toluene-d8	10.8		"	10.0		108	81-117				
Surrogate: SURR: p-Bromofluorobenzene	10.4		"	10.0		104	79-122				
LCS Dup (BL81328-BS1)						Prepared: 12/25/2018 Analyzed: 12/26/2018					
1,1,1,2-Tetrachloroethane	11		ug/L	10.0		107	82-126		3.91	30	
1,1,1-Trichloroethane	10		"	10.0		103	78-136		1.37	30	
1,1,2,2-Tetrachloroethane	9.4		"	10.0		93.8	76-129		0.638	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11		"	10.0		112	54-165		7.61	30	
1,1,2-Trichloroethane	9.5		"	10.0		94.8	82-123		7.78	30	
1,1-Dichloroethane	8.7		"	10.0		87.4	82-129		3.26	30	
1,1-Dichloroethylene	11		"	10.0		109	68-138		4.11	30	
1,2,3-Trichlorobenzene	10		"	10.0		104	76-136		3.23	30	
1,2,3-Trichloropropane	9.6		"	10.0		96.4	77-128		1.67	30	
1,2,4-Trichlorobenzene	9.7		"	10.0		97.1	76-137		0.620	30	
1,2,4-Trimethylbenzene	10		"	10.0		101	82-132		0.892	30	
1,2-Dibromo-3-chloropropane	8.4		"	10.0		83.5	45-147		2.18	30	
1,2-Dibromoethane	9.2		"	10.0		92.4	83-124		2.30	30	
1,2-Dichlorobenzene	10		"	10.0		99.5	79-123		1.20	30	
1,2-Dichloroethane	10		"	10.0		102	73-132		7.00	30	
1,2-Dichloropropane	12		"	10.0		119	78-126		5.10	30	
1,3,5-Trimethylbenzene	10		"	10.0		103	80-131		0.0967	30	
1,3-Dichlorobenzene	10		"	10.0		103	86-122		0.579	30	
1,4-Dichlorobenzene	10		"	10.0		100	85-124		1.09	30	
1,4-Dioxane	170		"	210		79.2	10-349		6.67	30	
2-Butanone	9.4		"	10.0		94.1	49-152		1.93	30	
2-Hexanone	8.0		"	10.0		80.3	51-146		0.125	30	
4-Methyl-2-pentanone	12		"	10.0		118	57-145		6.28	30	
Acetone	8.4		"	10.0		83.6	14-150		12.7	30	
Acrolein	9.1		"	25.0		36.5	10-153		14.4	30	
Acrylonitrile	8.2		"	10.0		81.6	51-150		2.18	30	
Benzene	11		"	10.0		108	85-126		3.00	30	
Bromochloromethane	10		"	10.0		100	77-128		3.56	30	
Bromodichloromethane	11		"	10.0		111	79-128		3.86	30	
Bromoform	9.6		"	10.0		95.5	78-133		5.27	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 BL81328 - EPA 5030B

LCS Dup (BL81328-BSD1)

Prepared: 12/25/2018 Analyzed: 12/26/2018

Bromomethane	11		ug/L	10.0		114	43-168		14.8	30	
Carbon disulfide	5.7		"	10.0		56.6	68-146	Low Bias	6.76	30	
Carbon tetrachloride	10		"	10.0		105	77-141		2.51	30	
Chlorobenzene	9.9		"	10.0		99.3	88-120		0.606	30	
Chloroethane	11		"	10.0		106	65-136		18.2	30	
Chloroform	11		"	10.0		105	82-128		2.79	30	
Chloromethane	9.5		"	10.0		95.2	43-155		0.00	30	
cis-1,2-Dichloroethylene	9.2		"	10.0		92.3	83-129		2.41	30	
cis-1,3-Dichloropropylene	11		"	10.0		114	80-131		1.94	30	
Cyclohexane	12		"	10.0		123	63-149		2.31	30	
Dibromochloromethane	9.6		"	10.0		96.2	80-130		1.68	30	
Dibromomethane	11		"	10.0		106	72-134		5.03	30	
Dichlorodifluoromethane	8.9		"	10.0		88.8	44-144		0.905	30	
Ethyl Benzene	10		"	10.0		102	80-131		1.19	30	
Hexachlorobutadiene	10		"	10.0		102	67-146		4.31	30	
Isopropylbenzene	11		"	10.0		105	76-140		0.947	30	
Methyl acetate	9.4		"	10.0		93.9	51-139		15.9	30	
Methyl tert-butyl ether (MTBE)	9.3		"	10.0		92.8	76-135		4.29	30	
Methylcyclohexane	13		"	10.0		125	72-143		2.42	30	
Methylene chloride	11		"	10.0		106	55-137		24.4	30	
n-Butylbenzene	9.8		"	10.0		98.1	79-132		2.69	30	
n-Propylbenzene	10		"	10.0		102	78-133		0.390	30	
o-Xylene	10		"	10.0		101	78-130		2.00	30	
p- & m- Xylenes	20		"	20.0		101	77-133		0.297	30	
p-Isopropyltoluene	10		"	10.0		104	81-136		2.63	30	
sec-Butylbenzene	11		"	10.0		107	79-137		2.75	30	
Styrene	10		"	10.0		101	67-132		3.22	30	
tert-Butyl alcohol (TBA)	45		"	50.0		90.0	25-162		8.98	30	
tert-Butylbenzene	11		"	10.0		105	77-138		0.571	30	
Tetrachloroethylene	9.4		"	10.0		93.8	82-131		1.61	30	
Toluene	12		"	10.0		118	80-127		4.77	30	
trans-1,2-Dichloroethylene	8.9		"	10.0		89.4	80-132		1.81	30	
trans-1,3-Dichloropropylene	11		"	10.0		111	78-131		10.9	30	
trans-1,4-dichloro-2-butene	9.0		"	10.0		89.6	63-141		1.66	30	
Trichloroethylene	11		"	10.0		114	82-128		2.67	30	
Trichlorofluoromethane	11		"	10.0		111	67-139		3.30	30	
Vinyl Chloride	10		"	10.0		99.6	58-145		4.10	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.21		"	10.0		92.1	69-130				
Surrogate: SURR: Toluene-d8	11.0		"	10.0		110	81-117				
Surrogate: SURR: p-Bromofluorobenzene	10.1		"	10.0		101	79-122				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike	Source*	%REC	%REC	Flag	RPD	RPD	Flag
		Limit			Result		Limits			Limit	
Batch BL81394 - EPA 5035A											
Blank (BL81394-BLK1)										Prepared & Analyzed: 12/21/2018	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet								
Tentatively Identified Compounds	0.0		"								
1,1,1-Trichloroethane	ND	5.0	"								
1,1,2,2-Tetrachloroethane	ND	5.0	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"								
1,1,2-Trichloroethane	ND	5.0	"								
1,1-Dichloroethane	ND	5.0	"								
1,1-Dichloroethylene	ND	5.0	"								
1,2,3-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 BL81394 - EPA 5035A

Blank (BL81394-BLK1)

Prepared & Analyzed: 12/21/2018

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	5.0	"
tert-Butylbenzene	ND	5.0	"
Tetrachloroethylene	ND	5.0	"
Toluene	ND	5.0	"
trans-1,2-Dichloroethylene	ND	5.0	"
trans-1,3-Dichloropropylene	ND	5.0	"
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: SURRE: 1,2-Dichloroethane-d4	46.0	ug/L	50.0	92.1	77-125
Surrogate: SURRE: Toluene-d8	52.8	"	50.0	106	85-120
Surrogate: SURRE: p-Bromofluorobenzene	52.3	"	50.0	105	76-130

LCS (BL81394-BS1)

Prepared & Analyzed: 12/21/2018

1,1,1,2-Tetrachloroethane	50	ug/L	50.0	100	75-129
1,1,1-Trichloroethane	45	"	50.0	89.6	71-137
1,1,2,2-Tetrachloroethane	48	"	50.0	96.5	79-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	29	"	50.0	58.1	58-146
1,1,2-Trichloroethane	48	"	50.0	95.1	83-123
1,1-Dichloroethane	45	"	50.0	90.5	75-130
1,1-Dichloroethylene	25	"	50.0	50.5	64-137
1,2,3-Trichlorobenzene	58	"	50.0	117	81-140
1,2,3-Trichloropropane	48	"	50.0	95.3	81-126
1,2,4-Trichlorobenzene	59	"	50.0	117	80-141
1,2,4-Trimethylbenzene	51	"	50.0	103	84-125
1,2-Dibromo-3-chloropropane	49	"	50.0	98.6	74-142
1,2-Dibromoethane	49	"	50.0	98.3	86-123
1,2-Dichlorobenzene	52	"	50.0	104	85-122
1,2-Dichloroethane	41	"	50.0	82.3	71-133
1,2-Dichloropropane	51	"	50.0	102	81-122
1,3,5-Trimethylbenzene	60	"	50.0	119	82-126
1,3-Dichlorobenzene	52	"	50.0	103	84-124
1,4-Dichlorobenzene	53	"	50.0	105	84-124
1,4-Dioxane	770	"	1050	73.6	10-228
2-Butanone	36	"	50.0	72.3	58-147
2-Hexanone	41	"	50.0	81.7	70-139
4-Methyl-2-pentanone	42	"	50.0	83.4	72-132
Acetone	19	"	50.0	37.6	36-155
Acrolein	20	"	125	15.8	10-238
Acrylonitrile	42	"	50.0	84.9	66-141
Benzene	46	"	50.0	91.6	77-127
Bromochloromethane	40	"	50.0	80.6	74-129

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 BL81394 - EPA 5035A

LCS (BL81394-BS1)

Prepared & Analyzed: 12/21/2018

Bromodichloromethane	52		ug/L	50.0		104	81-124				
Bromoform	53		"	50.0		107	80-136				
Bromomethane	31		"	50.0		61.5	32-177				
Carbon disulfide	33		"	50.0		66.6	10-136				
Carbon tetrachloride	46		"	50.0		91.7	66-143				
Chlorobenzene	49		"	50.0		97.8	86-120				
Chloroethane	55		"	50.0		109	51-142				
Chloroform	46		"	50.0		92.1	76-131				
Chloromethane	36		"	50.0		72.8	49-132				
cis-1,2-Dichloroethylene	47		"	50.0		93.5	74-132				
cis-1,3-Dichloropropylene	51		"	50.0		103	81-129				
Cyclohexane	46		"	50.0		91.4	70-130				
Dibromochloromethane	53		"	50.0		106	10-200				
Dibromomethane	48		"	50.0		96.2	83-124				
Dichlorodifluoromethane	38		"	50.0		75.5	28-158				
Ethyl Benzene	48		"	50.0		96.5	84-125				
Hexachlorobutadiene	53		"	50.0		106	83-133				
Isopropylbenzene	51		"	50.0		102	81-127				
Methyl acetate	21		"	50.0		41.9	41-143				
Methyl tert-butyl ether (MTBE)	45		"	50.0		89.6	74-131				
Methylcyclohexane	50		"	50.0		101	70-130				
Methylene chloride	31		"	50.0		61.5	57-141				
n-Butylbenzene	53		"	50.0		106	80-130				
n-Propylbenzene	50		"	50.0		99.4	74-136				
o-Xylene	49		"	50.0		98.2	83-123				
p- & m- Xylenes	83		"	100		83.0	82-128				
p-Isopropyltoluene	53		"	50.0		105	85-125				
sec-Butylbenzene	55		"	50.0		109	83-125				
Styrene	50		"	50.0		99.3	86-126				
tert-Butyl alcohol (TBA)	240		"	250		97.1	70-130				
tert-Butylbenzene	53		"	50.0		106	80-127				
Tetrachloroethylene	46		"	50.0		91.7	80-129				
Toluene	51		"	50.0		102	85-121				
trans-1,2-Dichloroethylene	45		"	50.0		89.6	72-132				
trans-1,3-Dichloropropylene	50		"	50.0		101	78-132				
trans-1,4-dichloro-2-butene	48		"	50.0		96.0	75-135				
Trichloroethylene	52		"	50.0		103	84-123				
Trichlorofluoromethane	40		"	50.0		79.7	62-140				
Vinyl Chloride	35		"	50.0		70.9	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	45.1		"	50.0		90.1	77-125				
Surrogate: SURR: Toluene-d8	53.5		"	50.0		107	85-120				
Surrogate: SURR: p-Bromofluorobenzene	49.7		"	50.0		99.5	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 BL81394 - EPA 5035A											
LCS Dup (BL81394-BSD1)						Prepared & Analyzed: 12/21/2018					
1,1,1,2-Tetrachloroethane	53		ug/L	50.0		105	75-129		4.67	30	
1,1,1-Trichloroethane	47		"	50.0		94.1	71-137		4.90	30	
1,1,2,2-Tetrachloroethane	52		"	50.0		103	79-129		6.79	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	31		"	50.0		61.9	58-146		6.40	30	
1,1,2-Trichloroethane	50		"	50.0		99.0	83-123		3.98	30	
1,1-Dichloroethane	49		"	50.0		97.2	75-130		7.16	30	
1,1-Dichloroethylene	26		"	50.0		52.5	64-137	Low Bias	3.92	30	
1,2,3-Trichlorobenzene	61		"	50.0		122	81-140		4.35	30	
1,2,3-Trichloropropane	51		"	50.0		102	81-126		6.89	30	
1,2,4-Trichlorobenzene	61		"	50.0		122	80-141		4.06	30	
1,2,4-Trimethylbenzene	55		"	50.0		109	84-125		6.22	30	
1,2-Dibromo-3-chloropropane	54		"	50.0		108	74-142		9.05	30	
1,2-Dibromoethane	52		"	50.0		104	86-123		5.61	30	
1,2-Dichlorobenzene	54		"	50.0		107	85-122		2.81	30	
1,2-Dichloroethane	45		"	50.0		90.4	71-133		9.33	30	
1,2-Dichloropropane	53		"	50.0		105	81-122		3.09	30	
1,3,5-Trimethylbenzene	62		"	50.0		124	82-126		3.63	30	
1,3-Dichlorobenzene	54		"	50.0		107	84-124		3.73	30	
1,4-Dichlorobenzene	55		"	50.0		111	84-124		5.16	30	
1,4-Dioxane	790		"	1050		75.1	10-228		2.04	30	
2-Butanone	39		"	50.0		77.1	58-147		6.37	30	
2-Hexanone	44		"	50.0		87.7	70-139		7.06	30	
4-Methyl-2-pentanone	44		"	50.0		87.7	72-132		4.98	30	
Acetone	21		"	50.0		41.1	36-155		8.94	30	
Acrolein	27		"	125		21.3	10-238		29.2	30	
Acrylonitrile	44		"	50.0		88.8	66-141		4.42	30	
Benzene	48		"	50.0		96.7	77-127		5.44	30	
Bromochloromethane	43		"	50.0		85.4	74-129		5.73	30	
Bromodichloromethane	55		"	50.0		111	81-124		6.22	30	
Bromoform	56		"	50.0		112	80-136		5.05	30	
Bromomethane	36		"	50.0		71.6	32-177		15.1	30	
Carbon disulfide	35		"	50.0		69.2	10-136		3.89	30	
Carbon tetrachloride	48		"	50.0		96.9	66-143		5.45	30	
Chlorobenzene	51		"	50.0		102	86-120		4.56	30	
Chloroethane	55		"	50.0		111	51-142		1.16	30	
Chloroform	48		"	50.0		96.1	76-131		4.27	30	
Chloromethane	38		"	50.0		76.3	49-132		4.75	30	
cis-1,2-Dichloroethylene	49		"	50.0		97.2	74-132		3.88	30	
cis-1,3-Dichloropropylene	55		"	50.0		109	81-129		6.51	30	
Cyclohexane	48		"	50.0		95.5	70-130		4.41	30	
Dibromochloromethane	56		"	50.0		112	10-200		5.37	30	
Dibromomethane	50		"	50.0		100	83-124		4.21	30	
Dichlorodifluoromethane	39		"	50.0		77.1	28-158		2.20	30	
Ethyl Benzene	50		"	50.0		101	84-125		4.08	30	
Hexachlorobutadiene	53		"	50.0		106	83-133		0.0377	30	
Isopropylbenzene	53		"	50.0		106	81-127		4.06	30	
Methyl acetate	22		"	50.0		43.6	41-143		3.93	30	
Methyl tert-butyl ether (MTBE)	48		"	50.0		95.1	74-131		5.87	30	
Methylcyclohexane	52		"	50.0		105	70-130		3.91	30	
Methylene chloride	32		"	50.0		63.8	57-141		3.67	30	
n-Butylbenzene	56		"	50.0		112	80-130		5.07	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 BL81394 - EPA 5035A

LCS Dup (BL81394-BSD1)

Prepared & Analyzed: 12/21/2018

n-Propylbenzene	52		ug/L	50.0		105	74-136		5.42	30	
o-Xylene	52		"	50.0		103	83-123		4.92	30	
p- & m- Xylenes	86		"	100		86.4	82-128		4.01	30	
p-Isopropyltoluene	55		"	50.0		111	85-125		4.94	30	
sec-Butylbenzene	57		"	50.0		113	83-125		3.70	30	
Styrene	52		"	50.0		104	86-126		4.22	30	
tert-Butyl alcohol (TBA)	270		"	250		107	70-130		9.41	30	
tert-Butylbenzene	55		"	50.0		110	80-127		3.41	30	
Tetrachloroethylene	48		"	50.0		95.5	80-129		4.04	30	
Toluene	53		"	50.0		106	85-121		4.59	30	
trans-1,2-Dichloroethylene	46		"	50.0		92.5	72-132		3.16	30	
trans-1,3-Dichloropropylene	53		"	50.0		105	78-132		4.48	30	
trans-1,4-dichloro-2-butene	50		"	50.0		100	75-135		4.60	30	
Trichloroethylene	53		"	50.0		107	84-123		3.60	30	
Trichlorofluoromethane	42		"	50.0		85.0	62-140		6.41	30	
Vinyl Chloride	37		"	50.0		73.3	52-130		3.27	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	45.2		"	50.0		90.4	77-125				
Surrogate: SURR: Toluene-d8	52.9		"	50.0		106	85-120				
Surrogate: SURR: p-Bromofluorobenzene	50.2		"	50.0		100	76-130				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BL81372 - EPA 3550C

Blank (BL81372-BLK1)

Prepared & Analyzed: 12/27/2018

1,1-Biphenyl	ND	41.7	ug/kg wet
1,2,4,5-Tetrachlorobenzene	ND	83.3	"
1,2,4-Trichlorobenzene	ND	41.7	"
1,2-Dichlorobenzene	ND	41.7	"
1,2-Diphenylhydrazine (as Azobenzene)	ND	41.7	"
1,3-Dichlorobenzene	ND	41.7	"
1,4-Dichlorobenzene	ND	41.7	"
2,3,4,6-Tetrachlorophenol	ND	83.3	"
2,4,5-Trichlorophenol	ND	41.7	"
2,4,6-Trichlorophenol	ND	41.7	"
2,4-Dichlorophenol	ND	41.7	"
2,4-Dimethylphenol	ND	41.7	"
2,4-Dinitrophenol	ND	83.3	"
2,4-Dinitrotoluene	ND	41.7	"
2,6-Dinitrotoluene	ND	41.7	"
2-Chloronaphthalene	ND	41.7	"
2-Chlorophenol	ND	41.7	"
2-Methylnaphthalene	ND	41.7	"
2-Methylphenol	ND	41.7	"
2-Nitroaniline	ND	83.3	"
2-Nitrophenol	ND	41.7	"
3- & 4-Methylphenols	ND	41.7	"
3,3-Dichlorobenzidine	ND	41.7	"
3-Nitroaniline	ND	83.3	"
4,6-Dinitro-2-methylphenol	ND	83.3	"
4-Bromophenyl phenyl ether	ND	41.7	"
4-Chloro-3-methylphenol	ND	41.7	"
4-Chloroaniline	ND	41.7	"
4-Chlorophenyl phenyl ether	ND	41.7	"
4-Nitroaniline	ND	83.3	"
4-Nitrophenol	ND	83.3	"
Acenaphthene	ND	41.7	"
Acenaphthylene	ND	41.7	"
Acetophenone	ND	41.7	"
Aniline	ND	167	"
Anthracene	ND	41.7	"
Atrazine	ND	41.7	"
Benzaldehyde	ND	41.7	"
Benzidine	ND	167	"
Benzo(a)anthracene	ND	41.7	"
Benzo(a)pyrene	ND	41.7	"
Benzo(b)fluoranthene	ND	41.7	"
Benzo(g,h,i)perylene	ND	41.7	"
Benzo(k)fluoranthene	ND	41.7	"
Benzoic acid	ND	41.7	"
Benzyl alcohol	ND	41.7	"
Benzyl butyl phthalate	ND	41.7	"
Bis(2-chloroethoxy)methane	ND	41.7	"
Bis(2-chloroethyl)ether	ND	41.7	"
Bis(2-chloroisopropyl)ether	ND	41.7	"
Bis(2-ethylhexyl)phthalate	ND	41.7	"



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BL81372 - EPA 3550C

Blank (BL81372-BLK1)

Prepared & Analyzed: 12/27/2018

Caprolactam	ND	83.3	ug/kg wet
Carbazole	ND	41.7	"
Chrysene	ND	41.7	"
Dibenzo(a,h)anthracene	ND	41.7	"
Dibenzofuran	ND	41.7	"
Diethyl phthalate	ND	41.7	"
Dimethyl phthalate	ND	41.7	"
Di-n-butyl phthalate	ND	41.7	"
Di-n-octyl phthalate	ND	41.7	"
Fluoranthene	ND	41.7	"
Fluorene	ND	41.7	"
Hexachlorobenzene	ND	41.7	"
Hexachlorobutadiene	ND	41.7	"
Hexachlorocyclopentadiene	ND	41.7	"
Hexachloroethane	ND	41.7	"
Indeno(1,2,3-cd)pyrene	ND	41.7	"
Isophorone	ND	41.7	"
Naphthalene	ND	41.7	"
Nitrobenzene	ND	41.7	"
N-Nitrosodimethylamine	ND	41.7	"
N-nitroso-di-n-propylamine	ND	41.7	"
N-Nitrosodiphenylamine	ND	41.7	"
Pentachlorophenol	ND	41.7	"
Phenanthrene	ND	41.7	"
Phenol	ND	41.7	"
Pyrene	ND	41.7	"

Surrogate: SURR: 2-Fluorophenol	1340	"	1670	80.1	20-108
Surrogate: SURR: Phenol-d5	1280	"	1670	76.8	23-114
Surrogate: SURR: Nitrobenzene-d5	719	"	833	86.3	22-108
Surrogate: SURR: 2-Fluorobiphenyl	640	"	833	76.8	21-113
Surrogate: SURR: 2,4,6-Tribromophenol	1510	"	1670	90.5	19-110
Surrogate: SURR: Terphenyl-d14	826	"	833	99.2	24-116



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BL81372 - EPA 3550C											
LCS (BL81372-BS1)						Prepared & Analyzed: 12/27/2018					
1,1-Biphenyl	631	41.7	ug/kg wet	833		75.7	22-103				
1,2,4,5-Tetrachlorobenzene	677	83.3	"	833		81.3	10-144				
1,2,4-Trichlorobenzene	663	41.7	"	833		79.6	23-130				
1,2-Dichlorobenzene	601	41.7	"	833		72.1	26-113				
1,2-Diphenylhydrazine (as Azobenzene)	751	41.7	"	833		90.1	10-140				
1,3-Dichlorobenzene	623	41.7	"	833		74.7	32-113				
1,4-Dichlorobenzene	621	41.7	"	833		74.5	28-111				
2,3,4,6-Tetrachlorophenol	1480	83.3	"	833		178	30-130	High Bias			
2,4,5-Trichlorophenol	677	41.7	"	833		81.3	14-138				
2,4,6-Trichlorophenol	666	41.7	"	833		80.0	27-122				
2,4-Dichlorophenol	710	41.7	"	833		85.2	23-133				
2,4-Dimethylphenol	722	41.7	"	833		86.6	15-131				
2,4-Dinitrophenol	711	83.3	"	833		85.3	10-149				
2,4-Dinitrotoluene	666	41.7	"	833		80.0	30-123				
2,6-Dinitrotoluene	664	41.7	"	833		79.7	30-125				
2-Chloronaphthalene	613	41.7	"	833		73.5	22-115				
2-Chlorophenol	667	41.7	"	833		80.1	25-121				
2-Methylnaphthalene	717	41.7	"	833		86.0	16-127				
2-Methylphenol	619	41.7	"	833		74.3	10-146				
2-Nitroaniline	705	83.3	"	833		84.6	24-126				
2-Nitrophenol	670	41.7	"	833		80.4	17-129				
3- & 4-Methylphenols	570	41.7	"	833		68.4	20-109				
3,3-Dichlorobenzidine	26.7	41.7	"				10-147				
3-Nitroaniline	491	83.3	"	833		59.0	23-123				
4,6-Dinitro-2-methylphenol	609	83.3	"	833		73.0	10-149				
4-Bromophenyl phenyl ether	646	41.7	"	833		77.5	30-138				
4-Chloro-3-methylphenol	706	41.7	"	833		84.7	16-138				
4-Chloroaniline	360	41.7	"	833		43.2	10-117				
4-Chlorophenyl phenyl ether	664	41.7	"	833		79.7	18-132				
4-Nitroaniline	671	83.3	"	833		80.5	14-125				
4-Nitrophenol	603	83.3	"	833		72.4	10-136				
Acenaphthene	632	41.7	"	833		75.8	17-124				
Acenaphthylene	632	41.7	"	833		75.8	16-124				
Acetophenone	689	41.7	"	833		82.7	28-105				
Aniline	473	167	"	833		56.8	10-111				
Anthracene	688	41.7	"	833		82.6	24-124				
Atrazine	683	41.7	"	833		82.0	22-120				
Benzaldehyde	655	41.7	"	833		78.6	21-100				
Benzo(a)anthracene	656	41.7	"	833		78.7	25-134				
Benzo(a)pyrene	685	41.7	"	833		82.2	29-144				
Benzo(b)fluoranthene	684	41.7	"	833		82.1	20-151				
Benzo(g,h,i)perylene	618	41.7	"	833		74.2	10-153				
Benzo(k)fluoranthene	676	41.7	"	833		81.1	10-148				
Benzoic acid	629	41.7	"	897		70.1	10-116				
Benzyl alcohol	727	41.7	"	833		87.3	17-128				
Benzyl butyl phthalate	667	41.7	"	833		80.1	10-132				
Bis(2-chloroethoxy)methane	678	41.7	"	833		81.4	10-129				
Bis(2-chloroethyl)ether	667	41.7	"	833		80.0	14-125				
Bis(2-chloroisopropyl)ether	733	41.7	"	833		87.9	14-122				
Bis(2-ethylhexyl)phthalate	667	41.7	"	833		80.0	10-141				
Caprolactam	694	83.3	"	833		83.2	10-123				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BL81372 - EPA 3550C

LCS (BL81372-BS1)

Prepared & Analyzed: 12/27/2018

Carbazole	687	41.7	ug/kg wet	833		82.4	31-120				
Chrysene	683	41.7	"	833		81.9	24-116				
Dibenzo(a,h)anthracene	618	41.7	"	833		74.2	17-147				
Dibenzofuran	685	41.7	"	833		82.2	23-123				
Diethyl phthalate	673	41.7	"	833		80.8	23-122				
Dimethyl phthalate	656	41.7	"	833		78.8	28-127				
Di-n-butyl phthalate	648	41.7	"	833		77.8	19-123				
Di-n-octyl phthalate	665	41.7	"	833		79.8	10-132				
Fluoranthene	689	41.7	"	833		82.7	36-125				
Fluorene	667	41.7	"	833		80.0	16-130				
Hexachlorobenzene	648	41.7	"	833		77.7	10-129				
Hexachlorobutadiene	661	41.7	"	833		79.4	22-153				
Hexachlorocyclopentadiene	623	41.7	"	833		74.7	10-134				
Hexachloroethane	555	41.7	"	833		66.6	20-112				
Indeno(1,2,3-cd)pyrene	636	41.7	"	833		76.4	10-155				
Isophorone	692	41.7	"	833		83.0	14-131				
Naphthalene	718	41.7	"	833		86.1	20-121				
Nitrobenzene	662	41.7	"	833		79.4	20-121				
N-Nitrosodimethylamine	617	41.7	"	833		74.0	10-124				
N-nitroso-di-n-propylamine	585	41.7	"	833		70.2	21-119				
N-Nitrosodiphenylamine	792	41.7	"	833		95.0	10-163				
Pentachlorophenol	634	41.7	"	833		76.1	10-143				
Phenanthrene	687	41.7	"	833		82.4	24-123				
Phenol	657	41.7	"	833		78.9	15-123				
Pyrene	674	41.7	"	833		80.9	24-132				
Surrogate: SURR: 2-Fluorophenol	1150		"	1670		68.9	20-108				
Surrogate: SURR: Phenol-d5	1120		"	1670		67.2	23-114				
Surrogate: SURR: Nitrobenzene-d5	614		"	833		73.7	22-108				
Surrogate: SURR: 2-Fluorobiphenyl	606		"	833		72.7	21-113				
Surrogate: SURR: 2,4,6-Tribromophenol	1280		"	1670		76.5	19-110				
Surrogate: SURR: Terphenyl-d14	691		"	833		82.9	24-116				



Metals by ICP - Quality Control Data
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BL81186 - EPA 3015A

Blank (BL81186-BLK1)

Prepared & Analyzed: 12/21/2018

Aluminum	ND	0.0556	mg/L
Barium	ND	0.0278	"
Calcium	ND	0.0556	"
Chromium	ND	0.00556	"
Cobalt	ND	0.00444	"
Copper	ND	0.0222	"
Iron	ND	0.278	"
Lead	ND	0.00556	"
Magnesium	ND	0.0556	"
Manganese	ND	0.00556	"
Nickel	ND	0.0111	"
Potassium	0.0710	0.0556	"
Silver	ND	0.00556	"
Sodium	ND	0.556	"
Vanadium	ND	0.0111	"
Zinc	ND	0.0278	"

LCS (BL81186-BS1)

Prepared & Analyzed: 12/21/2018

Aluminum	2.22	ug/mL	2.00	111	80-120
Barium	2.05	"	2.00	102	80-120
Calcium	0.968	"	1.00	96.8	80-120
Chromium	0.205	"	0.200	102	80-120
Cobalt	0.526	"	0.500	105	80-120
Copper	0.266	"	0.250	106	80-120
Iron	1.02	"	1.00	102	80-120
Lead	0.485	"	0.500	97.1	80-120
Magnesium	1.02	"	1.00	102	80-120
Manganese	0.530	"	0.500	106	80-120
Nickel	0.519	"	0.500	104	80-120
Potassium	1.08	"	1.00	108	80-120
Silver	0.0511	"	0.0500	102	80-120
Sodium	1.33	"	1.00	133	80-120
Vanadium	0.505	"	0.500	101	80-120
Zinc	0.487	"	0.500	97.4	80-120

High Bias



Metals by ICP/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 BL81187 - EPA 3015A

Blank (BL81187-BLK1)

Prepared & Analyzed: 12/21/2018

Antimony	ND	1.11	ug/L
Arsenic	ND	1.11	"
Beryllium	ND	0.333	"
Cadmium	ND	0.556	"
Selenium	ND	1.11	"
Thallium	ND	1.11	"

LCS (BL81187-BS1)

Prepared & Analyzed: 12/21/2018

Selenium	50.1		ug/L	50.0	100	80-120



Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BL81067 - EPA 7473 water

Blank (BL81067-BLK1)

Prepared & Analyzed: 12/20/2018

Mercury	ND	0.00020	mg/L

Reference (BL81067-SRM1)

Prepared & Analyzed: 12/20/2018

Mercury	0.00999		mg/L	0.0100		99.9	70-130



Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag

Batch BL81383 - % Solids Prep

Duplicate (BL81383-DUP1)		*Source sample: 18L0847-04 (HC-Control)					Prepared & Analyzed: 12/27/2018				
% Solids	82.1	0.100	%		82.3			0.272	20		



Wet Chemistry Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BL81300 - Analysis Preparation

Blank (BL81300-BLK1)

Prepared & Analyzed: 12/26/2018

Total Organic Carbon (TOC)	ND	1.00	mg/L

LCS (BL81300-BS1)

Prepared & Analyzed: 12/26/2018

Total Organic Carbon (TOC)	66.4	1.00	mg/L	57.8	115	79.5-125.1



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18L0847-01	HC-Control	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0847-02	HC-Control-DUP	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0847-03	HC-PS	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0847-04	HC-Control	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
18L0847-05	HC-Control-DUP	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
18L0847-06	HC-PS	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
18L0847-07	LC-Control	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0847-08	LC-Control-DUP	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0847-09	LC-PS	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0847-10	LC-PS-DUP	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18L0847-11	LC-Control	40mL Vial with Stir Bar-Cool 4° C
18L0847-12	LC-Control-DUP	40mL Vial with Stir Bar-Cool 4° C
18L0847-13	LC-PS	40mL Vial with Stir Bar-Cool 4° C
18L0847-14	LC-PS-DUP	40mL Vial with Stir Bar-Cool 4° C
18L0847-15	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

QR-04	The RPD exceeded control limits for the LCS/LCSD QC.
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.
N	The Tentatively Identified Compound reported indicates the presence of an possible analyte or class of analyte that has been 'tentatively identified' and the associated numerical value represents its estimated concentration.
M-MBLk	Analyte was detected in the batch method blank above the Reporting Limit.
M-ICV2	The recovery for this element in the ICV was outside the 90-110% recovery criteria.
M-CRL	The RL check for this element recovered outside of control limits.
M-BS	The recovery for this element in the batch blank spike recovered slightly outside of control limits
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
A-01	compound not added to spiking solution

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.

Field Chain-of-Custody Record

YORK Project No. 18L0847

Page 1 of 2

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.

YOUR INFORMATION				Report To:		Invoice To:		YOUR Project Number		Turn-Around Time		
Company: Langan Engineering	Company: Langan Engineering	Address: 300 Kimball Drive Parsippany, NJ 07054		Company: Langan Engineering	Address: 300 Kimball Drive Parsippany, NJ 07054		190043701		RUSH - Next Day			
Phone: 215 491 6519	Phone: 215 491 6519	Contact: Lingke Zeng		Phone: 215 491 6519	Contact: Lingke Zeng		YOUR Project Name		RUSH - Two Day			
E-mail: LZeng@langan.com	E-mail: LZeng@langan.com	E-mail: LZeng@langan.com		E-mail: LZeng@langan.com	E-mail: LZeng@langan.com		551 Greenwich Street		RUSH - Three Day			
Aroona Boodram 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	X	New York	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)		
				GW - groundwater		New Jersey	QA Report	CT RCP DOA/DUE	EQuls (Standard)			
				DW - drinking water		Connecticut	NY ASP A Package	NJDEP Reduced Deliverables	NYSDEC EQuls			
				WW - wastewater		Pennsylvania	NY ASP B Package	NJDEP SRP HazSite				
				O - Oil ; Other		Other		NJDQKP	Other:			
Sample Identification				Sample Matrix	Date/Time Sampled	Analysis Requested		Container Description				
HC-Control				GW	12/14/18 13:45	VOCs + TICs; TOC; TAL Metals		40 mL vials, 250 mL bottle				
HC-Control-DUP				GW	12/14/18 14:15	VOCs + TICs; TOC; TAL Metals		40 mL vials, 250 mL bottle				
HC-PS				GW	12/14/18 14:30	VOCs + TICs; TOC; TAL Metals		40 mL vials, 250 mL bottle				
HC-PS-DUP				GW	12/14/18 13:45	VOCs + TICs; TOC; TAL Metals		40 mL vials, 250 mL bottle				
HC-Control				S	12/14/18 13:45	VOCs + TICs; SVOCs+TICs; TOC		40 mL vials, 4 oz jar				
HC-Control-DUP				S	12/14/18 14:15	VOCs + TICs; SVOCs+TICs; TOC		40 mL vials, 4 oz jar				
HC-PS				S	12/14/18 14:30	VOCs + TICs; SVOCs+TICs; TOC		40 mL vials, 4 oz jar				
HC-PS-DUP				S	12/14/18 14:30	VOCs + TICs; SVOCs+TICs; TOC		40 mL vials, 4 oz jar				
Comments:				Preservation: (check all that apply)		Field Filtered Lab to Filter		Special Instruction				
				HCl X MeOH X HNO ₃ X H ₂ SO ₄ X NaOH X ZnAc X Ascorbic Acid X Other:								
Samples Relinquished by / Company				Date/Time	Samples Relinquished by / Company		Date/Time	Date/Time				
				12/19/18 11:50	12/19/18 11:50		12/19/18 11:50		12/19/18 1916			
Received by / Company				Date/Time	Samples Received by / Company		Date/Time	Date/Time				
Relinquished by / Company				Date/Time	Samples Received at Lab		Date/Time	Temp. Received at Lab				
					TC-4666 12/19/18 1916				3.1			



York Analytical Laboratories, Inc.
120 Research Drive
Stratford, CT 06615
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.
18L0847

Page 2 of 2

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company:	Langan Engineering	Company:	Langan Engineering	Company:	Langan Engineering	190043701		RUSH - Next Day	
Address:	300 Kimball Drive Parsippany, NJ 07054	Address:	300 Kimball Drive Parsippany, NJ 07054	Address:	300 Kimball Drive Parsippany, NJ 07054			RUSH - Two Day	
Phone:	215 491 6519	Phone:	215 491 6519	Phone:	215 491 6519			RUSH - Three Day	
Contact:	Lingke Zeng	Contact:	Lingke Zeng	Contact:	Lingke Zeng			RUSH - Four Day	
E-mail:	LZeng@langan.com	E-mail:	LZeng@langan.com	E-mail:	LZeng@langan.com			Standard (5-7 Day)	
Aroona Boodram		Matrix Codes		Samples From		Report / EDD Type (circle selections)		YORK Reg. Comp.	
Samples Collected by: (print your name above and sign below)		S - soil / solid		New York		CT RCP		Compared to the following Regulation(s): (please fill in)	
		GW - groundwater		New Jersey		CT RCP DQA/DUE			
		DW - drinking water		Connecticut		NY ASP A Package			
		WW - wastewater		Pennsylvania		NJDEP Reduced Deliverables			
		O - Oil ; Other		Other		NYDEP SRP HazSite			
Sample Identification		Sample Matrix		Date/Time Sampled		Analysis Requested		Container Description	
LC-Control	GW	12/14/18	12:00	VOCs + TICs; TOC; TAL Metals				40 mL vials, 250 mL bottle	
LC-Control-DUP	GW	12/14/18	12:30	VOCs + TICs; TOC; TAL Metals				40 mL vials, 250 mL bottle	
LC-PS	GW	12/14/18	12:55	VOCs + TICs; TOC; TAL Metals				40 mL vials, 250 mL bottle	
LC-PS-DUP	GW	12/14/18	13:20	VOCs + TICs; TOC; TAL Metals				40 mL vials, 250 mL bottle	
LC-Control	S	12/14/18	12:00	VOCs + TICs; SVOCs+TICs; TOC				40 mL vials, 4 oz jar	
LC-Control-DUP	S	12/14/18	12:30	VOCs + TICs; SVOCs+TICs; TOC				40 mL vials, 4 oz jar	
LC-PS	S	12/14/18	12:55	VOCs + TICs; SVOCs+TICs; TOC				40 mL vials, 4 oz jar	
LC-PS-DUP	S	12/14/18	13:20	VOCs + TICs; SVOCs+TICs; TOC				40 mL vials, 4 oz jar	
Comments:		Preservation: (check all that apply)		HCl ☒ MeOH ☒ HNO ₃ ☒ H ₂ SO ₄ ☒ NaOH ☒ ZnAc ☒		Special Instruction		Field Filtered Lab to Filter	
Samples Relinquished by / Company		Date/Time		Samples Relinquished by / Company		Date/Time			
12/19/18 11:50		12/19/18 11:50		12/19/18 11:50		12/19/18 11:50			
Samples Received by / Company		Date/Time		Samples Received by / Company		Date/Time			
12/19/18 11:50		12/19/18 11:50		12/19/18 11:50		12/19/18 11:50			
Samples Relinquished by / Company		Date/Time		Samples Relinquished by / Company		Date/Time			
12/19/18 11:50		12/19/18 11:50		12/19/18 11:50		12/19/18 11:50			
Temp. Received at Lab		3.1		Temp. Received at Lab		3.1			



Technical Report

prepared for:

Langan Engineering & Environmental Services (WP)

707 Westchester Ave.

White Plains NY, 10604

Attention: Lingke Zeng

Report Date: 01/28/2019

Client Project ID: 190043701 551 Greenwich St.

York Project (SDG) No.: 19A0819



CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037

New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 01/28/2019
Client Project ID: 190043701 551 Greenwich St.
York Project (SDG) No.: 19A0819

Langan Engineering & Environmental Services (WP)
707 Westchester Ave.
White Plains NY, 10604
Attention: Lingke Zeng

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on January 21, 2019 and listed below. The project was identified as your project: **190043701 551 Greenwich St.**

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
19A0819-01	23	Water	01/18/2019	01/21/2019
19A0819-02	23	Soil	01/18/2019	01/21/2019
19A0819-03	24	Water	01/18/2019	01/21/2019
19A0819-04	24	Soil	01/18/2019	01/21/2019
19A0819-05	25	Water	01/18/2019	01/21/2019
19A0819-06	25	Soil	01/18/2019	01/21/2019
19A0819-07	26	Water	01/18/2019	01/21/2019
19A0819-08	26	Soil	01/18/2019	01/21/2019
19A0819-09	27	Water	01/18/2019	01/21/2019
19A0819-10	27	Soil	01/18/2019	01/21/2019
19A0819-11	28	Water	01/18/2019	01/21/2019
19A0819-12	28	Soil	01/18/2019	01/21/2019
19A0819-13	X3	Water	01/18/2019	01/21/2019
19A0819-14	X3	Soil	01/18/2019	01/21/2019
19A0819-15	X4	Water	01/18/2019	01/21/2019
19A0819-16	X4	Soil	01/18/2019	01/21/2019
19A0819-17	15	Water	01/18/2019	01/21/2019
19A0819-18	15	Soil	01/18/2019	01/21/2019
19A0819-19	16	Water	01/18/2019	01/21/2019
19A0819-20	16	Soil	01/18/2019	01/21/2019
19A0819-21	17	Water	01/18/2019	01/21/2019
19A0819-22	17	Soil	01/18/2019	01/21/2019

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
19A0819-23	18	Water	01/18/2019	01/21/2019
19A0819-24	18	Soil	01/18/2019	01/21/2019
19A0819-25	19	Water	01/18/2019	01/21/2019
19A0819-26	19	Soil	01/18/2019	01/21/2019
19A0819-27	20	Water	01/18/2019	01/21/2019
19A0819-28	20	Soil	01/18/2019	01/21/2019
19A0819-29	21	Water	01/18/2019	01/21/2019
19A0819-30	21	Soil	01/18/2019	01/21/2019
19A0819-31	22	Water	01/18/2019	01/21/2019
19A0819-32	22	Soil	01/18/2019	01/21/2019
19A0819-33	5	Water	01/18/2019	01/21/2019
19A0819-34	5	Soil	01/18/2019	01/21/2019
19A0819-35	6	Water	01/18/2019	01/21/2019
19A0819-36	6	Soil	01/18/2019	01/21/2019
19A0819-37	7	Water	01/18/2019	01/21/2019
19A0819-38	7	Soil	01/18/2019	01/21/2019

General Notes for York Project (SDG) No.: 19A0819

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

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 01/28/2019





Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-01

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 10:30 am

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
95-63-6	1,2,4-Trimethylbenzene	226		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 19:32	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
108-67-8	1,3,5-Trimethylbenzene	68.2		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
78-93-3	2-Butanone	2.12	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS



Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 10:30 am

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
67-64-1	Acetone	6.23	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
71-43-2	Benzene	0.540		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
110-82-7	Cyclohexane	50.6	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS



Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-01

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 10:30 am

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
100-41-4	Ethyl Benzene	12.1		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
98-82-8	Isopropylbenzene	3.34		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
108-87-2	Methylcyclohexane	172		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 19:32	SS
75-09-2	Methylene chloride	6.93	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
104-51-8	n-Butylbenzene	5.02		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
103-65-1	n-Propylbenzene	11.5		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
95-47-6	o-Xylene	15.5		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
179601-23-1	p- & m- Xylenes	63.3		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
99-87-6	p-Isopropyltoluene	2.63		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
135-98-8	sec-Butylbenzene	1.82		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
108-88-3	Toluene	3.06		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
79-01-6	Trichloroethylene	6.42		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS



Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-01

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 10:30 am

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 18:54	SS
1330-20-7	Xylenes, Total	78.7		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/22/2019 18:54	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	78.1 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	94.1 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	100 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	10.3		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 10:30 am

01/21/2019

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	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 19:05	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 19:05	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
95-63-6	1,2,4-Trimethylbenzene	370		ug/kg dry	160	320	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:34	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
108-67-8	1,3,5-Trimethylbenzene	58		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	40	80	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS



Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-02

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 10:30 am

Date Received
01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-25-2	Bromoform	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
110-82-7	Cyclohexane	3.1	J, IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS



Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 10:30 am

01/21/2019

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
100-41-4	Ethyl Benzene	4.3		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
98-82-8	Isopropylbenzene	2.8	J	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
108-87-2	Methylcyclohexane	490		ug/kg dry	160	320	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:34	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
104-51-8	n-Butylbenzene	9.7		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
103-65-1	n-Propylbenzene	11		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
95-47-6	o-Xylene	6.1		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
179601-23-1	p- & m- Xylenes	24		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
99-87-6	p-Isopropyltoluene	3.6	J	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
135-98-8	sec-Butylbenzene	3.2	J	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
100-42-5	Styrene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.0	20	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
108-88-3	Toluene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 19:05	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS



Sample Information

Client Sample ID: 23

York Sample ID: 19A0819-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 10:30 am

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.0	4.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 19:05	SS
1330-20-7	Xylenes, Total	30		ug/kg dry	6.0	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 19:05	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	16.2 %	S-09					77-125			
2037-26-5	Surrogate: SURR: Toluene-d8	125 %	S-09					85-120			
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	127 %						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	91.9		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 10:45 am

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
95-63-6	1,2,4-Trimethylbenzene	310		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:03	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
108-67-8	1,3,5-Trimethylbenzene	89.6		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
78-93-3	2-Butanone	2.05	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 10:45 am

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
67-64-1	Acetone	5.61	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
71-43-2	Benzene	0.780		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
110-82-7	Cyclohexane	62.6	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-03

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 10:45 am

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
100-41-4	Ethyl Benzene	28.6		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
98-82-8	Isopropylbenzene	6.06		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
108-87-2	Methylcyclohexane	192		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:03	SS
75-09-2	Methylene chloride	5.03	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
104-51-8	n-Butylbenzene	9.14		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
103-65-1	n-Propylbenzene	19.9		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
95-47-6	o-Xylene	31.4		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
179601-23-1	p- & m- Xylenes	123		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
99-87-6	p-Isopropyltoluene	3.19		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
135-98-8	sec-Butylbenzene	2.49		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
108-88-3	Toluene	8.59		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
79-01-6	Trichloroethylene	6.02		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 10:45 am

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 19:25	SS
1330-20-7	Xylenes, Total	154		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/22/2019 19:25	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	70.8 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	94.5 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.7 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	11.0		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 10:45 am

01/21/2019

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 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 18:08	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 18:08	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
95-63-6	1,2,4-Trimethylbenzene	440		ug/kg dry	150	310	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:37	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
108-67-8	1,3,5-Trimethylbenzene	150		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	50	99	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-04

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 10:45 am

Date Received
01/21/2019

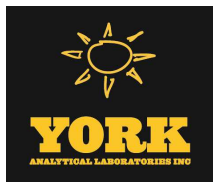
Volatile Organics, 8260 - Comprehensive

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	5.0	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	5.0	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-25-2	Bromoform	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
110-82-7	Cyclohexane	17	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-04

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 10:45 am

Date Received

01/21/2019

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
100-41-4	Ethyl Benzene	18		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
98-82-8	Isopropylbenzene	8.5		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
108-87-2	Methylcyclohexane	490		ug/kg dry	150	310	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:37	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	5.0	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
104-51-8	n-Butylbenzene	18		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
103-65-1	n-Propylbenzene	31		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
95-47-6	o-Xylene	20		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
179601-23-1	p- & m- Xylenes	83		ug/kg dry	5.0	9.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
99-87-6	p-Isopropyltoluene	7.6		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
135-98-8	sec-Butylbenzene	6.2		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
100-42-5	Styrene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.5	25	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
108-88-3	Toluene	3.3	J	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 18:08	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS



Sample Information

Client Sample ID: 24

York Sample ID: 19A0819-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 10:45 am

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:08	SS
1330-20-7	Xylenes, Total	100		ug/kg dry	7.5	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 18:08	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	15.6 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	131 %	S-09		85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	129 %			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	87.1		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-05

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 11:05 am

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

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	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
95-63-6	1,2,4-Trimethylbenzene	316		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
108-67-8	1,3,5-Trimethylbenzene	91.0		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
123-91-1	1,4-Dioxane	ND		ug/L	80.0	400	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
78-93-3	2-Butanone	0.900		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 11:05 am

01/21/2019

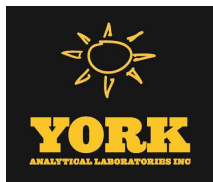
Volatiles, 8260 Comprehensive

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	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
67-64-1	Acetone	3.90	SCAL-E	ug/L	2.00	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
107-02-8	Acrolein	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
107-13-1	Acrylonitrile	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
71-43-2	Benzene	0.860		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
74-97-5	Bromochloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-25-2	Bromoform	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
74-83-9	Bromomethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-15-0	Carbon disulfide	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
108-90-7	Chlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-00-3	Chloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
67-66-3	Chloroform	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
74-87-3	Chloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
110-82-7	Cyclohexane	86.7	CCV-E	ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
74-95-3	Dibromomethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-05

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 11:05 am

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	48.1		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
98-82-8	Isopropylbenzene	6.96		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
79-20-9	Methyl acetate	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
108-87-2	Methylcyclohexane	173		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-09-2	Methylene chloride	2.04	SCAL- E	ug/L	2.00	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
104-51-8	n-Butylbenzene	6.70		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
103-65-1	n-Propylbenzene	20.0		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
95-47-6	o-Xylene	46.8		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
179601-23-1	p- & m- Xylenes	175		ug/L	1.00	2.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
99-87-6	p-Isopropyltoluene	3.16		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
135-98-8	sec-Butylbenzene	2.82		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
100-42-5	Styrene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	1.00	5.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
108-88-3	Toluene	15.6		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
79-01-6	Trichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 11:05 am

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 20:35	SS
1330-20-7	Xylenes, Total	222		ug/L	1.20	3.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/23/2019 07:30	01/23/2019 20:35	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	79.9 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	94.0 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	93.9 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	6.64		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:05 am

01/21/2019

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	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 17:11	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 17:11	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
95-63-6	1,2,4-Trimethylbenzene	32		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
108-67-8	1,3,5-Trimethylbenzene	11		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	35	70	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:05 am

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	3.5	7.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	3.5	7.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-25-2	Bromoform	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
110-82-7	Cyclohexane	2.3	J, IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
74-95-3	Dibromomethane	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-06

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 11:05 am

Date Received
01/21/2019

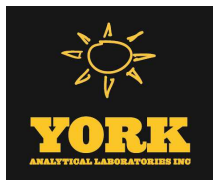
Volatile Organics, 8260 - Comprehensive

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
100-41-4	Ethyl Benzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
108-87-2	Methylcyclohexane	970		ug/kg dry	190	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:40	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	3.5	7.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
104-51-8	n-Butylbenzene	5.6		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
103-65-1	n-Propylbenzene	2.4	J	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
95-47-6	o-Xylene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
179601-23-1	p- & m- Xylenes	4.1	J	ug/kg dry	3.5	7.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
100-42-5	Styrene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	1.7	17	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
108-88-3	Toluene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 17:11	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS



Sample Information

Client Sample ID: 25

York Sample ID: 19A0819-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:05 am

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	1.7	3.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:11	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	5.2	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 17:11	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	22.3 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	107 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %			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	82.3		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-07

York Project (SDG) No.

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Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 11:25 am

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
95-63-6	1,2,4-Trimethylbenzene	234		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 21:39	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
108-67-8	1,3,5-Trimethylbenzene	118		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
78-93-3	2-Butanone	0.680	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-07

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

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January 18, 2019 11:25 am

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01/21/2019

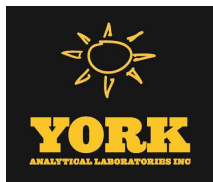
Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
67-64-1	Acetone	3.32	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
110-82-7	Cyclohexane	101	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-07

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19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 11:25 am

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
100-41-4	Ethyl Benzene	3.97		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
98-82-8	Isopropylbenzene	2.15		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
108-87-2	Methylcyclohexane	255		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 21:39	SS
75-09-2	Methylene chloride	1.67	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
104-51-8	n-Butylbenzene	6.84		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
103-65-1	n-Propylbenzene	9.07		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
95-47-6	o-Xylene	60.2		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
179601-23-1	p- & m- Xylenes	168		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
99-87-6	p-Isopropyltoluene	4.10		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
135-98-8	sec-Butylbenzene	2.48		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
98-06-6	tert-Butylbenzene	0.540		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
108-88-3	Toluene	8.33		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
79-01-6	Trichloroethylene	1.91		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-07

York Project (SDG) No.

Client Project ID

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19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 11:25 am

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 20:28	SS
1330-20-7	Xylenes, Total	228		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/22/2019 20:28	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	71.7 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	94.8 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.1 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	7.43		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-08

York Project (SDG) No.

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:25 am

01/21/2019

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	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:14	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:14	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
95-63-6	1,2,4-Trimethylbenzene	28		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
108-67-8	1,3,5-Trimethylbenzene	14		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	41	81	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-08

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 11:25 am

Date Received
01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-25-2	Bromoform	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
110-82-7	Cyclohexane	2.4	J, IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:25 am

01/21/2019

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
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
108-87-2	Methylcyclohexane	1000		ug/kg dry	170	340	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:43	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
104-51-8	n-Butylbenzene	3.9	J	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
179601-23-1	p- & m- Xylenes	4.4	J	ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
100-42-5	Styrene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.0	20	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
108-88-3	Toluene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 16:14	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS



Sample Information

Client Sample ID: 26

York Sample ID: 19A0819-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:25 am

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:14	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	6.1	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:14	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	19.5 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	109 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %			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	85.1		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 11:45 am

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
95-63-6	1,2,4-Trimethylbenzene	306		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:10	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
108-67-8	1,3,5-Trimethylbenzene	105		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
78-93-3	2-Butanone	0.670	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-09

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 11:45 am

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
67-64-1	Acetone	2.91	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
71-43-2	Benzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
110-82-7	Cyclohexane	77.8	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-09

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 11:45 am

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
100-41-4	Ethyl Benzene	13.0		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
98-82-8	Isopropylbenzene	2.35		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
108-87-2	Methylcyclohexane	203		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:10	SS
75-09-2	Methylene chloride	2.26	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
104-51-8	n-Butylbenzene	6.24		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
103-65-1	n-Propylbenzene	8.20		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
95-47-6	o-Xylene	39.2		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
179601-23-1	p- & m- Xylenes	149		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
99-87-6	p-Isopropyltoluene	3.99		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
135-98-8	sec-Butylbenzene	2.39		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
98-06-6	tert-Butylbenzene	0.400		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
108-88-3	Toluene	8.21		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
79-01-6	Trichloroethylene	2.14		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 11:45 am

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 21:00	SS
1330-20-7	Xylenes, Total	188		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/22/2019 21:00	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	70.4 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	95.4 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.9 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	7.01		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-10

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190043701 551 Greenwich St.

Soil

January 18, 2019 11:45 am

01/21/2019

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	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:17	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:17	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
95-63-6	1,2,4-Trimethylbenzene	39		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-67-8	1,3,5-Trimethylbenzene	15		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	46	93	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-10

York Project (SDG) No.

Client Project ID

Matrix

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:45 am

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	4.6	9.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	4.6	9.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-25-2	Bromoform	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
110-82-7	Cyclohexane	2.4	J, IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:45 am

01/21/2019

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
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-87-2	Methylcyclohexane	740		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:46	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	4.6	9.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
104-51-8	n-Butylbenzene	3.7	J	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
179601-23-1	p- & m- Xylenes	6.3	J	ug/kg dry	4.6	9.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
100-42-5	Styrene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.3	23	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-88-3	Toluene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 15:17	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS



Sample Information

Client Sample ID: 27

York Sample ID: 19A0819-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 11:45 am

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.3	4.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	6.9	14	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:17	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	17.7 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	115 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	114 %			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	83.6		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:15 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
95-63-6	1,2,4-Trimethylbenzene	563		ug/L	5.00	12.5	25	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:14	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
108-67-8	1,3,5-Trimethylbenzene	138		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
123-91-1	1,4-Dioxane	ND		ug/L	80.0	400	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
78-93-3	2-Butanone	1.52		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:15 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
67-64-1	Acetone	4.24	SCAL-E	ug/L	2.00	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
107-02-8	Acrolein	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
107-13-1	Acrylonitrile	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
71-43-2	Benzene	1.32		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
74-97-5	Bromochloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-25-2	Bromoform	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
74-83-9	Bromomethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-15-0	Carbon disulfide	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
108-90-7	Chlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-00-3	Chloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
67-66-3	Chloroform	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
74-87-3	Chloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
110-82-7	Cyclohexane	132	CCV-E	ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
74-95-3	Dibromomethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:15 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	60.9		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
98-82-8	Isopropylbenzene	7.34		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
79-20-9	Methyl acetate	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
108-87-2	Methylcyclohexane	252		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-09-2	Methylene chloride	2.86	SCAL- E	ug/L	2.00	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
104-51-8	n-Butylbenzene	10.1		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
103-65-1	n-Propylbenzene	21.2		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
95-47-6	o-Xylene	86.1		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
179601-23-1	p- & m- Xylenes	298		ug/L	1.00	2.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
99-87-6	p-Isopropyltoluene	4.26		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
135-98-8	sec-Butylbenzene	3.28		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
100-42-5	Styrene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	1.00	5.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
108-88-3	Toluene	26.4		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
79-01-6	Trichloroethylene	2.04		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 22:42	SS



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:15 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.400	1.00	2	EPA 8260C	01/23/2019 07:30	01/23/2019 22:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	384		ug/L	1.20	3.00	2	EPA 8260C	01/23/2019 07:30	01/23/2019 22:42	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
	Surrogate Recoveries	Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	74.7 %			69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	96.5 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	95.5 %			79-122						

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	6.96		mg/L	1.00	1	SM 5310C	01/23/2019 08:31	01/25/2019 15:22	AD
							Certifications:	NELAC-NY10854,CTDOH,NJDEP,PADEP		



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-12

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:15 pm

01/21/2019

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	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:20	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:20	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
95-63-6	1,2,4-Trimethylbenzene	94		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
108-67-8	1,3,5-Trimethylbenzene	32		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	41	82	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-12

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:15 pm

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	4.1	8.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	4.1	8.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-25-2	Bromoform	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
110-82-7	Cyclohexane	3.0	J, IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-12

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 12:15 pm

Date Received

01/21/2019

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
100-41-4	Ethyl Benzene	4.0	J	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
108-87-2	Methylcyclohexane	470		ug/kg dry	180	350	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:48	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	4.1	8.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
104-51-8	n-Butylbenzene	6.6		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
103-65-1	n-Propylbenzene	4.8		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
95-47-6	o-Xylene	5.3		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
179601-23-1	p- & m- Xylenes	20		ug/kg dry	4.1	8.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
99-87-6	p-Isopropyltoluene	2.6	J	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
135-98-8	sec-Butylbenzene	2.2	J	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
100-42-5	Styrene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.0	20	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
108-88-3	Toluene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 14:20	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS



Sample Information

Client Sample ID: 28

York Sample ID: 19A0819-12

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:15 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:20	SS
1330-20-7	Xylenes, Total	26		ug/kg dry	6.1	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:20	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	14.5 %	S-09								
2037-26-5	Surrogate: SURR: Toluene-d8	117 %									
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	114 %									

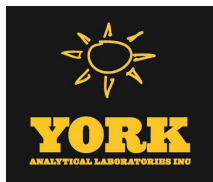
Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.4		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: X3

York Sample ID: 19A0819-13

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 12:30 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

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	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
95-63-6	1,2,4-Trimethylbenzene	273		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
108-67-8	1,3,5-Trimethylbenzene	78.9		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
123-91-1	1,4-Dioxane	ND		ug/L	80.0	400	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
78-93-3	2-Butanone	17.5		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS



Sample Information

Client Sample ID: X3

York Sample ID: 19A0819-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:30 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	2.98	SCAL-E	ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
67-64-1	Acetone	93.9	SCAL-E	ug/L	2.00	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
107-02-8	Acrolein	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
107-13-1	Acrylonitrile	ND		ug/L	0.400	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
71-43-2	Benzene	0.780		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
74-97-5	Bromochloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-25-2	Bromoform	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
74-83-9	Bromomethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-15-0	Carbon disulfide	2.34	CCV-E	ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
108-90-7	Chlorobenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-00-3	Chloroethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
67-66-3	Chloroform	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
74-87-3	Chloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
110-82-7	Cyclohexane	95.6	CCV-E	ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
74-95-3	Dibromomethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS



Sample Information

Client Sample ID: X3

York Sample ID: 19A0819-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:30 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	30.4		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
98-82-8	Isopropylbenzene	8.42		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
79-20-9	Methyl acetate	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-09-2	Methylene chloride	2.10	SCAL-E	ug/L	2.00	4.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
104-51-8	n-Butylbenzene	9.04		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
103-65-1	n-Propylbenzene	30.5		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
95-47-6	o-Xylene	42.8		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
179601-23-1	p- & m- Xylenes	129		ug/L	1.00	2.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
99-87-6	p-Isopropyltoluene	2.88		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
135-98-8	sec-Butylbenzene	3.20		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
100-42-5	Styrene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	1.00	5.00	2	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
108-88-3	Toluene	7.86		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
79-01-6	Trichloroethylene	0.720		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS



Sample Information

Client Sample ID: X3

York Sample ID: 19A0819-13

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:30 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.400	1.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/23/2019 23:45	SS
1330-20-7	Xylenes, Total	172		ug/L	1.20	3.00	2	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/23/2019 07:30	01/23/2019 23:45	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	80.2 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	94.9 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	95.2 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	2560		mg/L	50.0	50	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: X3

York Sample ID: 19A0819-14

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:30 pm

01/21/2019

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	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:23	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:23	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
95-63-6	1,2,4-Trimethylbenzene	30		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
108-67-8	1,3,5-Trimethylbenzene	11		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	43	86	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS



Sample Information

Client Sample ID: X3

York Sample ID: 19A0819-14

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 12:30 pm

Date Received
01/21/2019

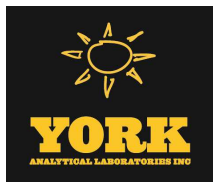
Volatile Organics, 8260 - Comprehensive

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
67-64-1	Acetone	7.6	J, CCV-E, ICV-E, SCAL- E, IS-HI	ug/kg dry	4.3	8.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	4.3	8.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-25-2	Bromoform	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
110-82-7	Cyclohexane	2.5	J, IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS



Sample Information

Client Sample ID: X3

York Sample ID: 19A0819-14

York Project (SDG) No.

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:30 pm

01/21/2019

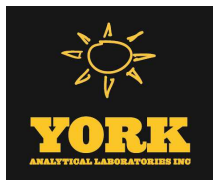
Volatile Organics, 8260 - Comprehensive

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	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
108-87-2	Methylcyclohexane	810		ug/kg dry	170	350	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:51	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	4.3	8.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
104-51-8	n-Butylbenzene	5.3		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
103-65-1	n-Propylbenzene	4.4		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
179601-23-1	p- & m- Xylenes	5.3	J	ug/kg dry	4.3	8.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
100-42-5	Styrene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.2	22	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
108-88-3	Toluene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS



Sample Information

Client Sample ID: X3

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190043701 551 Greenwich St.

Soil

January 18, 2019 12:30 pm

01/21/2019

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
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 13:23	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.2	4.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:23	SS
1330-20-7	Xylenes, Total	ND		ug/kg dry	6.5	13	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:23	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	15.0 %	S-09	77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	114 %		85-120							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	113 %		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	85.8		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-15

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:45 pm

01/21/2019

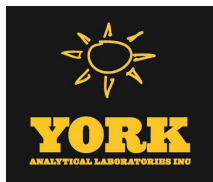
Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
95-63-6	1,2,4-Trimethylbenzene	220		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 00:48	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
108-67-8	1,3,5-Trimethylbenzene	71.3		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
78-93-3	2-Butanone	22.1	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-15

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 12:45 pm

Date Received

01/21/2019

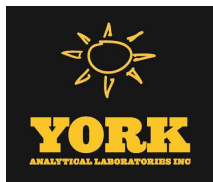
Volatiles, 8260 Comprehensive

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	6.20		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
67-64-1	Acetone	97.6	SCAL- E, CCV-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
71-43-2	Benzene	1.16		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-15-0	Carbon disulfide	2.14		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
110-82-7	Cyclohexane	76.7	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-15

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 12:45 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
100-41-4	Ethyl Benzene	32.9		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
98-82-8	Isopropylbenzene	8.47		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
108-87-2	Methylcyclohexane	175		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 00:48	SS
75-09-2	Methylene chloride	2.10	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
104-51-8	n-Butylbenzene	9.28		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
103-65-1	n-Propylbenzene	29.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
95-47-6	o-Xylene	37.6		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
179601-23-1	p- & m- Xylenes	121		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
99-87-6	p-Isopropyltoluene	3.15		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
135-98-8	sec-Butylbenzene	3.52		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
108-88-3	Toluene	8.59		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
79-01-6	Trichloroethylene	0.930		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-15

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 12:45 pm

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 22:35	SS
1330-20-7	Xylenes, Total	159		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/22/2019 22:35	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	73.3 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	95.5 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.6 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	2660		mg/L	50.0	50	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-16

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:45 pm

01/21/2019

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 Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 18:23	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 18:23	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
95-63-6	1,2,4-Trimethylbenzene	250	E	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
108-67-8	1,3,5-Trimethylbenzene	86		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	48	97	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-16

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:45 pm

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	4.8	9.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	4.8	9.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-25-2	Bromoform	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
110-82-7	Cyclohexane	6.3	IS-HI, CCV-E	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-16

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:45 pm

01/21/2019

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
100-41-4	Ethyl Benzene	11		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
98-82-8	Isopropylbenzene	9.4		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
108-87-2	Methylcyclohexane	850		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:50	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	4.8	9.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
104-51-8	n-Butylbenzene	34		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
103-65-1	n-Propylbenzene	38		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
95-47-6	o-Xylene	8.2		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
179601-23-1	p- & m- Xylenes	42		ug/kg dry	4.8	9.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
99-87-6	p-Isopropyltoluene	8.2		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
135-98-8	sec-Butylbenzene	11		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
100-42-5	Styrene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.4	24	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
108-88-3	Toluene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 18:23	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS



Sample Information

Client Sample ID: X4

York Sample ID: 19A0819-16

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 12:45 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.4	4.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 18:23	SS
1330-20-7	Xylenes, Total	50		ug/kg dry	7.2	14	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 18:23	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	7.22 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	137 %	S-09		85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	127 %			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	78.9		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-17

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 1:05 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
95-63-6	1,2,4-Trimethylbenzene	150		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
108-67-8	1,3,5-Trimethylbenzene	34.8		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
78-93-3	2-Butanone	29.0	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-17

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 1:05 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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	4.98		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
67-64-1	Acetone	176	SCAL-E	ug/L	5.00	10.0	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 01:20	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
71-43-2	Benzene	0.970		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-15-0	Carbon disulfide	3.80		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
110-82-7	Cyclohexane	20.2	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-17

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 1:05 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	14.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
98-82-8	Isopropylbenzene	3.79		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
108-87-2	Methylcyclohexane	62.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-09-2	Methylene chloride	1.84	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
104-51-8	n-Butylbenzene	4.78		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
103-65-1	n-Propylbenzene	14.0		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
95-47-6	o-Xylene	8.03		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
179601-23-1	p- & m- Xylenes	49.0		ug/L	0.500	1.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
99-87-6	p-Isopropyltoluene	1.95		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
135-98-8	sec-Butylbenzene	2.00		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
108-88-3	Toluene	2.95		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
79-01-6	Trichloroethylene	0.660		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:06	SS



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-17

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 1:05 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:06	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
1330-20-7	Xylenes, Total	57.0		ug/L	0.600	1.50	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:06	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	95.1 %		69-130							
2037-26-5	Surrogate: SURR: Toluene-d8	92.9 %		81-117							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	96.2 %		79-122							

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1410		mg/L	50.0	50	SM 5310C	01/23/2019 08:31	01/25/2019 15:22	AD
							Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-18

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:05 pm

01/21/2019

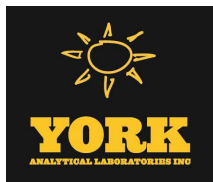
Volatile Organics, 8260 - Comprehensive

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	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 17:30	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 17:30	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
95-63-6	1,2,4-Trimethylbenzene	150		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
108-67-8	1,3,5-Trimethylbenzene	45		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	41	81	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
78-93-3	2-Butanone	2.1	J, IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-18

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 1:05 pm

Date Received

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
67-64-1	Acetone	14	IS-HI	ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-25-2	Bromoform	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
110-82-7	Cyclohexane	4.7	CCV-E, IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
74-95-3	Dibromomethane	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-18

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 1:05 pm

Date Received

01/21/2019

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
100-41-4	Ethyl Benzene	2.4	J	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
98-82-8	Isopropylbenzene	3.9	J	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
108-87-2	Methylcyclohexane	360		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:57	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
104-51-8	n-Butylbenzene	27		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
103-65-1	n-Propylbenzene	18		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
95-47-6	o-Xylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
179601-23-1	p- & m- Xylenes	8.2		ug/kg dry	4.1	8.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
99-87-6	p-Isopropyltoluene	6.2		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
135-98-8	sec-Butylbenzene	7.3		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
100-42-5	Styrene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	2.0	20	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
108-88-3	Toluene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 17:30	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS



Sample Information

Client Sample ID: 15

York Sample ID: 19A0819-18

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:05 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	2.0	4.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:30	SS
1330-20-7	Xylenes, Total	8.2	J	ug/kg dry	6.1	12	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 17:30	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	20.5 %	S-09	77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	109 %	85-120								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	112 %	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	87.2		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-19

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 1:25 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
95-63-6	1,2,4-Trimethylbenzene	205		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 01:52	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
108-67-8	1,3,5-Trimethylbenzene	48.1		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
78-93-3	2-Butanone	29.4	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-19

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 1:25 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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	5.87		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
67-64-1	Acetone	141	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
71-43-2	Benzene	1.55		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
75-15-0	Carbon disulfide	4.70		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
110-82-7	Cyclohexane	39.6	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-19

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 1:25 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	25.5		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	5.83		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	99.0		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	2.30	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	5.97		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	20.3		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	17.4		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
179601-23-1	p- & m- Xylenes	84.8		ug/L	0.500	1.00	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
99-87-6	p-Isopropyltoluene	2.45		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	2.64		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	6.90		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	1.17		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 07:30	01/22/2019 23:38	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-19

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 1:25 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/22/2019 23:38	SS
1330-20-7	Xylenes, Total	102		ug/L	0.600	1.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/22/2019 23:38	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.0 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	93.2 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.5 %	79-122								

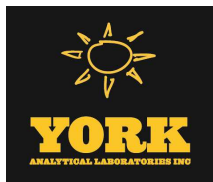
Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1440		mg/L	50.0	50	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-20

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:25 pm

01/21/2019

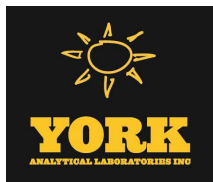
Volatile Organics, 8260 - Comprehensive

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	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:37	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:37	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
95-63-6	1,2,4-Trimethylbenzene	410	E	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
108-67-8	1,3,5-Trimethylbenzene	110		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	32	64	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-20

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 1:25 pm

Date Received

01/21/2019

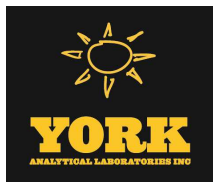
Volatile Organics, 8260 - Comprehensive

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
591-78-6	2-Hexanone	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
67-64-1	Acetone	4.0	J, IS-HI	ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
71-43-2	Benzene	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-25-2	Bromoform	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
110-82-7	Cyclohexane	3.4	CCV-E, IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
74-95-3	Dibromomethane	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-20

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 1:25 pm

Date Received

01/21/2019

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
100-41-4	Ethyl Benzene	15		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
98-82-8	Isopropylbenzene	13		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
108-87-2	Methylcyclohexane	510		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 17:03	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
104-51-8	n-Butylbenzene	43		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
103-65-1	n-Propylbenzene	51		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
95-47-6	o-Xylene	10		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
179601-23-1	p- & m- Xylenes	53		ug/kg dry	3.2	6.4	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
99-87-6	p-Isopropyltoluene	11		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
135-98-8	sec-Butylbenzene	13		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
100-42-5	Styrene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	1.6	16	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
108-88-3	Toluene	1.8	J	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 16:37	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS



Sample Information

Client Sample ID: 16

York Sample ID: 19A0819-20

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:25 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	1.6	3.2	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:37	SS
1330-20-7	Xylenes, Total	64		ug/kg dry	4.8	9.6	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:37	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	6.56 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	145 %	S-09		85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	139 %	S-09		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	86.6		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-21

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 1:45 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
95-63-6	1,2,4-Trimethylbenzene	515		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
108-67-8	1,3,5-Trimethylbenzene	190		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
123-91-1	1,4-Dioxane	ND		ug/L	400	2000	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
78-93-3	2-Butanone	21.2	CCV-E	ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-21

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 1:45 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

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	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
67-64-1	Acetone	44.2	CCV-E, SCAL-E	ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
107-02-8	Acrolein	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
107-13-1	Acrylonitrile	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
71-43-2	Benzene	4360		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 02:24	SS
74-97-5	Bromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
75-27-4	Bromodichloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
75-25-2	Bromoform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
74-83-9	Bromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
75-15-0	Carbon disulfide	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
56-23-5	Carbon tetrachloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
108-90-7	Chlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
75-00-3	Chloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
67-66-3	Chloroform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
74-87-3	Chloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
110-82-7	Cyclohexane	272	CCV-E	ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
124-48-1	Dibromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
74-95-3	Dibromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-21

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 1:45 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	248		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	48.5		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	32.1		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	381		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	14.8	SCAL- E	ug/L	10.0	20.0	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	12.6		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	79.5		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	627		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
179601-23-1	p- & m- Xylenes	1220		ug/L	5.00	10.0	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
99-87-6	p-Isopropyltoluene	12.6		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	8.60		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	5.00	25.0	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	2660		ug/L	10.0	25.0	50	EPA 8260C	01/23/2019 07:30	01/24/2019 02:24	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	8.80		ug/L	2.00	5.00	10	EPA 8260C	01/22/2019 07:30	01/23/2019 00:09	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-21

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 1:45 pm

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
75-01-4	Vinyl Chloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:09	SS
1330-20-7	Xylenes, Total	1840		ug/L	6.00	15.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/23/2019 00:09	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	86.5 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	94.0 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.8 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	27.2		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-22

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:45 pm

01/21/2019

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	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:10	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:10	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
95-63-6	1,2,4-Trimethylbenzene	5100		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
108-67-8	1,3,5-Trimethylbenzene	2100		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	3700	7300	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-22

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:45 pm

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	370	730	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	370	730	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
71-43-2	Benzene	710	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-25-2	Bromoform	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
110-82-7	Cyclohexane	1200	CCV-E, IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
74-95-3	Dibromomethane	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-22

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:45 pm

01/21/2019

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
100-41-4	Ethyl Benzene	790		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
98-82-8	Isopropylbenzene	470		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
108-87-2	Methylcyclohexane	11000		ug/kg dry	180	370	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	370	730	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
104-51-8	n-Butylbenzene	660		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
103-65-1	n-Propylbenzene	980		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
95-47-6	o-Xylene	1800		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
179601-23-1	p- & m- Xylenes	4400		ug/kg dry	370	730	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
99-87-6	p-Isopropyltoluene	380		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
135-98-8	sec-Butylbenzene	280	J	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
100-42-5	Styrene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	180	1800	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
108-88-3	Toluene	2100		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 16:10	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS



Sample Information

Client Sample ID: 17

York Sample ID: 19A0819-22

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 1:45 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	180	370	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 16:10	SS
1330-20-7	Xylenes, Total	6200		ug/kg dry	550	1100	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 16:10	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	42.2 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	98.8 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %			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	78.7		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-23

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:00 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
95-63-6	1,2,4-Trimethylbenzene	718		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
108-67-8	1,3,5-Trimethylbenzene	253		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
123-91-1	1,4-Dioxane	ND		ug/L	400	2000	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
78-93-3	2-Butanone	16.0	CCV-E	ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-23

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 2:00 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
67-64-1	Acetone	36.2	SCAL- E, CCV-E	ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
107-02-8	Acrolein	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
107-13-1	Acrylonitrile	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
71-43-2	Benzene	4920		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 02:55	SS
74-97-5	Bromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-27-4	Bromodichloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-25-2	Bromoform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
74-83-9	Bromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-15-0	Carbon disulfide	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
56-23-5	Carbon tetrachloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
108-90-7	Chlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-00-3	Chloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
67-66-3	Chloroform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
74-87-3	Chloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
110-82-7	Cyclohexane	372	CCV-E	ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
124-48-1	Dibromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
74-95-3	Dibromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-23

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:00 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
100-41-4	Ethyl Benzene	389		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
98-82-8	Isopropylbenzene	78.1		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
79-20-9	Methyl acetate	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	32.0		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
108-87-2	Methylcyclohexane	436		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-09-2	Methylene chloride	12.4	SCAL- E	ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
104-51-8	n-Butylbenzene	18.9		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
103-65-1	n-Propylbenzene	123		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
95-47-6	o-Xylene	854		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
179601-23-1	p- & m- Xylenes	1740		ug/L	5.00	10.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
99-87-6	p-Isopropyltoluene	15.7		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
135-98-8	sec-Butylbenzene	10.8		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
100-42-5	Styrene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	5.00	25.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
98-06-6	tert-Butylbenzene	2.50		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
127-18-4	Tetrachloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
108-88-3	Toluene	3120		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 02:55	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
79-01-6	Trichloroethylene	7.90		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-23

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:00 pm

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
75-01-4	Vinyl Chloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 00:41	SS
1330-20-7	Xylenes, Total	2600		ug/L	6.00	15.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/23/2019 00:41	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	77.1 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	93.3 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.7 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	26.5		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-24

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:00 pm

01/21/2019

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	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:43	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:43	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
95-63-6	1,2,4-Trimethylbenzene	6600		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
108-67-8	1,3,5-Trimethylbenzene	2600		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4300	8600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
78-93-3	2-Butanone	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-24

York Project (SDG) No.

Client Project ID

Matrix

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:00 pm

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
67-64-1	Acetone	ND		ug/kg dry	430	860	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
107-02-8	Acrolein	ND		ug/kg dry	430	860	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
71-43-2	Benzene	900		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-25-2	Bromoform	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
74-83-9	Bromomethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-00-3	Chloroethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
67-66-3	Chloroform	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
74-87-3	Chloromethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
110-82-7	Cyclohexane	1500	CCV-E	ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
74-95-3	Dibromomethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-24

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 2:00 pm

Date Received
01/21/2019

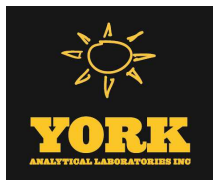
Volatile Organics, 8260 - Comprehensive

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
100-41-4	Ethyl Benzene	1200		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
98-82-8	Isopropylbenzene	630		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
79-20-9	Methyl acetate	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
108-87-2	Methylcyclohexane	12000		ug/kg dry	210	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-09-2	Methylene chloride	ND		ug/kg dry	430	860	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
104-51-8	n-Butylbenzene	670		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
103-65-1	n-Propylbenzene	1300		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
95-47-6	o-Xylene	2600		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
179601-23-1	p- & m- Xylenes	6400		ug/kg dry	430	860	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
99-87-6	p-Isopropyltoluene	430	J	ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
135-98-8	sec-Butylbenzene	320	J	ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
100-42-5	Styrene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	210	2100	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
108-88-3	Toluene	2600		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 15:43	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS



Sample Information

Client Sample ID: 18

York Sample ID: 19A0819-24

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:00 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	210	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:43	SS
1330-20-7	Xylenes, Total	9000		ug/kg dry	640	1300	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:43	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	46.2 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	99.1 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.3 %			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
solids	* % Solids	76.2		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-25

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:10 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
95-63-6	1,2,4-Trimethylbenzene	484		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
108-67-8	1,3,5-Trimethylbenzene	176		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
123-91-1	1,4-Dioxane	ND		ug/L	400	2000	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
78-93-3	2-Butanone	6.70	CCV-E	ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-25

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 2:10 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
67-64-1	Acetone	14.4	CCV-E, SCAL-E	ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
107-02-8	Acrolein	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
107-13-1	Acrylonitrile	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
71-43-2	Benzene	2900		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 03:27	SS
74-97-5	Bromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-27-4	Bromodichloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-25-2	Bromoform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
74-83-9	Bromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-15-0	Carbon disulfide	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
56-23-5	Carbon tetrachloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
108-90-7	Chlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-00-3	Chloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
67-66-3	Chloroform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
74-87-3	Chloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
110-82-7	Cyclohexane	394	CCV-E	ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
124-48-1	Dibromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
74-95-3	Dibromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-25

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 2:10 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
100-41-4	Ethyl Benzene	243		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
98-82-8	Isopropylbenzene	60.1		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
79-20-9	Methyl acetate	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	21.7		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
108-87-2	Methylcyclohexane	496		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-09-2	Methylene chloride	ND		ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
104-51-8	n-Butylbenzene	15.2		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
103-65-1	n-Propylbenzene	89.6		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
95-47-6	o-Xylene	552		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
179601-23-1	p- & m- Xylenes	1190		ug/L	5.00	10.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
99-87-6	p-Isopropyltoluene	14.8		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
135-98-8	sec-Butylbenzene	10.6		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
100-42-5	Styrene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	5.00	25.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
98-06-6	tert-Butylbenzene	2.30		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
127-18-4	Tetrachloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
108-88-3	Toluene	1930		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 03:27	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
79-01-6	Trichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-25

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:10 pm

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
75-01-4	Vinyl Chloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:12	SS
1330-20-7	Xylenes, Total	1740		ug/L	6.00	15.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/23/2019 01:12	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	79.3 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	95.1 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	100 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	14.4		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-26

York Project (SDG) No.

Client Project ID

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Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:10 pm

01/21/2019

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	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:17	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:17	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
95-63-6	1,2,4-Trimethylbenzene	690		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-67-8	1,3,5-Trimethylbenzene	510		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4600	9200	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
78-93-3	2-Butanone	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-26

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:10 pm

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
67-64-1	Acetone	ND		ug/kg dry	460	920	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
107-02-8	Acrolein	ND		ug/kg dry	460	920	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
71-43-2	Benzene	2300		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-25-2	Bromoform	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-83-9	Bromomethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-00-3	Chloroethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
67-66-3	Chloroform	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-87-3	Chloromethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
110-82-7	Cyclohexane	2600	CCV-E	ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
74-95-3	Dibromomethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-26

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 2:10 pm

Date Received
01/21/2019

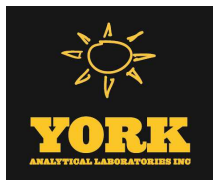
Volatile Organics, 8260 - Comprehensive

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
100-41-4	Ethyl Benzene	930		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
98-82-8	Isopropylbenzene	430	J	ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
79-20-9	Methyl acetate	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-87-2	Methylcyclohexane	11000		ug/kg dry	230	460	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-09-2	Methylene chloride	ND		ug/kg dry	460	920	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
103-65-1	n-Propylbenzene	430	J	ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
95-47-6	o-Xylene	790		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
179601-23-1	p- & m- Xylenes	2500		ug/kg dry	460	920	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
100-42-5	Styrene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	230	2300	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
108-88-3	Toluene	2700		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 15:17	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS



Sample Information

Client Sample ID: 19

York Sample ID: 19A0819-26

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:10 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	230	460	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 15:17	SS
1330-20-7	Xylenes, Total	3200		ug/kg dry	690	1400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 15:17	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	62.4 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	96.9 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	97.1 %			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	77.9		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-27

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:35 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
95-63-6	1,2,4-Trimethylbenzene	594		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
108-67-8	1,3,5-Trimethylbenzene	225		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
123-91-1	1,4-Dioxane	ND		ug/L	400	2000	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
78-93-3	2-Butanone	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-27

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 2:35 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
67-64-1	Acetone	11.3	CCV-E, SCAL-E	ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
107-02-8	Acrolein	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
107-13-1	Acrylonitrile	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
71-43-2	Benzene	2870		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 03:58	SS
74-97-5	Bromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-27-4	Bromodichloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-25-2	Bromoform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
74-83-9	Bromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-15-0	Carbon disulfide	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
56-23-5	Carbon tetrachloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
108-90-7	Chlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-00-3	Chloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
67-66-3	Chloroform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
74-87-3	Chloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
110-82-7	Cyclohexane	351	CCV-E	ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
124-48-1	Dibromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
74-95-3	Dibromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-27

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:35 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
100-41-4	Ethyl Benzene	254		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
98-82-8	Isopropylbenzene	60.7		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
79-20-9	Methyl acetate	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	21.4		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
108-87-2	Methylcyclohexane	457		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-09-2	Methylene chloride	ND		ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
104-51-8	n-Butylbenzene	17.1		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
103-65-1	n-Propylbenzene	93.4		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
95-47-6	o-Xylene	631		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
179601-23-1	p- & m- Xylenes	1290		ug/L	5.00	10.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
99-87-6	p-Isopropyltoluene	16.2		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
135-98-8	sec-Butylbenzene	10.8		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
100-42-5	Styrene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	5.00	25.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
98-06-6	tert-Butylbenzene	2.40		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
127-18-4	Tetrachloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
108-88-3	Toluene	1920		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 07:30	01/24/2019 03:58	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
79-01-6	Trichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-27

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:35 pm

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
75-01-4	Vinyl Chloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 07:30	01/23/2019 01:44	SS
1330-20-7	Xylenes, Total	1920		ug/L	6.00	15.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 07:30	01/23/2019 01:44	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	80.0 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	94.8 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	14.6		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-28

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:35 pm

01/21/2019

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	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:50	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:50	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
95-63-6	1,2,4-Trimethylbenzene	1200		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
108-67-8	1,3,5-Trimethylbenzene	780		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4000	8100	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
78-93-3	2-Butanone	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-28

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 2:35 pm

Date Received
01/21/2019

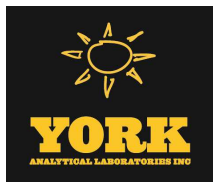
Volatile Organics, 8260 - Comprehensive

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
591-78-6	2-Hexanone	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
67-64-1	Acetone	ND		ug/kg dry	400	810	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
107-02-8	Acrolein	ND		ug/kg dry	400	810	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
71-43-2	Benzene	2600		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-25-2	Bromoform	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
74-83-9	Bromomethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-00-3	Chloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
67-66-3	Chloroform	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
74-87-3	Chloromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
110-82-7	Cyclohexane	1700	CCV-E	ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
74-95-3	Dibromomethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-28

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 2:35 pm

Date Received

01/21/2019

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
100-41-4	Ethyl Benzene	890		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
98-82-8	Isopropylbenzene	400	J	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
79-20-9	Methyl acetate	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
108-87-2	Methylcyclohexane	9200		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-09-2	Methylene chloride	ND		ug/kg dry	400	810	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
103-65-1	n-Propylbenzene	520		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
95-47-6	o-Xylene	1000		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
179601-23-1	p- & m- Xylenes	2800		ug/kg dry	400	810	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
100-42-5	Styrene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	200	2000	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
108-88-3	Toluene	3100		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 14:50	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS



Sample Information

Client Sample ID: 20

York Sample ID: 19A0819-28

York Project (SDG) No.

Client Project ID

Matrix

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:35 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:50	SS
1330-20-7	Xylenes, Total	3800		ug/kg dry	610	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:50	SS
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	56.7 %	S-09	77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	98.2 %		85-120							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.1 %		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	76.1		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-29

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:50 pm

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
95-63-6	1,2,4-Trimethylbenzene	574		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
108-67-8	1,3,5-Trimethylbenzene	215		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
123-91-1	1,4-Dioxane	ND		ug/L	400	2000	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
78-93-3	2-Butanone	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-29

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 2:50 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
67-64-1	Acetone	ND		ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
107-02-8	Acrolein	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
107-13-1	Acrylonitrile	ND		ug/L	2.00	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
71-43-2	Benzene	3380		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 14:35	SS
74-97-5	Bromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-27-4	Bromodichloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-25-2	Bromoform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
74-83-9	Bromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-15-0	Carbon disulfide	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
56-23-5	Carbon tetrachloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
108-90-7	Chlorobenzene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-00-3	Chloroethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
67-66-3	Chloroform	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
74-87-3	Chloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
110-82-7	Cyclohexane	423		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
124-48-1	Dibromochloromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
74-95-3	Dibromomethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-29

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 2:50 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	202		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
98-82-8	Isopropylbenzene	35.3		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
79-20-9	Methyl acetate	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	25.9		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
108-87-2	Methylcyclohexane	497		ug/L	2.00	5.00	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-09-2	Methylene chloride	ND		ug/L	10.0	20.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
104-51-8	n-Butylbenzene	10.4		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
103-65-1	n-Propylbenzene	38.5		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
95-47-6	o-Xylene	768		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
179601-23-1	p- & m- Xylenes	1510		ug/L	5.00	10.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
99-87-6	p-Isopropyltoluene	15.1		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
135-98-8	sec-Butylbenzene	7.50		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
100-42-5	Styrene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	5.00	25.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
98-06-6	tert-Butylbenzene	2.40		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
127-18-4	Tetrachloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
108-88-3	Toluene	2400		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 14:35	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
79-01-6	Trichloroethylene	3.30		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-29

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 2:50 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/L	2.00	5.00	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 07:30	SS
1330-20-7	Xylenes, Total	2280		ug/L	6.00	15.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/22/2019 12:30	01/23/2019 07:30	SS
Surrogate Recoveries		Result	Acceptance Range								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	82.1 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	92.4 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	97.5 %	79-122								

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	15.9		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-30

York Project (SDG) No.

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:50 pm

01/21/2019

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	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:23	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:23	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
95-63-6	1,2,4-Trimethylbenzene	1600		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
108-67-8	1,3,5-Trimethylbenzene	920		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	3600	7200	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
78-93-3	2-Butanone	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-30

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:50 pm

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
67-64-1	Acetone	ND		ug/kg dry	360	720	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
107-02-8	Acrolein	ND		ug/kg dry	360	720	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
71-43-2	Benzene	2700		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-25-2	Bromoform	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
74-83-9	Bromomethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-00-3	Chloroethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
67-66-3	Chloroform	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
74-87-3	Chloromethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
110-82-7	Cyclohexane	1900	CCV-E	ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
74-95-3	Dibromomethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-30

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 2:50 pm

Date Received

01/21/2019

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
100-41-4	Ethyl Benzene	1100		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
98-82-8	Isopropylbenzene	510		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
79-20-9	Methyl acetate	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
108-87-2	Methylcyclohexane	11000		ug/kg dry	180	360	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-09-2	Methylene chloride	ND		ug/kg dry	360	720	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
104-51-8	n-Butylbenzene	210	J	ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
103-65-1	n-Propylbenzene	680		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
95-47-6	o-Xylene	1400		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
179601-23-1	p- & m- Xylenes	3700		ug/kg dry	360	720	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
99-87-6	p-Isopropyltoluene	220	J	ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
100-42-5	Styrene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	180	1800	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
108-88-3	Toluene	3800		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 14:23	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS



Sample Information

Client Sample ID: 21

York Sample ID: 19A0819-30

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 2:50 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	180	360	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 14:23	SS
1330-20-7	Xylenes, Total	5100		ug/kg dry	540	1100	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 14:23	SS
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	49.6 %	S-09	77-125							
2037-26-5	Surrogate: SURR: Toluene-d8	99.9 %		85-120							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.4 %		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	77.0		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-31

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 3:15 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
95-63-6	1,2,4-Trimethylbenzene	531		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:07	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
108-67-8	1,3,5-Trimethylbenzene	192		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:07	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
78-93-3	2-Butanone	8.43	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-31

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 3:15 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
67-64-1	Acetone	12.7	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
71-43-2	Benzene	2900		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:39	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-15-0	Carbon disulfide	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
110-82-7	Cyclohexane	333	CCV-E	ug/L	1.00	2.50	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:07	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-31

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 3:15 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
100-41-4	Ethyl Benzene	230		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:07	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
98-82-8	Isopropylbenzene	70.5		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	17.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
108-87-2	Methylcyclohexane	363		ug/L	1.00	2.50	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:07	SS
75-09-2	Methylene chloride	4.79	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
104-51-8	n-Butylbenzene	16.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
103-65-1	n-Propylbenzene	98.2		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
95-47-6	o-Xylene	603		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:07	SS
179601-23-1	p- & m- Xylenes	1220		ug/L	2.50	5.00	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:07	SS
99-87-6	p-Isopropyltoluene	16.6		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
135-98-8	sec-Butylbenzene	10.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
98-06-6	tert-Butylbenzene	2.34		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
108-88-3	Toluene	2020		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 15:39	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
79-01-6	Trichloroethylene	3.81		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-31

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 3:15 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:02	SS
1330-20-7	Xylenes, Total	1820		ug/L	3.00	7.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/23/2019 12:30	01/24/2019 15:07	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	45.5 %	S-08		69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	93.2 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	113 %			79-122						

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	18.5		mg/L	1.00	1	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-32

York Project (SDG) No.

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19A0819

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Soil

January 18, 2019 3:15 pm

01/21/2019

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	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:56	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:56	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
95-63-6	1,2,4-Trimethylbenzene	5100		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
108-67-8	1,3,5-Trimethylbenzene	2100		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4000	8000	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
78-93-3	2-Butanone	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-32

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 3:15 pm

Date Received
01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
67-64-1	Acetone	ND	IS-HI	ug/kg dry	400	800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
107-02-8	Acrolein	ND	IS-HI	ug/kg dry	400	800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
107-13-1	Acrylonitrile	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
71-43-2	Benzene	910	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
74-97-5	Bromochloromethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-25-2	Bromoform	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
74-83-9	Bromomethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-15-0	Carbon disulfide	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-00-3	Chloroethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
67-66-3	Chloroform	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
74-87-3	Chloromethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
110-82-7	Cyclohexane	1500	CCV-E, IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
74-95-3	Dibromomethane	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-71-8	Dichlorodifluoromethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-32

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Soil

Collection Date/Time

January 18, 2019 3:15 pm

Date Received

01/21/2019

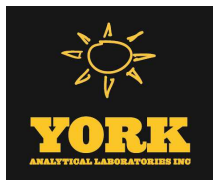
Volatile Organics, 8260 - Comprehensive

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
100-41-4	Ethyl Benzene	1200		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
98-82-8	Isopropylbenzene	620		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
79-20-9	Methyl acetate	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
108-87-2	Methylcyclohexane	12000		ug/kg dry	200	400	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-09-2	Methylene chloride	ND	IS-HI	ug/kg dry	400	800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
104-51-8	n-Butylbenzene	590		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
103-65-1	n-Propylbenzene	1200		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
95-47-6	o-Xylene	2200		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
179601-23-1	p- & m- Xylenes	6100		ug/kg dry	400	800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
99-87-6	p-Isopropyltoluene	390	J	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
135-98-8	sec-Butylbenzene	300	J	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
100-42-5	Styrene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-65-0	tert-Butyl alcohol (TBA)	ND	IS-HI	ug/kg dry	200	2000	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
108-88-3	Toluene	2600		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 13:56	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS



Sample Information

Client Sample ID: 22

York Sample ID: 19A0819-32

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 3:15 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/kg dry	200	400	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:56	SS
1330-20-7	Xylenes, Total	8300		ug/kg dry	600	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:56	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	42.8 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	99.3 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.7 %			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	78.7		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-33

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 3:30 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
95-63-6	1,2,4-Trimethylbenzene	304		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:10	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
108-67-8	1,3,5-Trimethylbenzene	110		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
78-93-3	2-Butanone	33.9	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-33

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 3:30 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
67-64-1	Acetone	107	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
71-43-2	Benzene	986		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:42	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-15-0	Carbon disulfide	2.68		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
110-82-7	Cyclohexane	291	CCV-E	ug/L	1.00	2.50	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:10	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-33

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 3:30 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
100-41-4	Ethyl Benzene	153		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:10	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
98-82-8	Isopropylbenzene	55.9		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	10.8		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
108-87-2	Methylcyclohexane	486		ug/L	1.00	2.50	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:10	SS
75-09-2	Methylene chloride	2.09	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
104-51-8	n-Butylbenzene	12.7		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
103-65-1	n-Propylbenzene	82.1		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
95-47-6	o-Xylene	299		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:10	SS
179601-23-1	p- & m- Xylenes	666		ug/L	2.50	5.00	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:10	SS
99-87-6	p-Isopropyltoluene	11.2		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
135-98-8	sec-Butylbenzene	8.50		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
98-06-6	tert-Butylbenzene	1.94		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
108-88-3	Toluene	669		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 16:10	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
79-01-6	Trichloroethylene	0.840		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-33

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 3:30 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 08:33	SS
1330-20-7	Xylenes, Total	964		ug/L	3.00	7.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/23/2019 12:30	01/24/2019 16:10	SS
Surrogate Recoveries		Result		Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	68.1 %	S-08	69-130							
2037-26-5	Surrogate: SURR: Toluene-d8	90.2 %		81-117							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	131 %	S-08	79-122							

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1900		mg/L	50.0	50	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-34

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 3:30 pm

01/21/2019

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	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:30	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:30	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
95-63-6	1,2,4-Trimethylbenzene	580		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
108-67-8	1,3,5-Trimethylbenzene	370	J	ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	3800	7600	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
78-93-3	2-Butanone	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-34

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 3:30 pm

Date Received
01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
67-64-1	Acetone	ND		ug/kg dry	380	760	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
107-02-8	Acrolein	ND		ug/kg dry	380	760	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
71-43-2	Benzene	1400		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-25-2	Bromoform	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
74-83-9	Bromomethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-00-3	Chloroethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
67-66-3	Chloroform	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
74-87-3	Chloromethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
110-82-7	Cyclohexane	2000	CCV-E	ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
74-95-3	Dibromomethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-34

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 3:30 pm

Date Received
01/21/2019

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
100-41-4	Ethyl Benzene	460		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
98-82-8	Isopropylbenzene	290	J	ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
79-20-9	Methyl acetate	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
108-87-2	Methylcyclohexane	10000		ug/kg dry	190	380	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-09-2	Methylene chloride	ND		ug/kg dry	380	760	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
104-51-8	n-Butylbenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
103-65-1	n-Propylbenzene	330	J	ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
95-47-6	o-Xylene	450		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
179601-23-1	p- & m- Xylenes	1300		ug/kg dry	380	760	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
100-42-5	Styrene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	190	1900	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
108-88-3	Toluene	1200		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 13:30	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS



Sample Information

Client Sample ID: 5

York Sample ID: 19A0819-34

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 3:30 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	190	380	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:30	SS
1330-20-7	Xylenes, Total	1700		ug/kg dry	570	1100	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:30	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	59.5 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	98.5 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	92.7 %			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	76.2		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-35

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 3:50 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
95-63-6	1,2,4-Trimethylbenzene	268		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 17:14	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
108-67-8	1,3,5-Trimethylbenzene	103		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
78-93-3	2-Butanone	48.9	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-35

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 3:50 pm

Date Received
01/21/2019

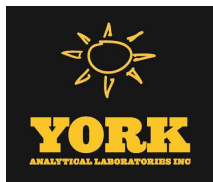
Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
67-64-1	Acetone	103	SCAL- E, CCV-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
71-43-2	Benzene	1060		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 17:45	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
75-15-0	Carbon disulfide	3.44		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
110-82-7	Cyclohexane	324	CCV-E	ug/L	1.00	2.50	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 17:14	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-35

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 3:50 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	170		ug/L	1.00	2.50	5	EPA 8260C	01/23/2019 12:30	01/24/2019 17:14	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	61.0		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	10.8		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	404		ug/L	1.00	2.50	5	EPA 8260C	01/23/2019 12:30	01/24/2019 17:14	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	2.33	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	13.5		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	86.5		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	312		ug/L	1.00	2.50	5	EPA 8260C	01/23/2019 12:30	01/24/2019 17:14	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
179601-23-1	p- & m- Xylenes	707		ug/L	2.50	5.00	5	EPA 8260C	01/23/2019 12:30	01/24/2019 17:14	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
99-87-6	p-Isopropyltoluene	11.7		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	8.93		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	1.99		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-88-3	Toluene	754		ug/L	1.00	2.50	5	EPA 8260C	01/23/2019 12:30	01/24/2019 17:14	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-01-6	Trichloroethylene	1.21		ug/L	0.200	0.500	1	EPA 8260C	01/22/2019 12:30	01/23/2019 09:04	SS
								Certifications:	CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-35

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 3:50 pm

01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:04	SS
1330-20-7	Xylenes, Total	1020		ug/L	3.00	7.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/23/2019 12:30	01/24/2019 17:14	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	65.3 %	S-08		69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	91.2 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	155 %	S-08		79-122						

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	1480		mg/L	50.0	50	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-36

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 3:50 pm

01/21/2019

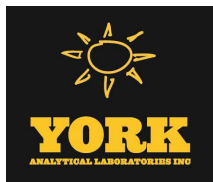
Volatile Organics, 8260 - Comprehensive

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	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:03	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:03	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
95-63-6	1,2,4-Trimethylbenzene	1300		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
108-67-8	1,3,5-Trimethylbenzene	670		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4400	8700	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
78-93-3	2-Butanone	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-36

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 3:50 pm

01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
67-64-1	Acetone	ND		ug/kg dry	440	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
107-02-8	Acrolein	ND		ug/kg dry	440	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
71-43-2	Benzene	1400		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-25-2	Bromoform	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
74-83-9	Bromomethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-00-3	Chloroethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
67-66-3	Chloroform	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
74-87-3	Chloromethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
110-82-7	Cyclohexane	2100	CCV-E	ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
74-95-3	Dibromomethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-36

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 3:50 pm

Date Received
01/21/2019

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
100-41-4	Ethyl Benzene	780		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
98-82-8	Isopropylbenzene	480		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
79-20-9	Methyl acetate	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
108-87-2	Methylcyclohexane	11000		ug/kg dry	220	440	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-09-2	Methylene chloride	ND		ug/kg dry	440	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
104-51-8	n-Butylbenzene	260	J	ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
103-65-1	n-Propylbenzene	670		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
95-47-6	o-Xylene	900		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
179601-23-1	p- & m- Xylenes	2500		ug/kg dry	440	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
135-98-8	sec-Butylbenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
100-42-5	Styrene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	220	2200	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
108-88-3	Toluene	1900		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 13:03	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS



Sample Information

Client Sample ID: 6

York Sample ID: 19A0819-36

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 3:50 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	220	440	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 13:03	SS
1330-20-7	Xylenes, Total	3400		ug/kg dry	650	1300	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 13:03	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	56.3 %	S-09					77-125			
2037-26-5	Surrogate: SURR: Toluene-d8	98.6 %						85-120			
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	97.2 %						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	75.5		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-37

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Water

January 18, 2019 4:05 pm

01/21/2019

Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
95-63-6	1,2,4-Trimethylbenzene	280		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:17	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
108-67-8	1,3,5-Trimethylbenzene	107		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
123-91-1	1,4-Dioxane	ND		ug/L	40.0	200	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
78-93-3	2-Butanone	57.9	CCV-E	ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-37

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 4:05 pm

Date Received
01/21/2019

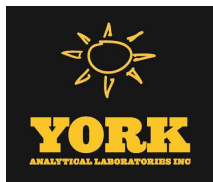
Volatiles, 8260 Comprehensive

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	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
67-64-1	Acetone	131	CCV-E, SCAL-E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
107-02-8	Acrolein	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
107-13-1	Acrylonitrile	ND		ug/L	0.200	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
71-43-2	Benzene	1370		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:49	SS
74-97-5	Bromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-25-2	Bromoform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
74-83-9	Bromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-15-0	Carbon disulfide	5.20		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
108-90-7	Chlorobenzene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-00-3	Chloroethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
67-66-3	Chloroform	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
74-87-3	Chloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
110-82-7	Cyclohexane	340	CCV-E	ug/L	1.00	2.50	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:17	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
74-95-3	Dibromomethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-37

York Project (SDG) No.

19A0819

Client Project ID

190043701 551 Greenwich St.

Matrix

Water

Collection Date/Time

January 18, 2019 4:05 pm

Date Received

01/21/2019

Volatiles, 8260 Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
100-41-4	Ethyl Benzene	173		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:17	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
98-82-8	Isopropylbenzene	65.1		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
79-20-9	Methyl acetate	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	12.4		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
108-87-2	Methylcyclohexane	451		ug/L	1.00	2.50	5	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:17	SS
75-09-2	Methylene chloride	2.89	SCAL- E	ug/L	1.00	2.00	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
104-51-8	n-Butylbenzene	14.3		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
103-65-1	n-Propylbenzene	93.2		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
95-47-6	o-Xylene	319		ug/L	1.00	2.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:17	SS
179601-23-1	p- & m- Xylenes	715		ug/L	2.50	5.00	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:17	SS
99-87-6	p-Isopropyltoluene	13.3		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
135-98-8	sec-Butylbenzene	10.4		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
100-42-5	Styrene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.500	2.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
98-06-6	tert-Butylbenzene	2.25		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
108-88-3	Toluene	800		ug/L	10.0	25.0	50	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/23/2019 12:30	01/24/2019 18:49	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
79-01-6	Trichloroethylene	1.17		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-37

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Water

Collection Date/Time
January 18, 2019 4:05 pm

Date Received
01/21/2019

Volatiles, 8260 Comprehensive

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
75-69-4	Trichlorofluoromethane	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.200	0.500	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/22/2019 12:30	01/23/2019 09:36	SS
1330-20-7	Xylenes, Total	1030		ug/L	3.00	7.50	5	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/23/2019 12:30	01/24/2019 18:17	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	64.3 %	S-08		69-130						
2037-26-5	Surrogate: SURR: Toluene-d8	92.0 %			81-117						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	155 %	S-08		79-122						

Total Organic Carbon

Log-in Notes:

Sample Notes:

Sample Prepared by Method: Analysis Preparation

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Total Organic Carbon (TOC)	2110		mg/L	50.0	50	SM 5310C Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	01/23/2019 08:31	01/25/2019 15:22	AD



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-38

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 4:05 pm

Date Received
01/21/2019

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	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 12:36	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 12:36	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
95-63-6	1,2,4-Trimethylbenzene	1400		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
108-67-8	1,3,5-Trimethylbenzene	760		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
123-91-1	1,4-Dioxane	ND		ug/kg dry	4300	8700	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
78-93-3	2-Butanone	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-38

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 4:05 pm

Date Received
01/21/2019

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
591-78-6	2-Hexanone	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
67-64-1	Acetone	ND		ug/kg dry	430	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
107-02-8	Acrolein	ND		ug/kg dry	430	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
107-13-1	Acrylonitrile	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
71-43-2	Benzene	790		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
74-97-5	Bromochloromethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-27-4	Bromodichloromethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-25-2	Bromoform	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
74-83-9	Bromomethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-15-0	Carbon disulfide	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
56-23-5	Carbon tetrachloride	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
108-90-7	Chlorobenzene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-00-3	Chloroethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
67-66-3	Chloroform	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
74-87-3	Chloromethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
110-82-7	Cyclohexane	1900	CCV-E	ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
124-48-1	Dibromochloromethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
74-95-3	Dibromomethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-38

York Project (SDG) No.
19A0819

Client Project ID
190043701 551 Greenwich St.

Matrix
Soil

Collection Date/Time
January 18, 2019 4:05 pm

Date Received
01/21/2019

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
100-41-4	Ethyl Benzene	730		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
98-82-8	Isopropylbenzene	530		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
79-20-9	Methyl acetate	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
108-87-2	Methylcyclohexane	13000		ug/kg dry	220	430	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-09-2	Methylene chloride	ND		ug/kg dry	430	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
104-51-8	n-Butylbenzene	320	J	ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
103-65-1	n-Propylbenzene	770		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
95-47-6	o-Xylene	880		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
179601-23-1	p- & m- Xylenes	2500		ug/kg dry	430	870	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
99-87-6	p-Isopropyltoluene	260	J	ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
135-98-8	sec-Butylbenzene	220	J	ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
100-42-5	Styrene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	220	2200	100	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
98-06-6	tert-Butylbenzene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
127-18-4	Tetrachloroethylene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
108-88-3	Toluene	1400		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH	01/24/2019 07:30	01/24/2019 12:36	SS
79-01-6	Trichloroethylene	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS



Sample Information

Client Sample ID: 7

York Sample ID: 19A0819-38

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19A0819

190043701 551 Greenwich St.

Soil

January 18, 2019 4:05 pm

01/21/2019

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
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
75-01-4	Vinyl Chloride	ND		ug/kg dry	220	430	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	01/24/2019 07:30	01/24/2019 12:36	SS
1330-20-7	Xylenes, Total	3400		ug/kg dry	650	1300	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	01/24/2019 07:30	01/24/2019 12:36	SS
Surrogate Recoveries		Result			Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	49.3 %	S-09		77-125						
2037-26-5	Surrogate: SURR: Toluene-d8	99.1 %			85-120						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.0 %			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	73.4		%	0.100	1	SM 2540G Certifications: CTDOH	01/28/2019 11:28	01/28/2019 15:47	TAJ



Analytical Batch Summary

Batch ID: BA90916

Preparation Method: EPA 5030B

Prepared By: RDS

YORK Sample ID	Client Sample ID	Preparation Date
19A0819-01	23	01/22/19
19A0819-03	24	01/22/19
19A0819-07	26	01/22/19
19A0819-09	27	01/22/19
19A0819-15	X4	01/22/19
19A0819-17	15	01/22/19
19A0819-19	16	01/22/19
19A0819-21	17	01/22/19
19A0819-23	18	01/22/19
19A0819-25	19	01/22/19
19A0819-27	20	01/22/19
BA90916-BLK1	Blank	01/22/19
BA90916-BS1	LCS	01/22/19
BA90916-BSD1	LCS Dup	01/22/19

Batch ID: BA90924

Preparation Method: EPA 5030B

Prepared By: RDS

YORK Sample ID	Client Sample ID	Preparation Date
19A0819-29	21	01/22/19
19A0819-31	22	01/22/19
19A0819-33	5	01/22/19
19A0819-35	6	01/22/19
19A0819-37	7	01/22/19
BA90924-BLK1	Blank	01/22/19
BA90924-BS1	LCS	01/22/19
BA90924-BSD1	LCS Dup	01/22/19

Batch ID: BA90969

Preparation Method: Analysis Preparation

Prepared By: AD

YORK Sample ID	Client Sample ID	Preparation Date
19A0819-01	23	01/23/19
19A0819-03	24	01/23/19
19A0819-05	25	01/23/19
19A0819-07	26	01/23/19
19A0819-09	27	01/23/19
19A0819-11	28	01/23/19
19A0819-13	X3	01/23/19
19A0819-15	X4	01/23/19
19A0819-17	15	01/23/19
19A0819-19	16	01/23/19
19A0819-21	17	01/23/19
19A0819-23	18	01/23/19
19A0819-25	19	01/23/19
19A0819-27	20	01/23/19
19A0819-29	21	01/23/19



19A0819-31	22	01/23/19
19A0819-33	5	01/23/19
19A0819-35	6	01/23/19
19A0819-37	7	01/23/19
BA90969-BLK1	Blank	01/23/19
BA90969-BS1	LCS	01/23/19

Batch ID: BA90976 **Preparation Method:** EPA 5030B **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
19A0819-01RE1	23	01/23/19
19A0819-03RE1	24	01/23/19
19A0819-05	25	01/23/19
19A0819-05RE1	25	01/23/19
19A0819-07RE1	26	01/23/19
19A0819-09RE1	27	01/23/19
19A0819-11	28	01/23/19
19A0819-11RE1	28	01/23/19
19A0819-13	X3	01/23/19
19A0819-13RE1	X3	01/23/19
19A0819-15RE1	X4	01/23/19
19A0819-17RE1	15	01/23/19
19A0819-19RE1	16	01/23/19
19A0819-21RE1	17	01/23/19
19A0819-23RE1	18	01/23/19
19A0819-25RE1	19	01/23/19
19A0819-27RE1	20	01/23/19
BA90976-BLK1	Blank	01/23/19
BA90976-BS1	LCS	01/23/19
BA90976-BSD1	LCS Dup	01/23/19

Batch ID: BA91005 **Preparation Method:** EPA 5030B **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
19A0819-29RE1	21	01/23/19
19A0819-31RE1	22	01/23/19
19A0819-31RE2	22	01/23/19
19A0819-33RE1	5	01/23/19
19A0819-33RE2	5	01/23/19
19A0819-35RE1	6	01/23/19
19A0819-35RE2	6	01/23/19
19A0819-37RE1	7	01/23/19
19A0819-37RE2	7	01/23/19
BA91005-BLK1	Blank	01/23/19
BA91005-BS1	LCS	01/23/19
BA91005-BSD1	LCS Dup	01/23/19

Batch ID: BA91062 **Preparation Method:** EPA 5035A **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date



19A0819-16	X4	01/24/19
19A0819-16RE1	X4	01/24/19
19A0819-18	15	01/24/19
19A0819-18RE1	15	01/24/19
19A0819-20	16	01/24/19
19A0819-20RE1	16	01/24/19
19A0819-22	17	01/24/19
19A0819-24	18	01/24/19
19A0819-26	19	01/24/19
19A0819-28	20	01/24/19
19A0819-30	21	01/24/19
19A0819-32	22	01/24/19
19A0819-34	5	01/24/19
19A0819-36	6	01/24/19
19A0819-38	7	01/24/19
BA91062-BLK1	Blank	01/24/19
BA91062-BLK2	Blank	01/24/19
BA91062-BS1	LCS	01/24/19
BA91062-BSD1	LCS Dup	01/24/19

Batch ID: BA91063 **Preparation Method:** EPA 5035A **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
19A0819-02	23	01/24/19
19A0819-02RE1	23	01/24/19
19A0819-04	24	01/24/19
19A0819-04RE1	24	01/24/19
19A0819-06	25	01/24/19
19A0819-06RE1	25	01/24/19
19A0819-08	26	01/24/19
19A0819-08RE1	26	01/24/19
19A0819-10	27	01/24/19
19A0819-10RE1	27	01/24/19
19A0819-12	28	01/24/19
19A0819-12RE1	28	01/24/19
19A0819-14	X3	01/24/19
19A0819-14RE1	X3	01/24/19
BA91063-BLK1	Blank	01/24/19
BA91063-BLK2	Blank	01/24/19
BA91063-BS1	LCS	01/24/19
BA91063-BSD1	LCS Dup	01/24/19

Batch ID: BA91240 **Preparation Method:** % Solids Prep **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
19A0819-02	23	01/28/19
19A0819-04	24	01/28/19
19A0819-06	25	01/28/19
19A0819-08	26	01/28/19
19A0819-10	27	01/28/19
19A0819-12	28	01/28/19



19A0819-14	X3	01/28/19
19A0819-16	X4	01/28/19
19A0819-18	15	01/28/19
19A0819-20	16	01/28/19
19A0819-22	17	01/28/19
19A0819-24	18	01/28/19
19A0819-26	19	01/28/19
19A0819-28	20	01/28/19
19A0819-30	21	01/28/19
19A0819-32	22	01/28/19
19A0819-34	5	01/28/19
19A0819-36	6	01/28/19
19A0819-38	7	01/28/19



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 BA90916 - EPA 5030B											
Blank (BA90916-BLK1)										Prepared & Analyzed: 01/22/2019	
1,1,1,2-Tetrachloroethane	ND	0.500	ug/L								
1,1,1-Trichloroethane	ND	0.500	"								
1,1,2,2-Tetrachloroethane	ND	0.500	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"								
1,1,2-Trichloroethane	ND	0.500	"								
1,1-Dichloroethane	ND	0.500	"								
1,1-Dichloroethylene	ND	0.500	"								
1,2,3-Trichlorobenzene	ND	0.500	"								
1,2,3-Trichloropropane	ND	0.500	"								
1,2,4-Trichlorobenzene	ND	0.500	"								
1,2,4-Trimethylbenzene	ND	0.500	"								
1,2-Dibromo-3-chloropropane	ND	0.500	"								
1,2-Dibromoethane	ND	0.500	"								
1,2-Dichlorobenzene	ND	0.500	"								
1,2-Dichloroethane	ND	0.500	"								
1,2-Dichloropropane	ND	0.500	"								
1,3,5-Trimethylbenzene	ND	0.500	"								
1,3-Dichlorobenzene	ND	0.500	"								
1,4-Dichlorobenzene	ND	0.500	"								
1,4-Dioxane	ND	200	"								
2-Butanone	ND	0.500	"								
2-Hexanone	ND	0.500	"								
4-Methyl-2-pentanone	ND	2.00	"								
Acetone	ND	2.00	"								
Acrolein	ND	2.00	"								
Acrylonitrile	ND	2.00	"								
Benzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Cyclohexane	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl acetate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylcyclohexane	ND	0.500	"								
Methylene chloride	ND	2.00	"								



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 BA90916 - EPA 5030B

Blank (BA90916-BLK1)

Prepared & Analyzed: 01/22/2019

n-Butylbenzene	ND	0.500	ug/L								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butyl alcohol (TBA)	ND	2.50	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	9.50		"	10.0		95.0	69-130				
Surrogate: SURR: Toluene-d8	9.47		"	10.0		94.7	81-117				
Surrogate: SURR: p-Bromofluorobenzene	10.0		"	10.0		100	79-122				

LCS (BA90916-BS1)

Prepared & Analyzed: 01/22/2019

1,1,1,2-Tetrachloroethane	8.56		ug/L	10.0		85.6	82-126				
1,1,1-Trichloroethane	8.68		"	10.0		86.8	78-136				
1,1,2,2-Tetrachloroethane	8.71		"	10.0		87.1	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.43		"	10.0		94.3	54-165				
1,1,2-Trichloroethane	8.38		"	10.0		83.8	82-123				
1,1-Dichloroethane	9.48		"	10.0		94.8	82-129				
1,1-Dichloroethylene	9.24		"	10.0		92.4	68-138				
1,2,3-Trichlorobenzene	7.31		"	10.0		73.1	76-136	Low Bias			
1,2,3-Trichloropropane	8.44		"	10.0		84.4	77-128				
1,2,4-Trichlorobenzene	7.66		"	10.0		76.6	76-137				
1,2,4-Trimethylbenzene	8.42		"	10.0		84.2	82-132				
1,2-Dibromo-3-chloropropane	7.86		"	10.0		78.6	45-147				
1,2-Dibromoethane	8.66		"	10.0		86.6	83-124				
1,2-Dichlorobenzene	8.42		"	10.0		84.2	79-123				
1,2-Dichloroethane	9.01		"	10.0		90.1	73-132				
1,2-Dichloropropane	8.59		"	10.0		85.9	78-126				
1,3,5-Trimethylbenzene	8.43		"	10.0		84.3	80-131				
1,3-Dichlorobenzene	8.28		"	10.0		82.8	86-122	Low Bias			
1,4-Dichlorobenzene	8.37		"	10.0		83.7	85-124	Low Bias			
1,4-Dioxane	224		"	210		107	10-349				
2-Butanone	8.30		"	10.0		83.0	49-152				
2-Hexanone	8.11		"	10.0		81.1	51-146				
4-Methyl-2-pentanone	9.26		"	10.0		92.6	57-145				
Acetone	7.97		"	10.0		79.7	14-150				
Acrolein	10.9		"	10.0		109	10-153				
Acrylonitrile	10.3		"	10.0		103	51-150				
Benzene	9.84		"	10.0		98.4	85-126				
Bromochloromethane	9.98		"	10.0		99.8	77-128				
Bromodichloromethane	8.42		"	10.0		84.2	79-128				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA90916 - EPA 5030B

LCS (BA90916-BS1)

Prepared & Analyzed: 01/22/2019

Bromoform	7.93		ug/L	10.0		79.3	78-133				
Bromomethane	4.63		"	10.0		46.3	43-168				
Carbon disulfide	10.2		"	10.0		102	68-146				
Carbon tetrachloride	8.63		"	10.0		86.3	77-141				
Chlorobenzene	8.28		"	10.0		82.8	88-120	Low Bias			
Chloroethane	9.83		"	10.0		98.3	65-136				
Chloroform	8.96		"	10.0		89.6	82-128				
Chloromethane	9.39		"	10.0		93.9	43-155				
cis-1,2-Dichloroethylene	9.37		"	10.0		93.7	83-129				
cis-1,3-Dichloropropylene	8.16		"	10.0		81.6	80-131				
Cyclohexane	10.3		"	10.0		103	63-149				
Dibromochloromethane	8.20		"	10.0		82.0	80-130				
Dibromomethane	8.35		"	10.0		83.5	72-134				
Dichlorodifluoromethane	8.24		"	10.0		82.4	44-144				
Ethyl Benzene	8.59		"	10.0		85.9	80-131				
Hexachlorobutadiene	7.73		"	10.0		77.3	67-146				
Isopropylbenzene	8.14		"	10.0		81.4	76-140				
Methyl acetate	9.82		"	10.0		98.2	51-139				
Methyl tert-butyl ether (MTBE)	9.64		"	10.0		96.4	76-135				
Methylcyclohexane	8.64		"	10.0		86.4	72-143				
Methylene chloride	6.98		"	10.0		69.8	55-137				
n-Butylbenzene	8.20		"	10.0		82.0	79-132				
n-Propylbenzene	8.40		"	10.0		84.0	78-133				
o-Xylene	8.65		"	10.0		86.5	78-130				
p- & m- Xylenes	17.0		"	20.0		85.2	77-133				
p-Isopropyltoluene	8.33		"	10.0		83.3	81-136				
sec-Butylbenzene	8.95		"	10.0		89.5	79-137				
Styrene	8.63		"	10.0		86.3	67-132				
tert-Butyl alcohol (TBA)	46.4		"	50.0		92.8	25-162				
tert-Butylbenzene	8.27		"	10.0		82.7	77-138				
Tetrachloroethylene	5.82		"	10.0		58.2	82-131	Low Bias			
Toluene	8.73		"	10.0		87.3	80-127				
trans-1,2-Dichloroethylene	9.08		"	10.0		90.8	80-132				
trans-1,3-Dichloropropylene	7.81		"	10.0		78.1	78-131				
Trichloroethylene	8.27		"	10.0		82.7	82-128				
Trichlorofluoromethane	8.73		"	10.0		87.3	67-139				
Vinyl Chloride	9.91		"	10.0		99.1	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.54		"	10.0		95.4	69-130				
Surrogate: SURR: Toluene-d8	9.47		"	10.0		94.7	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.68		"	10.0		96.8	79-122				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BA90916 - EPA 5030B											
LCS Dup (BA90916-BSD1)						Prepared & Analyzed: 01/22/2019					
1,1,1,2-Tetrachloroethane	9.41		ug/L	10.0		94.1	82-126		9.46	30	
1,1,1-Trichloroethane	9.70		"	10.0		97.0	78-136		11.1	30	
1,1,2,2-Tetrachloroethane	9.49		"	10.0		94.9	76-129		8.57	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8.98		"	10.0		89.8	54-165		4.89	30	
1,1,2-Trichloroethane	9.43		"	10.0		94.3	82-123		11.8	30	
1,1-Dichloroethane	10.3		"	10.0		103	82-129		8.29	30	
1,1-Dichloroethylene	9.98		"	10.0		99.8	68-138		7.70	30	
1,2,3-Trichlorobenzene	7.63		"	10.0		76.3	76-136		4.28	30	
1,2,3-Trichloropropane	9.42		"	10.0		94.2	77-128		11.0	30	
1,2,4-Trichlorobenzene	7.56		"	10.0		75.6	76-137	Low Bias	1.31	30	
1,2,4-Trimethylbenzene	8.85		"	10.0		88.5	82-132		4.98	30	
1,2-Dibromo-3-chloropropane	8.14		"	10.0		81.4	45-147		3.50	30	
1,2-Dibromoethane	9.62		"	10.0		96.2	83-124		10.5	30	
1,2-Dichlorobenzene	9.26		"	10.0		92.6	79-123		9.50	30	
1,2-Dichloroethane	9.54		"	10.0		95.4	73-132		5.71	30	
1,2-Dichloropropane	9.54		"	10.0		95.4	78-126		10.5	30	
1,3,5-Trimethylbenzene	8.87		"	10.0		88.7	80-131		5.09	30	
1,3-Dichlorobenzene	8.72		"	10.0		87.2	86-122		5.18	30	
1,4-Dichlorobenzene	8.63		"	10.0		86.3	85-124		3.06	30	
1,4-Dioxane	156		"	210		74.3	10-349		35.6	30	Non-dir.
2-Butanone	9.43		"	10.0		94.3	49-152		12.7	30	
2-Hexanone	8.84		"	10.0		88.4	51-146		8.61	30	
4-Methyl-2-pentanone	10.4		"	10.0		104	57-145		11.4	30	
Acetone	8.13		"	10.0		81.3	14-150		1.99	30	
Acrolein	12.0		"	10.0		120	10-153		10.1	30	
Acrylonitrile	10.3		"	10.0		103	51-150		0.485	30	
Benzene	10.6		"	10.0		106	85-126		7.53	30	
Bromochloromethane	10.9		"	10.0		109	77-128		9.00	30	
Bromodichloromethane	9.35		"	10.0		93.5	79-128		10.5	30	
Bromoform	9.12		"	10.0		91.2	78-133		14.0	30	
Bromomethane	5.56		"	10.0		55.6	43-168		18.3	30	
Carbon disulfide	11.0		"	10.0		110	68-146		7.33	30	
Carbon tetrachloride	9.27		"	10.0		92.7	77-141		7.15	30	
Chlorobenzene	9.19		"	10.0		91.9	88-120		10.4	30	
Chloroethane	10.8		"	10.0		108	65-136		9.50	30	
Chloroform	9.86		"	10.0		98.6	82-128		9.56	30	
Chloromethane	10.6		"	10.0		106	43-155		12.5	30	
cis-1,2-Dichloroethylene	10.2		"	10.0		102	83-129		8.68	30	
cis-1,3-Dichloropropylene	9.21		"	10.0		92.1	80-131		12.1	30	
Cyclohexane	10.7		"	10.0		107	63-149		3.33	30	
Dibromochloromethane	9.07		"	10.0		90.7	80-130		10.1	30	
Dibromomethane	9.37		"	10.0		93.7	72-134		11.5	30	
Dichlorodifluoromethane	8.29		"	10.0		82.9	44-144		0.605	30	
Ethyl Benzene	9.23		"	10.0		92.3	80-131		7.18	30	
Hexachlorobutadiene	6.63		"	10.0		66.3	67-146	Low Bias	15.3	30	
Isopropylbenzene	8.80		"	10.0		88.0	76-140		7.79	30	
Methyl acetate	10.4		"	10.0		104	51-139		6.22	30	
Methyl tert-butyl ether (MTBE)	10.4		"	10.0		104	76-135		7.68	30	
Methylcyclohexane	8.43		"	10.0		84.3	72-143		2.46	30	
Methylene chloride	7.69		"	10.0		76.9	55-137		9.68	30	
n-Butylbenzene	8.11		"	10.0		81.1	79-132		1.10	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA90916 - EPA 5030B

LCS Dup (BA90916-BSD1)

Prepared & Analyzed: 01/22/2019

n-Propylbenzene	8.55		ug/L	10.0		85.5	78-133		1.77	30	
o-Xylene	9.49		"	10.0		94.9	78-130		9.26	30	
p- & m- Xylenes	18.4		"	20.0		91.8	77-133		7.45	30	
p-Isopropyltoluene	8.49		"	10.0		84.9	81-136		1.90	30	
sec-Butylbenzene	9.22		"	10.0		92.2	79-137		2.97	30	
Styrene	9.40		"	10.0		94.0	67-132		8.54	30	
tert-Butyl alcohol (TBA)	44.4		"	50.0		88.7	25-162		4.50	30	
tert-Butylbenzene	8.86		"	10.0		88.6	77-138		6.89	30	
Tetrachloroethylene	5.98		"	10.0		59.8	82-131	Low Bias	2.71	30	
Toluene	9.69		"	10.0		96.9	80-127		10.4	30	
trans-1,2-Dichloroethylene	9.92		"	10.0		99.2	80-132		8.84	30	
trans-1,3-Dichloropropylene	8.85		"	10.0		88.5	78-131		12.5	30	
Trichloroethylene	9.09		"	10.0		90.9	82-128		9.45	30	
Trichlorofluoromethane	9.04		"	10.0		90.4	67-139		3.49	30	
Vinyl Chloride	10.9		"	10.0		109	58-145		9.24	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.21		"	10.0		92.1	69-130				
Surrogate: SURR: Toluene-d8	9.62		"	10.0		96.2	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.54		"	10.0		95.4	79-122				

Batch BA90924 - EPA 5030B

Blank (BA90924-BLK1)

Prepared: 01/22/2019 Analyzed: 01/23/2019

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
1,4-Dioxane	ND	200	"
2-Butanone	ND	0.500	"
2-Hexanone	ND	0.500	"
4-Methyl-2-pentanone	ND	2.00	"
Acetone	ND	2.00	"
Acrolein	ND	2.00	"
Acrylonitrile	ND	2.00	"
Benzene	ND	0.500	"
Bromochloromethane	ND	0.500	"
Bromodichloromethane	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA90924 - EPA 5030B

Blank (BA90924-BLK1)

Prepared: 01/22/2019 Analyzed: 01/23/2019

Bromoform	ND	0.500	ug/L								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Cyclohexane	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl acetate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylcyclohexane	ND	0.500	"								
Methylene chloride	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butyl alcohol (TBA)	ND	2.50	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURRE: 1,2-Dichloroethane-d4	9.21		"	10.0		92.1	69-130				
Surrogate: SURRE: Toluene-d8	9.35		"	10.0		93.5	81-117				
Surrogate: SURRE: p-Bromofluorobenzene	9.97		"	10.0		99.7	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 BA90924 - EPA 5030B											
LCS (BA90924-BS1)						Prepared: 01/22/2019 Analyzed: 01/23/2019					
1,1,1,2-Tetrachloroethane	9.86		ug/L	10.0		98.6	82-126				
1,1,1-Trichloroethane	10.2		"	10.0		102	78-136				
1,1,2,2-Tetrachloroethane	9.33		"	10.0		93.3	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9		"	10.0		109	54-165				
1,1,2-Trichloroethane	9.74		"	10.0		97.4	82-123				
1,1-Dichloroethane	11.0		"	10.0		110	82-129				
1,1-Dichloroethylene	10.8		"	10.0		108	68-138				
1,2,3-Trichlorobenzene	8.12		"	10.0		81.2	76-136				
1,2,3-Trichloropropane	9.55		"	10.0		95.5	77-128				
1,2,4-Trichlorobenzene	8.74		"	10.0		87.4	76-137				
1,2,4-Trimethylbenzene	9.73		"	10.0		97.3	82-132				
1,2-Dibromo-3-chloropropane	8.21		"	10.0		82.1	45-147				
1,2-Dibromoethane	9.75		"	10.0		97.5	83-124				
1,2-Dichlorobenzene	9.94		"	10.0		99.4	79-123				
1,2-Dichloroethane	10.3		"	10.0		103	73-132				
1,2-Dichloropropane	9.70		"	10.0		97.0	78-126				
1,3,5-Trimethylbenzene	9.61		"	10.0		96.1	80-131				
1,3-Dichlorobenzene	9.60		"	10.0		96.0	86-122				
1,4-Dichlorobenzene	9.59		"	10.0		95.9	85-124				
1,4-Dioxane	150		"	210		71.4	10-349				
2-Butanone	9.40		"	10.0		94.0	49-152				
2-Hexanone	8.73		"	10.0		87.3	51-146				
4-Methyl-2-pentanone	10.3		"	10.0		103	57-145				
Acetone	8.05		"	10.0		80.5	14-150				
Acrolein	3.87		"	10.0		38.7	10-153				
Acrylonitrile	11.1		"	10.0		111	51-150				
Benzene	11.6		"	10.0		116	85-126				
Bromochloromethane	11.4		"	10.0		114	77-128				
Bromodichloromethane	9.34		"	10.0		93.4	79-128				
Bromoform	9.43		"	10.0		94.3	78-133				
Bromomethane	7.64		"	10.0		76.4	43-168				
Carbon disulfide	11.7		"	10.0		117	68-146				
Carbon tetrachloride	10.0		"	10.0		100	77-141				
Chlorobenzene	9.89		"	10.0		98.9	88-120				
Chloroethane	11.6		"	10.0		116	65-136				
Chloroform	10.3		"	10.0		103	82-128				
Chloromethane	10.9		"	10.0		109	43-155				
cis-1,2-Dichloroethylene	10.5		"	10.0		105	83-129				
cis-1,3-Dichloropropylene	9.12		"	10.0		91.2	80-131				
Cyclohexane	12.3		"	10.0		123	63-149				
Dibromochloromethane	9.44		"	10.0		94.4	80-130				
Dibromomethane	9.48		"	10.0		94.8	72-134				
Dichlorodifluoromethane	9.50		"	10.0		95.0	44-144				
Ethyl Benzene	10.1		"	10.0		101	80-131				
Hexachlorobutadiene	7.73		"	10.0		77.3	67-146				
Isopropylbenzene	9.47		"	10.0		94.7	76-140				
Methyl acetate	12.1		"	10.0		121	51-139				
Methyl tert-butyl ether (MTBE)	11.0		"	10.0		110	76-135				
Methylcyclohexane	9.90		"	10.0		99.0	72-143				
Methylene chloride	7.97		"	10.0		79.7	55-137				
n-Butylbenzene	9.30		"	10.0		93.0	79-132				



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 BA90924 - EPA 5030B

LCS (BA90924-BS1)

Prepared: 01/22/2019 Analyzed: 01/23/2019

n-Propylbenzene	9.61		ug/L	10.0		96.1	78-133				
o-Xylene	10.1		"	10.0		101	78-130				
p- & m- Xylenes	20.1		"	20.0		101	77-133				
p-Isopropyltoluene	9.54		"	10.0		95.4	81-136				
sec-Butylbenzene	10.2		"	10.0		102	79-137				
Styrene	10.0		"	10.0		100	67-132				
tert-Butyl alcohol (TBA)	41.3		"	50.0		82.6	25-162				
tert-Butylbenzene	9.63		"	10.0		96.3	77-138				
Tetrachloroethylene	6.92		"	10.0		69.2	82-131	Low Bias			
Toluene	10.2		"	10.0		102	80-127				
trans-1,2-Dichloroethylene	10.7		"	10.0		107	80-132				
trans-1,3-Dichloropropylene	8.76		"	10.0		87.6	78-131				
Trichloroethylene	10.1		"	10.0		101	82-128				
Trichlorofluoromethane	10.0		"	10.0		100	67-139				
Vinyl Chloride	11.5		"	10.0		115	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.11		"	10.0		91.1	69-130				
Surrogate: SURR: Toluene-d8	9.44		"	10.0		94.4	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.45		"	10.0		94.5	79-122				

LCS Dup (BA90924-BSD1)

Prepared: 01/22/2019 Analyzed: 01/23/2019

1,1,1,2-Tetrachloroethane	9.89		ug/L	10.0		98.9	82-126		0.304	30	
1,1,1-Trichloroethane	10.1		"	10.0		101	78-136		1.19	30	
1,1,2,2-Tetrachloroethane	9.58		"	10.0		95.8	76-129		2.64	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.7		"	10.0		107	54-165		2.22	30	
1,1,2-Trichloroethane	9.75		"	10.0		97.5	82-123		0.103	30	
1,1-Dichloroethane	10.8		"	10.0		108	82-129		2.39	30	
1,1-Dichloroethylene	10.7		"	10.0		107	68-138		0.653	30	
1,2,3-Trichlorobenzene	8.37		"	10.0		83.7	76-136		3.03	30	
1,2,3-Trichloropropane	9.91		"	10.0		99.1	77-128		3.70	30	
1,2,4-Trichlorobenzene	8.64		"	10.0		86.4	76-137		1.15	30	
1,2,4-Trimethylbenzene	9.91		"	10.0		99.1	82-132		1.83	30	
1,2-Dibromo-3-chloropropane	8.60		"	10.0		86.0	45-147		4.64	30	
1,2-Dibromoethane	9.76		"	10.0		97.6	83-124		0.103	30	
1,2-Dichlorobenzene	10.0		"	10.0		100	79-123		0.602	30	
1,2-Dichloroethane	9.95		"	10.0		99.5	73-132		3.36	30	
1,2-Dichloropropane	9.74		"	10.0		97.4	78-126		0.412	30	
1,3,5-Trimethylbenzene	9.83		"	10.0		98.3	80-131		2.26	30	
1,3-Dichlorobenzene	9.87		"	10.0		98.7	86-122		2.77	30	
1,4-Dichlorobenzene	9.77		"	10.0		97.7	85-124		1.86	30	
1,4-Dioxane	301		"	210		143	10-349		67.0	30	Non-dir.
2-Butanone	10.1		"	10.0		101	49-152		6.98	30	
2-Hexanone	8.84		"	10.0		88.4	51-146		1.25	30	
4-Methyl-2-pentanone	10.6		"	10.0		106	57-145		2.40	30	
Acetone	8.34		"	10.0		83.4	14-150		3.54	30	
Acrolein	4.34		"	10.0		43.4	10-153		11.4	30	
Acrylonitrile	11.1		"	10.0		111	51-150		0.00	30	
Benzene	11.3		"	10.0		113	85-126		2.45	30	
Bromochloromethane	11.0		"	10.0		110	77-128		3.75	30	
Bromodichloromethane	9.44		"	10.0		94.4	79-128		1.06	30	
Bromoform	9.39		"	10.0		93.9	78-133		0.425	30	
Bromomethane	7.71		"	10.0		77.1	43-168		0.912	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 BA90924 - EPA 5030B

LCS Dup (BA90924-BSD1)

Prepared: 01/22/2019 Analyzed: 01/23/2019

Carbon disulfide	11.4		ug/L	10.0		114	68-146		2.34	30
Carbon tetrachloride	9.83		"	10.0		98.3	77-141		1.91	30
Chlorobenzene	9.80		"	10.0		98.0	88-120		0.914	30
Chloroethane	11.3		"	10.0		113	65-136		2.88	30
Chloroform	10.2		"	10.0		102	82-128		1.27	30
Chloromethane	10.6		"	10.0		106	43-155		2.69	30
cis-1,2-Dichloroethylene	10.2		"	10.0		102	83-129		2.60	30
cis-1,3-Dichloropropylene	9.08		"	10.0		90.8	80-131		0.440	30
Cyclohexane	12.0		"	10.0		120	63-149		2.30	30
Dibromochloromethane	9.36		"	10.0		93.6	80-130		0.851	30
Dibromomethane	9.49		"	10.0		94.9	72-134		0.105	30
Dichlorodifluoromethane	9.05		"	10.0		90.5	44-144		4.85	30
Ethyl Benzene	10.1		"	10.0		101	80-131		0.00	30
Hexachlorobutadiene	7.76		"	10.0		77.6	67-146		0.387	30
Isopropylbenzene	9.68		"	10.0		96.8	76-140		2.19	30
Methyl acetate	11.9		"	10.0		119	51-139		1.50	30
Methyl tert-butyl ether (MTBE)	10.8		"	10.0		108	76-135		2.20	30
Methylcyclohexane	9.72		"	10.0		97.2	72-143		1.83	30
Methylene chloride	7.70		"	10.0		77.0	55-137		3.45	30
n-Butylbenzene	9.22		"	10.0		92.2	79-132		0.864	30
n-Propylbenzene	9.75		"	10.0		97.5	78-133		1.45	30
o-Xylene	10.1		"	10.0		101	78-130		0.297	30
p- & m- Xylenes	19.9		"	20.0		99.6	77-133		0.899	30
p-Isopropyltoluene	9.66		"	10.0		96.6	81-136		1.25	30
sec-Butylbenzene	10.4		"	10.0		104	79-137		2.05	30
Styrene	9.94		"	10.0		99.4	67-132		1.00	30
tert-Butyl alcohol (TBA)	54.3		"	50.0		109	25-162		27.2	30
tert-Butylbenzene	9.85		"	10.0		98.5	77-138		2.26	30
Tetrachloroethylene	6.96		"	10.0		69.6	82-131	Low Bias	0.576	30
Toluene	10.2		"	10.0		102	80-127		0.0980	30
trans-1,2-Dichloroethylene	10.6		"	10.0		106	80-132		0.845	30
trans-1,3-Dichloropropylene	8.63		"	10.0		86.3	78-131		1.50	30
Trichloroethylene	9.96		"	10.0		99.6	82-128		1.59	30
Trichlorofluoromethane	9.84		"	10.0		98.4	67-139		1.81	30
Vinyl Chloride	11.3		"	10.0		113	58-145		2.11	30
Surrogate: SURR: 1,2-Dichloroethane-d4	8.88		"	10.0		88.8	69-130			
Surrogate: SURR: Toluene-d8	9.42		"	10.0		94.2	81-117			
Surrogate: SURR: p-Bromofluorobenzene	9.58		"	10.0		95.8	79-122			



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA90976 - EPA 5030B

Blank (BA90976-BLK1)

Prepared & Analyzed: 01/23/2019

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,2,3-Trichlorobenzene	0.200	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
1,4-Dioxane	ND	200	"
2-Butanone	ND	0.500	"
2-Hexanone	ND	0.500	"
4-Methyl-2-pentanone	ND	2.00	"
Acetone	ND	2.00	"
Acrolein	ND	2.00	"
Acrylonitrile	ND	2.00	"
Benzene	ND	0.500	"
Bromochloromethane	ND	0.500	"
Bromodichloromethane	ND	0.500	"
Bromoform	ND	0.500	"
Bromomethane	ND	0.500	"
Carbon disulfide	ND	0.500	"
Carbon tetrachloride	ND	0.500	"
Chlorobenzene	ND	0.500	"
Chloroethane	ND	0.500	"
Chloroform	ND	0.500	"
Chloromethane	ND	0.500	"
cis-1,2-Dichloroethylene	ND	0.500	"
cis-1,3-Dichloropropylene	ND	0.500	"
Cyclohexane	ND	0.500	"
Dibromochloromethane	ND	0.500	"
Dibromomethane	ND	0.500	"
Dichlorodifluoromethane	ND	0.500	"
Ethyl Benzene	ND	0.500	"
Hexachlorobutadiene	ND	0.500	"
Isopropylbenzene	ND	0.500	"
Methyl acetate	ND	0.500	"
Methyl tert-butyl ether (MTBE)	ND	0.500	"
Methylcyclohexane	ND	0.500	"
Methylene chloride	ND	2.00	"
n-Butylbenzene	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA90976 - EPA 5030B

Blank (BA90976-BLK1)

Prepared & Analyzed: 01/23/2019

n-Propylbenzene	ND	0.500	ug/L
o-Xylene	ND	0.500	"
p- & m- Xylenes	ND	1.00	"
p-Isopropyltoluene	ND	0.500	"
sec-Butylbenzene	ND	0.500	"
Styrene	ND	0.500	"
tert-Butyl alcohol (TBA)	ND	2.50	"
tert-Butylbenzene	ND	0.500	"
Tetrachloroethylene	ND	0.500	"
Toluene	ND	0.500	"
trans-1,2-Dichloroethylene	ND	0.500	"
trans-1,3-Dichloropropylene	ND	0.500	"
Trichloroethylene	ND	0.500	"
Trichlorofluoromethane	ND	0.500	"
Vinyl Chloride	ND	0.500	"
Xylenes, Total	ND	1.50	"

Surrogate: SURR: 1,2-Dichloroethane-d4	9.45	"	10.0	94.5	69-130
Surrogate: SURR: Toluene-d8	9.30	"	10.0	93.0	81-117
Surrogate: SURR: p-Bromofluorobenzene	10.0	"	10.0	100	79-122

LCS (BA90976-BS1)

Prepared & Analyzed: 01/23/2019

1,1,1,2-Tetrachloroethane	9.90	ug/L	10.0	99.0	82-126
1,1,1-Trichloroethane	10.2	"	10.0	102	78-136
1,1,2,2-Tetrachloroethane	9.79	"	10.0	97.9	76-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.84	"	10.0	98.4	54-165
1,1,2-Trichloroethane	10.1	"	10.0	101	82-123
1,1-Dichloroethane	11.1	"	10.0	111	82-129
1,1-Dichloroethylene	10.8	"	10.0	108	68-138
1,2,3-Trichlorobenzene	9.44	"	10.0	94.4	76-136
1,2,3-Trichloropropane	9.64	"	10.0	96.4	77-128
1,2,4-Trichlorobenzene	8.83	"	10.0	88.3	76-137
1,2,4-Trimethylbenzene	9.16	"	10.0	91.6	82-132
1,2-Dibromo-3-chloropropane	9.39	"	10.0	93.9	45-147
1,2-Dibromoethane	10.1	"	10.0	101	83-124
1,2-Dichlorobenzene	9.79	"	10.0	97.9	79-123
1,2-Dichloroethane	10.2	"	10.0	102	73-132
1,2-Dichloropropane	9.83	"	10.0	98.3	78-126
1,3,5-Trimethylbenzene	9.29	"	10.0	92.9	80-131
1,3-Dichlorobenzene	9.23	"	10.0	92.3	86-122
1,4-Dichlorobenzene	9.39	"	10.0	93.9	85-124
1,4-Dioxane	506	"	210	241	10-349
2-Butanone	11.5	"	10.0	115	49-152
2-Hexanone	9.41	"	10.0	94.1	51-146
4-Methyl-2-pentanone	10.8	"	10.0	108	57-145
Acetone	8.53	"	10.0	85.3	14-150
Acrolein	8.19	"	10.0	81.9	10-153
Acrylonitrile	11.3	"	10.0	113	51-150
Benzene	11.6	"	10.0	116	85-126
Bromochloromethane	11.6	"	10.0	116	77-128
Bromodichloromethane	9.41	"	10.0	94.1	79-128
Bromoform	9.61	"	10.0	96.1	78-133



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA90976 - EPA 5030B

LCS (BA90976-BS1)

Prepared & Analyzed: 01/23/2019

Bromomethane	7.92		ug/L	10.0		79.2	43-168				
Carbon disulfide	12.3		"	10.0		123	68-146				
Carbon tetrachloride	9.98		"	10.0		99.8	77-141				
Chlorobenzene	9.83		"	10.0		98.3	88-120				
Chloroethane	11.2		"	10.0		112	65-136				
Chloroform	10.5		"	10.0		105	82-128				
Chloromethane	12.0		"	10.0		120	43-155				
cis-1,2-Dichloroethylene	10.9		"	10.0		109	83-129				
cis-1,3-Dichloropropylene	9.27		"	10.0		92.7	80-131				
Cyclohexane	11.2		"	10.0		112	63-149				
Dibromochloromethane	9.57		"	10.0		95.7	80-130				
Dibromomethane	9.56		"	10.0		95.6	72-134				
Dichlorodifluoromethane	10.5		"	10.0		105	44-144				
Ethyl Benzene	9.86		"	10.0		98.6	80-131				
Hexachlorobutadiene	7.83		"	10.0		78.3	67-146				
Isopropylbenzene	9.05		"	10.0		90.5	76-140				
Methyl acetate	12.3		"	10.0		123	51-139				
Methyl tert-butyl ether (MTBE)	11.2		"	10.0		112	76-135				
Methylcyclohexane	8.73		"	10.0		87.3	72-143				
Methylene chloride	8.10		"	10.0		81.0	55-137				
n-Butylbenzene	8.24		"	10.0		82.4	79-132				
n-Propylbenzene	8.99		"	10.0		89.9	78-133				
o-Xylene	9.95		"	10.0		99.5	78-130				
p- & m- Xylenes	19.6		"	20.0		98.1	77-133				
p-Isopropyltoluene	8.93		"	10.0		89.3	81-136				
sec-Butylbenzene	9.62		"	10.0		96.2	79-137				
Styrene	10.1		"	10.0		101	67-132				
tert-Butyl alcohol (TBA)	60.6		"	50.0		121	25-162				
tert-Butylbenzene	9.20		"	10.0		92.0	77-138				
Tetrachloroethylene	6.57		"	10.0		65.7	82-131	Low Bias			
Toluene	10.1		"	10.0		101	80-127				
trans-1,2-Dichloroethylene	11.0		"	10.0		110	80-132				
trans-1,3-Dichloropropylene	8.84		"	10.0		88.4	78-131				
Trichloroethylene	9.48		"	10.0		94.8	82-128				
Trichlorofluoromethane	9.48		"	10.0		94.8	67-139				
Vinyl Chloride	11.9		"	10.0		119	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.22		"	10.0		92.2	69-130				
Surrogate: SURR: Toluene-d8	9.33		"	10.0		93.3	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.49		"	10.0		94.9	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 BA90976 - EPA 5030B											
LCS Dup (BA90976-BSD1)						Prepared & Analyzed: 01/23/2019					
1,1,1,2-Tetrachloroethane	9.00		ug/L	10.0		90.0	82-126		9.52	30	
1,1,1-Trichloroethane	9.13		"	10.0		91.3	78-136		11.2	30	
1,1,2,2-Tetrachloroethane	8.98		"	10.0		89.8	76-129		8.63	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0		102	54-165		4.08	30	
1,1,2-Trichloroethane	8.80		"	10.0		88.0	82-123		13.7	30	
1,1-Dichloroethane	9.95		"	10.0		99.5	82-129		11.1	30	
1,1-Dichloroethylene	9.82		"	10.0		98.2	68-138		9.51	30	
1,2,3-Trichlorobenzene	8.79		"	10.0		87.9	76-136		7.13	30	
1,2,3-Trichloropropane	8.71		"	10.0		87.1	77-128		10.1	30	
1,2,4-Trichlorobenzene	8.73		"	10.0		87.3	76-137		1.14	30	
1,2,4-Trimethylbenzene	8.97		"	10.0		89.7	82-132		2.10	30	
1,2-Dibromo-3-chloropropane	8.29		"	10.0		82.9	45-147		12.4	30	
1,2-Dibromoethane	8.90		"	10.0		89.0	83-124		12.3	30	
1,2-Dichlorobenzene	9.17		"	10.0		91.7	79-123		6.54	30	
1,2-Dichloroethane	9.16		"	10.0		91.6	73-132		11.0	30	
1,2-Dichloropropane	9.01		"	10.0		90.1	78-126		8.70	30	
1,3,5-Trimethylbenzene	8.98		"	10.0		89.8	80-131		3.39	30	
1,3-Dichlorobenzene	8.93		"	10.0		89.3	86-122		3.30	30	
1,4-Dichlorobenzene	8.97		"	10.0		89.7	85-124		4.58	30	
1,4-Dioxane	263		"	210		125	10-349		63.2	30	Non-dir.
2-Butanone	9.01		"	10.0		90.1	49-152		24.1	30	
2-Hexanone	8.27		"	10.0		82.7	51-146		12.9	30	
4-Methyl-2-pentanone	9.46		"	10.0		94.6	57-145		13.1	30	
Acetone	7.29		"	10.0		72.9	14-150		15.7	30	
Acrolein	6.10		"	10.0		61.0	10-153		29.3	30	
Acrylonitrile	9.72		"	10.0		97.2	51-150		14.8	30	
Benzene	10.4		"	10.0		104	85-126		11.0	30	
Bromochloromethane	10.0		"	10.0		100	77-128		14.5	30	
Bromodichloromethane	8.46		"	10.0		84.6	79-128		10.6	30	
Bromoform	8.53		"	10.0		85.3	78-133		11.9	30	
Bromomethane	7.31		"	10.0		73.1	43-168		8.01	30	
Carbon disulfide	11.1		"	10.0		111	68-146		10.4	30	
Carbon tetrachloride	9.00		"	10.0		90.0	77-141		10.3	30	
Chlorobenzene	9.07		"	10.0		90.7	88-120		8.04	30	
Chloroethane	10.2		"	10.0		102	65-136		8.68	30	
Chloroform	9.22		"	10.0		92.2	82-128		12.9	30	
Chloromethane	10.8		"	10.0		108	43-155		11.2	30	
cis-1,2-Dichloroethylene	9.44		"	10.0		94.4	83-129		14.3	30	
cis-1,3-Dichloropropylene	8.34		"	10.0		83.4	80-131		10.6	30	
Cyclohexane	11.5		"	10.0		115	63-149		2.20	30	
Dibromochloromethane	8.63		"	10.0		86.3	80-130		10.3	30	
Dibromomethane	8.53		"	10.0		85.3	72-134		11.4	30	
Dichlorodifluoromethane	11.0		"	10.0		110	44-144		5.21	30	
Ethyl Benzene	9.26		"	10.0		92.6	80-131		6.28	30	
Hexachlorobutadiene	8.08		"	10.0		80.8	67-146		3.14	30	
Isopropylbenzene	8.70		"	10.0		87.0	76-140		3.94	30	
Methyl acetate	10.3		"	10.0		103	51-139		17.8	30	
Methyl tert-butyl ether (MTBE)	9.78		"	10.0		97.8	76-135		13.7	30	
Methylcyclohexane	9.43		"	10.0		94.3	72-143		7.71	30	
Methylene chloride	7.06		"	10.0		70.6	55-137		13.7	30	
n-Butylbenzene	8.94		"	10.0		89.4	79-132		8.15	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 BA90976 - EPA 5030B

LCS Dup (BA90976-BSD1)

Prepared & Analyzed: 01/23/2019

n-Propylbenzene	8.93		ug/L	10.0		89.3	78-133		0.670	30
o-Xylene	9.20		"	10.0		92.0	78-130		7.83	30
p- & m- Xylenes	18.4		"	20.0		92.2	77-133		6.20	30
p-Isopropyltoluene	8.94		"	10.0		89.4	81-136		0.112	30
sec-Butylbenzene	9.49		"	10.0		94.9	79-137		1.36	30
Styrene	9.35		"	10.0		93.5	67-132		7.61	30
tert-Butyl alcohol (TBA)	49.0		"	50.0		98.0	25-162		21.1	30
tert-Butylbenzene	8.87		"	10.0		88.7	77-138		3.65	30
Tetrachloroethylene	6.50		"	10.0		65.0	82-131	Low Bias	1.07	30
Toluene	9.36		"	10.0		93.6	80-127		8.00	30
trans-1,2-Dichloroethylene	9.77		"	10.0		97.7	80-132		11.6	30
trans-1,3-Dichloropropylene	7.84		"	10.0		78.4	78-131		12.0	30
Trichloroethylene	8.85		"	10.0		88.5	82-128		6.87	30
Trichlorofluoromethane	9.11		"	10.0		91.1	67-139		3.98	30
Vinyl Chloride	10.8		"	10.0		108	58-145		9.97	30
Surrogate: SURR: 1,2-Dichloroethane-d4	9.24		"	10.0		92.4	69-130			
Surrogate: SURR: Toluene-d8	9.44		"	10.0		94.4	81-117			
Surrogate: SURR: p-Bromofluorobenzene	9.55		"	10.0		95.5	79-122			

Batch BA91005 - EPA 5030B

Blank (BA91005-BLK1)

Prepared: 01/23/2019 Analyzed: 01/24/2019

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
1,4-Dioxane	ND	200	"
2-Butanone	ND	0.500	"
2-Hexanone	ND	0.500	"
4-Methyl-2-pentanone	ND	2.00	"
Acetone	ND	2.00	"
Acrolein	ND	2.00	"
Acrylonitrile	ND	2.00	"
Benzene	ND	0.500	"
Bromochloromethane	ND	0.500	"
Bromodichloromethane	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA91005 - EPA 5030B

Blank (BA91005-BLK1)

Prepared: 01/23/2019 Analyzed: 01/24/2019

Bromoform	ND	0.500	ug/L								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Cyclohexane	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl acetate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylcyclohexane	ND	0.500	"								
Methylene chloride	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butyl alcohol (TBA)	ND	2.50	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Xylenes, Total	ND	1.50	"								
Surrogate: SURRE: 1,2-Dichloroethane-d4	9.31		"	10.0		93.1	69-130				
Surrogate: SURRE: Toluene-d8	9.52		"	10.0		95.2	81-117				
Surrogate: SURRE: p-Bromofluorobenzene	10.1		"	10.0		101	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 BA91005 - EPA 5030B											
LCS (BA91005-BS1)						Prepared: 01/23/2019 Analyzed: 01/24/2019					
1,1,1,2-Tetrachloroethane	9.91		ug/L	10.0		99.1	82-126				
1,1,1-Trichloroethane	10.2		"	10.0		102	78-136				
1,1,2,2-Tetrachloroethane	8.58		"	10.0		85.8	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.8		"	10.0		118	54-165				
1,1,2-Trichloroethane	9.43		"	10.0		94.3	82-123				
1,1-Dichloroethane	10.8		"	10.0		108	82-129				
1,1-Dichloroethylene	10.8		"	10.0		108	68-138				
1,2,3-Trichlorobenzene	8.43		"	10.0		84.3	76-136				
1,2,3-Trichloropropane	9.14		"	10.0		91.4	77-128				
1,2,4-Trichlorobenzene	9.00		"	10.0		90.0	76-137				
1,2,4-Trimethylbenzene	9.70		"	10.0		97.0	82-132				
1,2-Dibromo-3-chloropropane	8.08		"	10.0		80.8	45-147				
1,2-Dibromoethane	9.61		"	10.0		96.1	83-124				
1,2-Dichlorobenzene	9.61		"	10.0		96.1	79-123				
1,2-Dichloroethane	9.87		"	10.0		98.7	73-132				
1,2-Dichloropropane	9.74		"	10.0		97.4	78-126				
1,3,5-Trimethylbenzene	9.71		"	10.0		97.1	80-131				
1,3-Dichlorobenzene	9.50		"	10.0		95.0	86-122				
1,4-Dichlorobenzene	9.55		"	10.0		95.5	85-124				
1,4-Dioxane	211		"	210		101	10-349				
2-Butanone	8.59		"	10.0		85.9	49-152				
2-Hexanone	7.74		"	10.0		77.4	51-146				
4-Methyl-2-pentanone	9.83		"	10.0		98.3	57-145				
Acetone	7.46		"	10.0		74.6	14-150				
Acrolein	0.740		"	10.0		7.40	10-153	Low Bias			
Acrylonitrile	11.0		"	10.0		110	51-150				
Benzene	11.4		"	10.0		114	85-126				
Bromochloromethane	11.0		"	10.0		110	77-128				
Bromodichloromethane	9.13		"	10.0		91.3	79-128				
Bromoform	8.69		"	10.0		86.9	78-133				
Bromomethane	1.35		"	10.0		13.5	43-168	Low Bias			
Carbon disulfide	12.6		"	10.0		126	68-146				
Carbon tetrachloride	10.1		"	10.0		101	77-141				
Chlorobenzene	9.88		"	10.0		98.8	88-120				
Chloroethane	11.2		"	10.0		112	65-136				
Chloroform	10.3		"	10.0		103	82-128				
Chloromethane	9.98		"	10.0		99.8	43-155				
cis-1,2-Dichloroethylene	10.1		"	10.0		101	83-129				
cis-1,3-Dichloropropylene	8.46		"	10.0		84.6	80-131				
Cyclohexane	12.7		"	10.0		127	63-149				
Dibromochloromethane	9.26		"	10.0		92.6	80-130				
Dibromomethane	9.24		"	10.0		92.4	72-134				
Dichlorodifluoromethane	12.3		"	10.0		123	44-144				
Ethyl Benzene	10.1		"	10.0		101	80-131				
Hexachlorobutadiene	8.07		"	10.0		80.7	67-146				
Isopropylbenzene	9.43		"	10.0		94.3	76-140				
Methyl acetate	12.6		"	10.0		126	51-139				
Methyl tert-butyl ether (MTBE)	10.5		"	10.0		105	76-135				
Methylcyclohexane	10.6		"	10.0		106	72-143				
Methylene chloride	7.86		"	10.0		78.6	55-137				
n-Butylbenzene	9.42		"	10.0		94.2	79-132				



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 BA91005 - EPA 5030B

LCS (BA91005-BS1)

Prepared: 01/23/2019 Analyzed: 01/24/2019

n-Propylbenzene	9.48		ug/L	10.0		94.8	78-133				
o-Xylene	10.0		"	10.0		100	78-130				
p- & m- Xylenes	20.3		"	20.0		102	77-133				
p-Isopropyltoluene	9.61		"	10.0		96.1	81-136				
sec-Butylbenzene	10.2		"	10.0		102	79-137				
Styrene	9.91		"	10.0		99.1	67-132				
tert-Butyl alcohol (TBA)	41.5		"	50.0		83.1	25-162				
tert-Butylbenzene	9.53		"	10.0		95.3	77-138				
Tetrachloroethylene	7.21		"	10.0		72.1	82-131	Low Bias			
Toluene	10.2		"	10.0		102	80-127				
trans-1,2-Dichloroethylene	10.8		"	10.0		108	80-132				
trans-1,3-Dichloropropylene	7.80		"	10.0		78.0	78-131				
Trichloroethylene	10.1		"	10.0		101	82-128				
Trichlorofluoromethane	10.1		"	10.0		101	67-139				
Vinyl Chloride	11.7		"	10.0		117	58-145				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.08		"	10.0		90.8	69-130				
Surrogate: SURR: Toluene-d8	9.49		"	10.0		94.9	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.45		"	10.0		94.5	79-122				

LCS Dup (BA91005-BSD1)

Prepared: 01/23/2019 Analyzed: 01/24/2019

1,1,1,2-Tetrachloroethane	9.56		ug/L	10.0		95.6	82-126		3.60	30	
1,1,1-Trichloroethane	10.2		"	10.0		102	78-136		0.392	30	
1,1,2,2-Tetrachloroethane	9.70		"	10.0		97.0	76-129		12.3	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.4		"	10.0		114	54-165		3.19	30	
1,1,2-Trichloroethane	9.35		"	10.0		93.5	82-123		0.852	30	
1,1-Dichloroethane	10.9		"	10.0		109	82-129		0.460	30	
1,1-Dichloroethylene	11.1		"	10.0		111	68-138		2.56	30	
1,2,3-Trichlorobenzene	8.75		"	10.0		87.5	76-136		3.73	30	
1,2,3-Trichloropropane	9.46		"	10.0		94.6	77-128		3.44	30	
1,2,4-Trichlorobenzene	9.01		"	10.0		90.1	76-137		0.111	30	
1,2,4-Trimethylbenzene	9.80		"	10.0		98.0	82-132		1.03	30	
1,2-Dibromo-3-chloropropane	8.31		"	10.0		83.1	45-147		2.81	30	
1,2-Dibromoethane	9.45		"	10.0		94.5	83-124		1.68	30	
1,2-Dichlorobenzene	9.89		"	10.0		98.9	79-123		2.87	30	
1,2-Dichloroethane	10.1		"	10.0		101	73-132		2.40	30	
1,2-Dichloropropane	9.63		"	10.0		96.3	78-126		1.14	30	
1,3,5-Trimethylbenzene	9.68		"	10.0		96.8	80-131		0.309	30	
1,3-Dichlorobenzene	9.79		"	10.0		97.9	86-122		3.01	30	
1,4-Dichlorobenzene	9.66		"	10.0		96.6	85-124		1.15	30	
1,4-Dioxane	205		"	210		97.5	10-349		3.16	30	
2-Butanone	8.97		"	10.0		89.7	49-152		4.33	30	
2-Hexanone	8.19		"	10.0		81.9	51-146		5.65	30	
4-Methyl-2-pentanone	9.94		"	10.0		99.4	57-145		1.11	30	
Acetone	7.13		"	10.0		71.3	14-150		4.52	30	
Acrolein	5.45		"	10.0		54.5	10-153		152	30	Non-dir.
Acrylonitrile	11.1		"	10.0		111	51-150		0.723	30	
Benzene	11.4		"	10.0		114	85-126		0.702	30	
Bromochloromethane	11.1		"	10.0		111	77-128		0.362	30	
Bromodichloromethane	9.02		"	10.0		90.2	79-128		1.21	30	
Bromoform	8.90		"	10.0		89.0	78-133		2.39	30	
Bromomethane	1.66		"	10.0		16.6	43-168	Low Bias	20.6	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 BA91005 - EPA 5030B

LCS Dup (BA91005-BSD1)

Prepared: 01/23/2019 Analyzed: 01/24/2019

Carbon disulfide	12.5		ug/L	10.0		125	68-146		0.720	30	
Carbon tetrachloride	9.84		"	10.0		98.4	77-141		2.81	30	
Chlorobenzene	9.67		"	10.0		96.7	88-120		2.15	30	
Chloroethane	11.1		"	10.0		111	65-136		0.810	30	
Chloroform	10.2		"	10.0		102	82-128		1.17	30	
Chloromethane	10.3		"	10.0		103	43-155		2.77	30	
cis-1,2-Dichloroethylene	10.1		"	10.0		101	83-129		0.297	30	
cis-1,3-Dichloropropylene	8.24		"	10.0		82.4	80-131		2.63	30	
Cyclohexane	12.6		"	10.0		126	63-149		0.474	30	
Dibromochloromethane	9.03		"	10.0		90.3	80-130		2.52	30	
Dibromomethane	9.15		"	10.0		91.5	72-134		0.979	30	
Dichlorodifluoromethane	12.0		"	10.0		120	44-144		2.39	30	
Ethyl Benzene	9.87		"	10.0		98.7	80-131		2.01	30	
Hexachlorobutadiene	8.38		"	10.0		83.8	67-146		3.77	30	
Isopropylbenzene	9.56		"	10.0		95.6	76-140		1.37	30	
Methyl acetate	12.0		"	10.0		120	51-139		4.39	30	
Methyl tert-butyl ether (MTBE)	10.8		"	10.0		108	76-135		2.07	30	
Methylcyclohexane	10.4		"	10.0		104	72-143		2.20	30	
Methylene chloride	7.73		"	10.0		77.3	55-137		1.67	30	
n-Butylbenzene	9.74		"	10.0		97.4	79-132		3.34	30	
n-Propylbenzene	9.60		"	10.0		96.0	78-133		1.26	30	
o-Xylene	9.93		"	10.0		99.3	78-130		0.902	30	
p- & m- Xylenes	19.7		"	20.0		98.5	77-133		3.00	30	
p-Isopropyltoluene	9.74		"	10.0		97.4	81-136		1.34	30	
sec-Butylbenzene	10.4		"	10.0		104	79-137		1.84	30	
Styrene	9.79		"	10.0		97.9	67-132		1.22	30	
tert-Butyl alcohol (TBA)	47.5		"	50.0		94.9	25-162		13.3	30	
tert-Butylbenzene	9.65		"	10.0		96.5	77-138		1.25	30	
Tetrachloroethylene	6.95		"	10.0		69.5	82-131	Low Bias	3.67	30	
Toluene	10.1		"	10.0		101	80-127		1.18	30	
trans-1,2-Dichloroethylene	10.7		"	10.0		107	80-132		0.372	30	
trans-1,3-Dichloropropylene	7.72		"	10.0		77.2	78-131	Low Bias	1.03	30	
Trichloroethylene	9.10		"	10.0		91.0	82-128		10.7	30	
Trichlorofluoromethane	10.0		"	10.0		100	67-139		0.498	30	
Vinyl Chloride	11.6		"	10.0		116	58-145		0.860	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	9.16		"	10.0		91.6	69-130				
Surrogate: SURR: Toluene-d8	9.41		"	10.0		94.1	81-117				
Surrogate: SURR: p-Bromofluorobenzene	9.37		"	10.0		93.7	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 BA91062 - EPA 5035A

Blank (BA91062-BLK1)

Prepared & Analyzed: 01/24/2019

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	"
n-Butylbenzene	ND	5.0	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA91062 - EPA 5035A

Blank (BA91062-BLK1)

Prepared & Analyzed: 01/24/2019

n-Propylbenzene	ND	5.0	ug/kg wet
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-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: SURR: 1,2-Dichloroethane-d4	50.1	ug/L	50.0	100	77-125
Surrogate: SURR: Toluene-d8	48.0	"	50.0	96.0	85-120
Surrogate: SURR: p-Bromofluorobenzene	48.6	"	50.0	97.3	76-130

Blank (BA91062-BLK2)

Prepared & Analyzed: 01/24/2019

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	"



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 BA91062 - EPA 5035A

Blank (BA91062-BLK2)

Prepared & Analyzed: 01/24/2019

Bromoform	ND	500	ug/kg wet
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	"
n-Propylbenzene	ND	500	"
o-Xylene	ND	500	"
p- & m- Xylenes	ND	1000	"
p-Isopropyltoluene	ND	500	"
sec-Butylbenzene	ND	500	"
Styrene	ND	500	"
tert-Butyl alcohol (TBA)	ND	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: SURR: 1,2-Dichloroethane-d4	49.7	ug/L	50.0	99.4	77-125
Surrogate: SURR: Toluene-d8	48.2	"	50.0	96.4	85-120
Surrogate: SURR: p-Bromofluorobenzene	49.2	"	50.0	98.4	76-130



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BA91062 - EPA 5035A											
LCS (BA91062-BS1)						Prepared & Analyzed: 01/24/2019					
1,1,1,2-Tetrachloroethane	46		ug/L	50.0		92.8	75-129				
1,1,1-Trichloroethane	51		"	50.0		102	71-137				
1,1,2,2-Tetrachloroethane	44		"	50.0		88.5	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	57		"	50.0		113	58-146				
1,1,2-Trichloroethane	45		"	50.0		91.0	83-123				
1,1-Dichloroethane	50		"	50.0		99.4	75-130				
1,1-Dichloroethylene	48		"	50.0		95.9	64-137				
1,2,3-Trichlorobenzene	45		"	50.0		90.8	81-140				
1,2,3-Trichloropropane	47		"	50.0		95.0	81-126				
1,2,4-Trichlorobenzene	45		"	50.0		90.9	80-141				
1,2,4-Trimethylbenzene	44		"	50.0		88.4	84-125				
1,2-Dibromo-3-chloropropane	40		"	50.0		79.1	74-142				
1,2-Dibromoethane	46		"	50.0		92.9	86-123				
1,2-Dichlorobenzene	48		"	50.0		95.0	85-122				
1,2-Dichloroethane	51		"	50.0		101	71-133				
1,2-Dichloropropane	41		"	50.0		82.7	81-122				
1,3,5-Trimethylbenzene	44		"	50.0		88.5	82-126				
1,3-Dichlorobenzene	46		"	50.0		91.2	84-124				
1,4-Dichlorobenzene	46		"	50.0		92.2	84-124				
1,4-Dioxane	1100		"	1050		100	10-228				
2-Butanone	66		"	50.0		132	58-147				
2-Hexanone	39		"	50.0		78.3	70-139				
4-Methyl-2-pentanone	38		"	50.0		76.2	72-132				
Acetone	55		"	50.0		110	36-155				
Acrolein	110		"	50.0		224	10-238				
Acrylonitrile	49		"	50.0		97.8	66-141				
Benzene	52		"	50.0		104	77-127				
Bromochloromethane	47		"	50.0		94.1	74-129				
Bromodichloromethane	43		"	50.0		86.1	81-124				
Bromoform	42		"	50.0		83.0	80-136				
Bromomethane	57		"	50.0		115	32-177				
Carbon disulfide	48		"	50.0		95.9	10-136				
Carbon tetrachloride	52		"	50.0		104	66-143				
Chlorobenzene	47		"	50.0		93.8	86-120				
Chloroethane	59		"	50.0		118	51-142				
Chloroform	53		"	50.0		105	76-131				
Chloromethane	58		"	50.0		117	49-132				
cis-1,2-Dichloroethylene	49		"	50.0		97.4	74-132				
cis-1,3-Dichloropropylene	41		"	50.0		82.8	81-129				
Cyclohexane	44		"	50.0		87.1	70-130				
Dibromochloromethane	45		"	50.0		89.9	10-200				
Dibromomethane	46		"	50.0		91.3	83-124				
Dichlorodifluoromethane	53		"	50.0		106	28-158				
Ethyl Benzene	45		"	50.0		89.8	84-125				
Hexachlorobutadiene	44		"	50.0		88.4	83-133				
Isopropylbenzene	44		"	50.0		87.6	81-127				
Methyl acetate	42		"	50.0		83.0	41-143				
Methyl tert-butyl ether (MTBE)	52		"	50.0		104	74-131				
Methylcyclohexane	44		"	50.0		88.0	70-130				
Methylene chloride	47		"	50.0		93.6	57-141				
n-Butylbenzene	48		"	50.0		96.4	80-130				



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 BA91062 - EPA 5035A

LCS (BA91062-BS1)

Prepared & Analyzed: 01/24/2019

n-Propylbenzene	43		ug/L	50.0		86.4	74-136				
o-Xylene	45		"	50.0		90.4	83-123				
p- & m- Xylenes	90		"	100		89.7	82-128				
p-Isopropyltoluene	46		"	50.0		91.3	85-125				
sec-Butylbenzene	46		"	50.0		93.0	83-125				
Styrene	46		"	50.0		91.2	86-126				
tert-Butyl alcohol (TBA)	220		"	250		86.4	70-130				
tert-Butylbenzene	40		"	50.0		79.2	80-127	Low Bias			
Tetrachloroethylene	43		"	50.0		86.8	80-129				
Toluene	46		"	50.0		91.3	85-121				
trans-1,2-Dichloroethylene	48		"	50.0		96.0	72-132				
trans-1,3-Dichloropropylene	41		"	50.0		81.2	78-132				
trans-1,4-dichloro-2-butene	38		"	50.0		75.7	75-135				
Trichloroethylene	45		"	50.0		89.8	84-123				
Trichlorofluoromethane	61		"	50.0		121	62-140				
Vinyl Chloride	55		"	50.0		110	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	50.7		"	50.0		101	77-125				
Surrogate: SURR: Toluene-d8	47.5		"	50.0		94.9	85-120				
Surrogate: SURR: p-Bromofluorobenzene	46.7		"	50.0		93.5	76-130				

LCS Dup (BA91062-BS1)

Prepared & Analyzed: 01/24/2019

1,1,1,2-Tetrachloroethane	47		ug/L	50.0		93.6	75-129		0.901	30	
1,1,1-Trichloroethane	52		"	50.0		104	71-137		2.62	30	
1,1,2,2-Tetrachloroethane	44		"	50.0		88.1	79-129		0.430	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	58		"	50.0		116	58-146		3.00	30	
1,1,2-Trichloroethane	46		"	50.0		91.2	83-123		0.220	30	
1,1-Dichloroethane	51		"	50.0		101	75-130		1.97	30	
1,1-Dichloroethylene	49		"	50.0		98.7	64-137		2.90	30	
1,2,3-Trichlorobenzene	46		"	50.0		92.5	81-140		1.79	30	
1,2,3-Trichloropropane	47		"	50.0		93.1	81-126		1.94	30	
1,2,4-Trichlorobenzene	47		"	50.0		93.4	80-141		2.78	30	
1,2,4-Trimethylbenzene	46		"	50.0		91.6	84-125		3.47	30	
1,2-Dibromo-3-chloropropane	39		"	50.0		77.3	74-142		2.30	30	
1,2-Dibromoethane	47		"	50.0		93.3	86-123		0.387	30	
1,2-Dichlorobenzene	49		"	50.0		97.2	85-122		2.23	30	
1,2-Dichloroethane	50		"	50.0		100	71-133		0.953	30	
1,2-Dichloropropane	42		"	50.0		84.1	81-122		1.68	30	
1,3,5-Trimethylbenzene	46		"	50.0		92.4	82-126		4.27	30	
1,3-Dichlorobenzene	47		"	50.0		94.2	84-124		3.26	30	
1,4-Dichlorobenzene	47		"	50.0		94.2	84-124		2.12	30	
1,4-Dioxane	1100		"	1050		103	10-228		2.16	30	
2-Butanone	65		"	50.0		129	58-147		2.02	30	
2-Hexanone	38		"	50.0		75.9	70-139		3.03	30	
4-Methyl-2-pentanone	37		"	50.0		74.0	72-132		2.88	30	
Acetone	52		"	50.0		103	36-155		6.08	30	
Acrolein	100		"	50.0		208	10-238		7.55	30	
Acrylonitrile	47		"	50.0		94.1	66-141		3.86	30	
Benzene	53		"	50.0		105	77-127		1.28	30	
Bromochloromethane	48		"	50.0		95.3	74-129		1.27	30	
Bromodichloromethane	43		"	50.0		86.7	81-124		0.671	30	
Bromoform	41		"	50.0		81.5	80-136		1.87	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 BA91062 - EPA 5035A

LCS Dup (BA91062-BSD1)

Prepared & Analyzed: 01/24/2019

Bromomethane	61		ug/L	50.0		122	32-177		6.24	30	
Carbon disulfide	50		"	50.0		99.6	10-136		3.76	30	
Carbon tetrachloride	54		"	50.0		107	66-143		3.27	30	
Chlorobenzene	48		"	50.0		95.8	86-120		2.09	30	
Chloroethane	59		"	50.0		118	51-142		0.593	30	
Chloroform	53		"	50.0		107	76-131		1.57	30	
Chloromethane	59		"	50.0		118	49-132		1.02	30	
cis-1,2-Dichloroethylene	49		"	50.0		98.7	74-132		1.33	30	
cis-1,3-Dichloropropylene	42		"	50.0		83.6	81-129		0.938	30	
Cyclohexane	44		"	50.0		88.3	70-130		1.37	30	
Dibromochloromethane	45		"	50.0		90.0	10-200		0.156	30	
Dibromomethane	45		"	50.0		90.2	83-124		1.26	30	
Dichlorodifluoromethane	56		"	50.0		112	28-158		5.45	30	
Ethyl Benzene	46		"	50.0		92.7	84-125		3.24	30	
Hexachlorobutadiene	47		"	50.0		93.7	83-133		5.75	30	
Isopropylbenzene	46		"	50.0		91.9	81-127		4.88	30	
Methyl acetate	40		"	50.0		79.8	41-143		3.93	30	
Methyl tert-butyl ether (MTBE)	51		"	50.0		102	74-131		1.65	30	
Methylcyclohexane	46		"	50.0		92.3	70-130		4.81	30	
Methylene chloride	47		"	50.0		93.3	57-141		0.385	30	
n-Butylbenzene	52		"	50.0		104	80-130		7.91	30	
n-Propylbenzene	45		"	50.0		90.1	74-136		4.10	30	
o-Xylene	46		"	50.0		92.8	83-123		2.55	30	
p- & m- Xylenes	93		"	100		92.7	82-128		3.30	30	
p-Isopropyltoluene	48		"	50.0		95.6	85-125		4.62	30	
sec-Butylbenzene	49		"	50.0		97.7	83-125		4.95	30	
Styrene	47		"	50.0		93.6	86-126		2.58	30	
tert-Butyl alcohol (TBA)	210		"	250		84.4	70-130		2.35	30	
tert-Butylbenzene	41		"	50.0		83.0	80-127		4.61	30	
Tetrachloroethylene	45		"	50.0		90.2	80-129		3.89	30	
Toluene	47		"	50.0		94.6	85-121		3.53	30	
trans-1,2-Dichloroethylene	49		"	50.0		98.2	72-132		2.29	30	
trans-1,3-Dichloropropylene	40		"	50.0		80.4	78-132		0.965	30	
trans-1,4-dichloro-2-butene	35		"	50.0		70.1	75-135	Low Bias	7.57	30	
Trichloroethylene	47		"	50.0		93.5	84-123		3.97	30	
Trichlorofluoromethane	63		"	50.0		126	62-140		3.73	30	
Vinyl Chloride	57		"	50.0		114	52-130		2.89	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	50.3		"	50.0		101	77-125				
Surrogate: SURR: Toluene-d8	48.0		"	50.0		95.9	85-120				
Surrogate: SURR: p-Bromofluorobenzene	47.2		"	50.0		94.5	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 BA91063 - EPA 5035A

Blank (BA91063-BLK1)

Prepared & Analyzed: 01/24/2019

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	"
n-Butylbenzene	ND	5.0	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA91063 - EPA 5035A

Blank (BA91063-BLK1)

Prepared & Analyzed: 01/24/2019

n-Propylbenzene	ND	5.0	ug/kg wet
o-Xylene	ND	5.0	"
p- & m- Xylenes	ND	10	"
p-Isopropyltoluene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
Styrene	ND	5.0	"
tert-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: SURR: 1,2-Dichloroethane-d4	50.0	ug/L	50.0	100	77-125
Surrogate: SURR: Toluene-d8	47.8	"	50.0	95.6	85-120
Surrogate: SURR: p-Bromofluorobenzene	47.7	"	50.0	95.4	76-130

Blank (BA91063-BLK2)

Prepared & Analyzed: 01/24/2019

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	"



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 BA91063 - EPA 5035A

Blank (BA91063-BLK2)

Prepared & Analyzed: 01/24/2019

Bromoform	ND	500	ug/kg wet								
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	"								
n-Propylbenzene	ND	500	"								
o-Xylene	ND	500	"								
p- & m- Xylenes	ND	1000	"								
p-Isopropyltoluene	ND	500	"								
sec-Butylbenzene	ND	500	"								
Styrene	ND	500	"								
tert-Butyl alcohol (TBA)	ND	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: SURR: 1,2-Dichloroethane-d4	51.9		ug/L	50.0		104	77-125				
Surrogate: SURR: Toluene-d8	47.6		"	50.0		95.1	85-120				
Surrogate: SURR: p-Bromofluorobenzene	47.6		"	50.0		95.3	76-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BA91063 - EPA 5035A											
LCS (BA91063-BS1)						Prepared & Analyzed: 01/24/2019					
1,1,1,2-Tetrachloroethane	46		ug/L	50.0		91.3	75-129				
1,1,1-Trichloroethane	46		"	50.0		91.4	71-137				
1,1,2,2-Tetrachloroethane	45		"	50.0		90.6	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	49		"	50.0		98.3	58-146				
1,1,2-Trichloroethane	43		"	50.0		87.0	83-123				
1,1-Dichloroethane	47		"	50.0		94.3	75-130				
1,1-Dichloroethylene	46		"	50.0		91.0	64-137				
1,2,3-Trichlorobenzene	47		"	50.0		94.3	81-140				
1,2,3-Trichloropropane	45		"	50.0		89.6	81-126				
1,2,4-Trichlorobenzene	46		"	50.0		92.4	80-141				
1,2,4-Trimethylbenzene	42		"	50.0		84.4	84-125				
1,2-Dibromo-3-chloropropane	42		"	50.0		84.4	74-142				
1,2-Dibromoethane	46		"	50.0		92.3	86-123				
1,2-Dichlorobenzene	45		"	50.0		89.9	85-122				
1,2-Dichloroethane	49		"	50.0		98.7	71-133				
1,2-Dichloropropane	43		"	50.0		85.7	81-122				
1,3,5-Trimethylbenzene	42		"	50.0		84.3	82-126				
1,3-Dichlorobenzene	44		"	50.0		88.2	84-124				
1,4-Dichlorobenzene	44		"	50.0		88.4	84-124				
1,4-Dioxane	1200		"	1050		115	10-228				
2-Butanone	60		"	50.0		119	58-147				
2-Hexanone	49		"	50.0		98.7	70-139				
4-Methyl-2-pentanone	46		"	50.0		91.4	72-132				
Acetone	61		"	50.0		121	36-155				
Acrolein	37		"	50.0		73.2	10-238				
Acrylonitrile	52		"	50.0		103	66-141				
Benzene	48		"	50.0		96.9	77-127				
Bromochloromethane	49		"	50.0		97.6	74-129				
Bromodichloromethane	44		"	50.0		87.3	81-124				
Bromoform	45		"	50.0		90.2	80-136				
Bromomethane	62		"	50.0		125	32-177				
Carbon disulfide	47		"	50.0		94.0	10-136				
Carbon tetrachloride	46		"	50.0		92.2	66-143				
Chlorobenzene	44		"	50.0		89.0	86-120				
Chloroethane	61		"	50.0		122	51-142				
Chloroform	47		"	50.0		94.3	76-131				
Chloromethane	47		"	50.0		94.1	49-132				
cis-1,2-Dichloroethylene	47		"	50.0		94.2	74-132				
cis-1,3-Dichloropropylene	42		"	50.0		84.2	81-129				
Cyclohexane	52		"	50.0		105	70-130				
Dibromochloromethane	45		"	50.0		89.0	10-200				
Dibromomethane	44		"	50.0		88.0	83-124				
Dichlorodifluoromethane	46		"	50.0		92.2	28-158				
Ethyl Benzene	43		"	50.0		86.8	84-125				
Hexachlorobutadiene	47		"	50.0		93.9	83-133				
Isopropylbenzene	42		"	50.0		84.0	81-127				
Methyl acetate	49		"	50.0		98.0	41-143				
Methyl tert-butyl ether (MTBE)	49		"	50.0		98.3	74-131				
Methylcyclohexane	43		"	50.0		86.3	70-130				
Methylene chloride	46		"	50.0		91.6	57-141				
n-Butylbenzene	45		"	50.0		89.2	80-130				



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 BA91063 - EPA 5035A

LCS (BA91063-BS1)

Prepared & Analyzed: 01/24/2019

n-Propylbenzene	42		ug/L	50.0		83.9	74-136				
o-Xylene	44		"	50.0		87.5	83-123				
p- & m- Xylenes	87		"	100		87.3	82-128				
p-Isopropyltoluene	43		"	50.0		86.9	85-125				
sec-Butylbenzene	45		"	50.0		89.2	83-125				
Styrene	45		"	50.0		89.1	86-126				
tert-Butyl alcohol (TBA)	260		"	250		102	70-130				
tert-Butylbenzene	38		"	50.0		76.3	80-127	Low Bias			
Tetrachloroethylene	41		"	50.0		81.8	80-129				
Toluene	44		"	50.0		87.4	85-121				
trans-1,2-Dichloroethylene	46		"	50.0		91.5	72-132				
trans-1,3-Dichloropropylene	43		"	50.0		85.1	78-132				
trans-1,4-dichloro-2-butene	43		"	50.0		86.5	75-135				
Trichloroethylene	44		"	50.0		87.3	84-123				
Trichlorofluoromethane	52		"	50.0		104	62-140				
Vinyl Chloride	48		"	50.0		96.5	52-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	50.7		"	50.0		101	77-125				
Surrogate: SURR: Toluene-d8	47.2		"	50.0		94.5	85-120				
Surrogate: SURR: p-Bromofluorobenzene	47.3		"	50.0		94.6	76-130				

LCS Dup (BA91063-BS1)

Prepared & Analyzed: 01/24/2019

1,1,1,2-Tetrachloroethane	46		ug/L	50.0		92.6	75-129		1.41	30	
1,1,1-Trichloroethane	47		"	50.0		94.6	71-137		3.46	30	
1,1,2,2-Tetrachloroethane	45		"	50.0		89.5	79-129		1.22	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	51		"	50.0		101	58-146		3.05	30	
1,1,2-Trichloroethane	45		"	50.0		89.7	83-123		3.08	30	
1,1-Dichloroethane	48		"	50.0		95.8	75-130		1.64	30	
1,1-Dichloroethylene	47		"	50.0		93.5	64-137		2.75	30	
1,2,3-Trichlorobenzene	47		"	50.0		94.6	81-140		0.318	30	
1,2,3-Trichloropropane	46		"	50.0		92.9	81-126		3.55	30	
1,2,4-Trichlorobenzene	47		"	50.0		94.8	80-141		2.61	30	
1,2,4-Trimethylbenzene	43		"	50.0		86.6	84-125		2.48	30	
1,2-Dibromo-3-chloropropane	44		"	50.0		88.5	74-142		4.77	30	
1,2-Dibromoethane	47		"	50.0		94.2	86-123		2.08	30	
1,2-Dichlorobenzene	46		"	50.0		91.6	85-122		1.87	30	
1,2-Dichloroethane	49		"	50.0		98.2	71-133		0.427	30	
1,2-Dichloropropane	44		"	50.0		87.7	81-122		2.28	30	
1,3,5-Trimethylbenzene	43		"	50.0		86.9	82-126		3.08	30	
1,3-Dichlorobenzene	45		"	50.0		89.8	84-124		1.75	30	
1,4-Dichlorobenzene	45		"	50.0		89.4	84-124		1.19	30	
1,4-Dioxane	1300		"	1050		120	10-228		3.86	30	
2-Butanone	58		"	50.0		117	58-147		2.08	30	
2-Hexanone	50		"	50.0		99.8	70-139		1.07	30	
4-Methyl-2-pentanone	47		"	50.0		94.6	72-132		3.42	30	
Acetone	60		"	50.0		119	36-155		1.48	30	
Acrolein	37		"	50.0		74.3	10-238		1.52	30	
Acrylonitrile	51		"	50.0		101	66-141		1.89	30	
Benzene	49		"	50.0		98.3	77-127		1.48	30	
Bromochloromethane	50		"	50.0		99.5	74-129		1.87	30	
Bromodichloromethane	44		"	50.0		88.0	81-124		0.799	30	
Bromoform	46		"	50.0		92.7	80-136		2.69	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 BA91063 - EPA 5035A

LCS Dup (BA91063-BSD1)

Prepared & Analyzed: 01/24/2019

Bromomethane	55		ug/L	50.0		109	32-177		13.1	30
Carbon disulfide	48		"	50.0		96.2	10-136		2.25	30
Carbon tetrachloride	48		"	50.0		95.3	66-143		3.37	30
Chlorobenzene	45		"	50.0		90.9	86-120		2.16	30
Chloroethane	53		"	50.0		107	51-142		13.3	30
Chloroform	48		"	50.0		96.2	76-131		1.95	30
Chloromethane	48		"	50.0		95.3	49-132		1.25	30
cis-1,2-Dichloroethylene	48		"	50.0		95.8	74-132		1.64	30
cis-1,3-Dichloropropylene	43		"	50.0		85.9	81-129		2.05	30
Cyclohexane	54		"	50.0		107	70-130		2.42	30
Dibromochloromethane	45		"	50.0		89.2	10-200		0.224	30
Dibromomethane	44		"	50.0		88.6	83-124		0.747	30
Dichlorodifluoromethane	48		"	50.0		96.2	28-158		4.20	30
Ethyl Benzene	45		"	50.0		89.3	84-125		2.86	30
Hexachlorobutadiene	48		"	50.0		96.4	83-133		2.65	30
Isopropylbenzene	43		"	50.0		86.4	81-127		2.72	30
Methyl acetate	48		"	50.0		96.1	41-143		2.00	30
Methyl tert-butyl ether (MTBE)	49		"	50.0		97.5	74-131		0.756	30
Methylcyclohexane	45		"	50.0		90.0	70-130		4.26	30
Methylene chloride	46		"	50.0		92.8	57-141		1.28	30
n-Butylbenzene	43		"	50.0		86.7	80-130		2.84	30
n-Propylbenzene	43		"	50.0		86.0	74-136		2.45	30
o-Xylene	45		"	50.0		89.5	83-123		2.26	30
p- & m- Xylenes	89		"	100		89.2	82-128		2.15	30
p-Isopropyltoluene	44		"	50.0		89.0	85-125		2.30	30
sec-Butylbenzene	46		"	50.0		91.1	83-125		2.11	30
Styrene	46		"	50.0		91.0	86-126		2.20	30
tert-Butyl alcohol (TBA)	260		"	250		104	70-130		1.89	30
tert-Butylbenzene	40		"	50.0		79.3	80-127	Low Bias	3.88	30
Tetrachloroethylene	42		"	50.0		85.0	80-129		3.77	30
Toluene	45		"	50.0		90.2	85-121		3.20	30
trans-1,2-Dichloroethylene	47		"	50.0		93.7	72-132		2.42	30
trans-1,3-Dichloropropylene	44		"	50.0		87.2	78-132		2.44	30
trans-1,4-dichloro-2-butene	43		"	50.0		86.6	75-135		0.139	30
Trichloroethylene	45		"	50.0		89.9	84-123		2.91	30
Trichlorofluoromethane	48		"	50.0		96.5	62-140		7.08	30
Vinyl Chloride	49		"	50.0		98.1	52-130		1.60	30
Surrogate: SURR: 1,2-Dichloroethane-d4	51.1		"	50.0		102	77-125			
Surrogate: SURR: Toluene-d8	47.1		"	50.0		94.2	85-120			
Surrogate: SURR: p-Bromofluorobenzene	47.1		"	50.0		94.3	76-130			



Wet Chemistry Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA90969 - Analysis Preparation

Blank (BA90969-BLK1)

Prepared: 01/23/2019 Analyzed: 01/25/2019

Total Organic Carbon (TOC)	ND	1.00	mg/L

LCS (BA90969-BS1)

Prepared: 01/23/2019 Analyzed: 01/25/2019

Total Organic Carbon (TOC)	64.1	1.00	mg/L	57.8	111	79.5-125.1



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
19A0819-01	23	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-02	23	40mL Vial with Stir Bar-Cool 4° C
19A0819-03	24	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-04	24	40mL Vial with Stir Bar-Cool 4° C
19A0819-05	25	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-06	25	40mL Vial with Stir Bar-Cool 4° C
19A0819-07	26	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-08	26	40mL Vial with Stir Bar-Cool 4° C
19A0819-09	27	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-10	27	40mL Vial with Stir Bar-Cool 4° C
19A0819-11	28	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-12	28	40mL Vial with Stir Bar-Cool 4° C
19A0819-13	X3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-14	X3	40mL Vial with Stir Bar-Cool 4° C
19A0819-15	X4	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-16	X4	40mL Vial with Stir Bar-Cool 4° C
19A0819-17	15	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-18	15	40mL Vial with Stir Bar-Cool 4° C
19A0819-19	16	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-20	16	40mL Vial with Stir Bar-Cool 4° C
19A0819-21	17	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-22	17	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-23	18	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-24	18	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-25	19	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-26	19	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-27	20	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-28	20	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-29	21	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-30	21	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-31	22	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-32	22	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-33	5	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-34	5	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-35	6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-36	6	40mL Pre-Tared Vial + 10mL MeOH; Cool to 4° C
19A0819-37	7	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
19A0819-38	7	40mL Pre-Tared Vial + 10mL MeOH; Cool to 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.
S-08	The recovery of this surrogate was outside of QC limits.
QR-04	The RPD exceeded control limits for the LCS/LCSD QC.
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-HI	The internal std associated with this target compound did not meet acceptance criteria (area >200% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
ICV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
CCV-E	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

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



Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

Field Chain-of-Custody Record

YORK Project No.

19A0819

Page 1 of 4

Page 1 of 4

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.

YOUR INFORMATION			Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company:	Address:	Phone:	Company:	Address:	Phone:	Company:	Address:			
Langan	Langan	215-491-6519	Langan	Langan	215-491-6519	Langan	Langan	190043701	RUSH - Next Day	
300 Kimball Drive	300 Kimball Drive		300 Kimball Drive	300 Kimball Drive		300 Kimball Drive	300 Kimball Drive		RUSH - Two Day	
Parsippany, NJ	Parsippany, NJ		Parsippany, NJ	Parsippany, NJ		Parsippany, NJ	Parsippany, NJ		RUSH - Three Day	
215-491-6519	215-491-6519		215-491-6519	215-491-6519		215-491-6519	215-491-6519		RUSH - Four Day	
Lingke Zeng	Lingke Zeng		Lingke Zeng	Lingke Zeng		Lingke Zeng	Lingke Zeng		Standard (5-7 Day)	X
LZeng@Langan.com	LZeng@Langan.com		LZeng@Langan.com	LZeng@Langan.com		LZeng@Langan.com	LZeng@Langan.com			
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.			Samples Collected by: (print your name above and sign below) Aaron Budram		Samples From: ☒ New York ☐ New Jersey ☐ Connecticut ☐ Pennsylvania ☐ Other		Report / EDD Type (circle selections) Summary Report ☐ CT RCP ☐ CT RCP DQA/DUE ☐ NJDEP Reduced Deliverables ☐ NJDKQP Standard Excel EDD ☐ EQUIS (Standard) ☐ NYSDEC EQUIS ☐ NJDEP SRP HazSite ☐ Other:		YORK Reg. Comp. Compared to the following Regulation(s): (please fill in) NY	
Sample Identification			Sample Matrix	Date/Time Sampled	Analysis Requested		Container Description			
23	GW	1/18/19 10:30	VOL + TOC	40 mL vials						
23	S	1/18/19 10:30	VOC							
24	GW	1/18/19 10:45	VOC + TOC							
24	S	1/18/19 10:45	VOC							
25	GW	1/18/19 11:05	VOC + TOC							
25	S	1/18/19 11:05	VOC							
26	GW	1/18/19 11:25	VOC + TOC							
26	S	1/18/19 11:25	VOC							
27	GW	1/18/19 11:45	VOC + TOC							
27	S	1/18/19 11:45	VOC							
Comments:			Preservation: (check all that apply) HCl ☒ MeOH ☒ HNO ₃ ☐ H ₂ SO ₄ ☐ NaOH ☐ ZnAc ☐ Ascorbic Acid ☐ Other:		Special Instruction Field Filtered ☐ Lab to Filter ☐					
Samples Relinquished by / Company		Date/Time	Samples Relinquished by / Company		Date/Time	Samples Relinquished by / Company		Date/Time		
D.Y. Langan		1/18/19 4:40	D.Y. Langan		1-18-19 4:40	D.Y. Langan		1-21-19 1000		
Received by / Company		Date/Time	Samples Relinquished by / Company		Date/Time	Samples Relinquished by / Company		Date/Time		
ATML Langan		1/21/19 11:00	ATML Langan		1/21/19	ATML Langan				
Relinquished by / Company		Date/Time	Samples Relinquished by / Company		Date/Time	Samples Relinquished by / Company		Date/Time		

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1-21-19 1320 e 2.3 c



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YORK
ANALYTICAL LABORATORIES, INC.

Field Chain-of-Custody Record

YORK Project No.

18A0819

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YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company:	Langan	Company:	Langan	Company:	Langan	190043701		RUSH - Next Day	
Address:	300 Kimball Dr. Parsippany, NJ	Address:	300 Kimball Dr. Parsippany, NJ	Address:	300 Kimball Dr. Parsippany, NJ	YOUR Project Name		RUSH - Two Day	
Phone:	215-491-0519	Phone:	215-491-0519	Phone:	215-491-0519	551 Greenwich St.		RUSH - Three Day	
Contact:	Lingke Zeng	Contact:	Lingke Zeng	Contact:	Lingke Zeng			RUSH - Four Day	
E-mail:	Lzeng@langan.com	E-mail:	Lzeng@langan.com	E-mail:	Lzeng@langan.com	YOUR PO#:		Standard (5-7 Day)	
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.		Matrix Codes		Samples From		Report / EDD Type (circle selections)		YORK Reg. Comp.	
Arnona Boodram Samples Collected by: (print your name above and sign below) <i>Arnona Boodram</i>		S - soil / solid	New York	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s) (please fill in) NY		
		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			
28	GW	1/18/19 12:15	VOC + TUC		40 mL vials				
28	S	1/18/19 12:15	VOC						
X3	GW	1/18/19 12:30	VOC + TUC						
X3	S	1/18/19 12:30	VOC						
X4	GW	1/18/19 12:45	VOC + TUC						
X4	S	1/18/19 12:45	VOC						
15	GW	1/18/19 13:05	VOC + TUC						
15	S	1/18/19 13:05	VOC						
16	GW	1/18/19 13:25	VOC + TUC						
16	S	1/18/19 13:25	VOC						
Comments:		Preservation: (check all that apply)							
		HCl ☒ MeOH ☒ HNO ₃ ☐ H ₂ SO ₄ ☐ NaOH ☐ ZnAc ☐							
		Ascorbic Acid ☐ Other: ☐							
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Special Instruction					
<i>[Signature]</i>	1/18/19 4:40	Dry York	1-18-19 4:40	Field Filtered Lab to Filter					
Samples Relinquished by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Date/Time					
At York	1/21/19 11:00	At York	1/21/19 11:00	1-21-19 1000					
Samples Relinquished by / Company	Date/Time	Samples Received in LAB by	Date/Time	Temp. Received at Lab					
		At York	1-21-19 13:28	e 2.3 c					



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YORK
ANALYTICAL LABORATORIES INC.

Field Chain-of-Custody Record

YORK Project No.
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YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company:	Langan	Company:	Langan	Company:	Langan	190043701		RUSH - Next Day	
Address:	300 Kimball Dr. Parsippany NJ	Address:	300 Kimball Dr. Parsippany NJ	Address:	300 Kimball Dr. Parsippany NJ			RUSH - Two Day	
Phone:	215-491-0519	Phone:	215-491-0519	Phone:	215-491-0519			RUSH - Three Day	
Contact:	Lingke Zeng	Contact:	Lingke Zeng	Contact:	Lingke Zeng			RUSH - Four Day	
E-mail:	Lzeng@langan.com	E-mail:	Lzeng@langan.com	E-mail:	Lzeng@langan.com			Standard (5-7 Day)	
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.		Matrix Codes		Samples From		Report / EDD Type (circle selections)		YORK Reg. Comp.	
Arunda Boudran Samples Collected by: (print your name above and sign below)		S - soil / solid	☒	New York	Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in) NY	
		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			
17	GW	1/18/19 13:45	VOC + TOC	40 mL vials					
17	S	1/18/19 13:45	VOC						
18	GW	1/18/19 14:00	VOC + TOC						
18	S	1/18/19 14:00	VOC						
19	GW	1/18/19 14:10	VOC + TOC						
19	S	1/18/19 14:10	VOC						
20	GW	1/18/19 14:35	VOC + TOC						
20	S	1/18/19 14:35	VOC						
21	GW	1/18/19 14:50	VOC + TOC						
21	S	1/18/19 14:50	VOC						
Comments:		Preservation: (check all that apply)		Special Instruction					
		HCl ☒ MeOH ☒ HNO ₃ ☒ H ₂ SO ₄ ☒ NaOH ☒ ZnAc ☒		Field Filtered Lab to Filter					
		Ascorbic Acid ☐ Other: ☐							
Samples Relinquished by / Company		Date/Time	Samples Relinquished by / Company		Date/Time				
1/18/19 4:40		1/18/19 4:40	D. Y. Langan		1-21-19 1000				
Received by / Company		Date/Time	Samples Relinquished by / Company		Date/Time				
1/21/19 11:00		1/21/19	D. Y. Langan						
Relinquished by / Company		Date/Time	Samples Received in LAB by		Date/Time				
1/21/19		1/21/19	Alpaca		Temp. Received at Lab				
					1-21-19 1328 e				
					23				



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YORK
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Field Chain-of-Custody Record

YORK Project No.
19A0819

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Page **4** of **4**

YOUR INFORMATION		Report To:		Invoice To:		YOUR Project Number		Turn-Around Time	
Company	Address	Company	Address	Company	Address	190043701		RUSH - Next Day	
Address	Address	Company	Address	Company	Address	551 Greenwich St.		RUSH - Two Day	
Phone	Phone	Company	Address	Company	Address			RUSH - Three Day	
Contact	Contact	Company	Address	Company	Address			RUSH - Four Day	
E-mail	E-mail	Company	Address	Company	Address			Standard (5-7 Day)	
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.		Matrix Codes		Samples From		Report / EDD Type (circle selections)		YORK Reg. Comp.	
S - soil / solid		New York		Summary Report		CT RCP		Compared to the following Regulation(s): (please fill in)	
GW - groundwater		New Jersey		QA Report		CT RCP DOA/DUE		NY	
DW - drinking water		Connecticut		NY ASP A Package		NJDEP Reduced Deliverables			
WW - wastewater		Pennsylvania		NY ASP B Package		NJDEP SRP HazSite			
O - Oil ; Other		Other				Other:			
Date/Time Sampled		Date/Time Sampled		Date/Time Sampled		Date/Time Sampled		Date/Time Sampled	
1/18/19 15:15		1/18/19 15:15		1/18/19 15:15		1/18/19 15:15		1/18/19 15:15	
1/18/19 15:30		1/18/19 15:30		1/18/19 15:30		1/18/19 15:30		1/18/19 15:30	
1/18/19 15:50		1/18/19 15:50		1/18/19 15:50		1/18/19 15:50		1/18/19 15:50	
1/18/19 16:05		1/18/19 16:05		1/18/19 16:05		1/18/19 16:05		1/18/19 16:05	
1/18/19 16:05		1/18/19 16:05		1/18/19 16:05		1/18/19 16:05		1/18/19 16:05	
Analysis Requested		Analysis Requested		Analysis Requested		Analysis Requested		Analysis Requested	
VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC	
VOC		VOC		VOC		VOC		VOC	
VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC	
VOC		VOC		VOC		VOC		VOC	
VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC	
VOC		VOC		VOC		VOC		VOC	
VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC		VOC + TUC	
VOC		VOC		VOC		VOC		VOC	
Special Instruction		Special Instruction		Special Instruction		Special Instruction		Special Instruction	
Field Filtered Lab to Filter		Field Filtered Lab to Filter		Field Filtered Lab to Filter		Field Filtered Lab to Filter		Field Filtered Lab to Filter	
Date/Time		Date/Time		Date/Time		Date/Time		Date/Time	
1-21-19 1000		1-21-19 1000		1-21-19 1000		1-21-19 1000		1-21-19 1000	
Temp. Received at Lab		Temp. Received at Lab		Temp. Received at Lab		Temp. Received at Lab		Temp. Received at Lab	
128 e 2.3c		128 e 2.3c		128 e 2.3c		128 e 2.3c		128 e 2.3c	



ANALYTICAL REPORT

Lab Number:	L1845465
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Paul McMahon
Phone:	(212) 479-5429
Project Name:	551 GREENWICH ST.
Project Number:	190043701
Report Date:	11/13/18

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1845465-01	MW02_110618	WATER	NY, NY	11/06/18 11:30	11/06/18
L1845465-02	MW03_110618	WATER	NY, NY	11/06/18 13:45	11/06/18
L1845465-03	MW05_110618	WATER	NY, NY	11/06/18 12:30	11/06/18

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1845465-01: The sample was received without the container for the Total Metals analysis. An aliquot was taken from an unpreserved container and preserved appropriately.

Dissolved Metals

The WG1178645-3 MS recovery for manganese (126%), performed on L1845465-01, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly Stenstrom

Title: Technical Director/Representative

Date: 11/13/18

METALS

Project Name: 551 GREENWICH ST.**Lab Number:** L1845465**Project Number:** 190043701**Report Date:** 11/13/18**SAMPLE RESULTS**

Lab ID: L1845465-01

Date Collected: 11/06/18 11:30

Client ID: MW02_110618

Date Received: 11/06/18

Sample Location: NY, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total	6.37		mg/l	0.0750	0.0191	1	11/07/18 16:30	11/08/18 16:31	EPA 3005A	1,6020B	AM
Manganese, Total	3.477		mg/l	0.00200	0.00044	1	11/07/18 16:30	11/08/18 16:31	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	7.02		mg/l	0.0750	0.0191	1	11/12/18 18:40	11/13/18 13:07	EPA 3005A	1,6020B	AM
Manganese, Dissolved	3.450		mg/l	0.00150	0.00044	1	11/12/18 18:40	11/13/18 13:07	EPA 3005A	1,6020B	AM



Project Name: 551 GREENWICH ST.**Lab Number:** L1845465**Project Number:** 190043701**Report Date:** 11/13/18**SAMPLE RESULTS**

Lab ID: L1845465-02

Date Collected: 11/06/18 13:45

Client ID: MW03_110618

Date Received: 11/06/18

Sample Location: NY, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total	1.12		mg/l	0.0750	0.0191	1	11/07/18 16:30	11/08/18 16:35	EPA 3005A	1,6020B	AM
Manganese, Total	0.3652		mg/l	0.00200	0.00044	1	11/07/18 16:30	11/08/18 16:35	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	1.40		mg/l	0.0750	0.0191	1	11/12/18 18:40	11/13/18 13:41	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.3802		mg/l	0.00150	0.00044	1	11/12/18 18:40	11/13/18 13:41	EPA 3005A	1,6020B	AM



Project Name: 551 GREENWICH ST.**Lab Number:** L1845465**Project Number:** 190043701**Report Date:** 11/13/18**SAMPLE RESULTS**

Lab ID: L1845465-03

Date Collected: 11/06/18 12:30

Client ID: MW05_110618

Date Received: 11/06/18

Sample Location: NY, NY

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total	0.110		mg/l	0.0750	0.0191	1	11/07/18 16:30	11/08/18 16:39	EPA 3005A	1,6020B	AM
Manganese, Total	0.5288		mg/l	0.00200	0.00044	1	11/07/18 16:30	11/08/18 16:39	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.125		mg/l	0.0750	0.0191	1	11/12/18 18:40	11/13/18 13:45	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.5603		mg/l	0.00150	0.00044	1	11/12/18 18:40	11/13/18 13:45	EPA 3005A	1,6020B	AM



Project Name: 551 GREENWICH ST.

Lab Number: L1845465

Project Number: 190043701

Report Date: 11/13/18

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1176972-1										
Iron, Total	0.0311	J	mg/l	0.0750	0.0191	1	11/07/18 16:30	11/08/18 14:25	1,6020B	AM
Manganese, Total	0.00157	J	mg/l	0.00200	0.00044	1	11/07/18 16:30	11/08/18 14:25	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1178645-1										
Iron, Dissolved	0.0295	J	mg/l	0.0750	0.0191	1	11/12/18 18:40	11/13/18 12:33	1,6020B	AM
Manganese, Dissolved	0.00140	J	mg/l	0.00150	0.00044	1	11/12/18 18:40	11/13/18 12:33	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845465

Report Date: 11/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1176972-2								
Iron, Total	118		-		80-120	-		
Manganese, Total	97		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1178645-2								
Iron, Dissolved	115		-		80-120	-		
Manganese, Dissolved	100		-		80-120	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845465

Report Date: 11/13/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1176972-7 QC Sample: L1844730-01 Client ID: MS Sample												
Iron, Total	1.08	1	2.12	104		-	-		75-125	-		20
Manganese, Total	0.3888	0.5	0.8760	97		-	-		75-125	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1178645-3 QC Sample: L1845465-01 Client ID: MW02_110618												
Iron, Dissolved	7.02	1	7.97	95		-	-		75-125	-		20
Manganese, Dissolved	3.450	0.5	4.078	126	Q	-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845465

Report Date: 11/13/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1178645-4 QC Sample: L1845465-01 Client ID: MW02_110618						
Iron, Dissolved	7.02	7.17	mg/l	2		20
Manganese, Dissolved	3.450	3.527	mg/l	2		20

INORGANICS & MISCELLANEOUS

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

SAMPLE RESULTS

Lab ID: L1845465-01
Client ID: MW02_110618
Sample Location: NY, NY

Date Collected: 11/06/18 11:30
Date Received: 11/06/18
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	570.		mg CaCO3/L	2.00	NA	1	-	11/07/18 09:14	121,2320B	BR
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	0.033	1	-	11/09/18 22:42	121,4500NO3-F	MR
Sulfate	ND		mg/l	10	1.4	1	11/07/18 14:56	11/07/18 14:56	1,9038	BR
Chemical Oxygen Demand	170		mg/l	20	6.0	1	11/07/18 18:25	11/07/18 20:52	44,410.4	TL
BOD, 5 day	29.		mg/l	10	NA	5	11/08/18 04:15	11/12/18 23:55	121,5210B	TE
Total Organic Carbon	160		mg/l	50	11.	100	-	11/08/18 12:12	1,9060A	DW



Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845465

Report Date: 11/13/18

SAMPLE RESULTS

Lab ID: L1845465-02

Client ID: MW03_110618

Sample Location: NY, NY

Date Collected: 11/06/18 13:45

Date Received: 11/06/18

Field Prep: Refer to COC

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	494.		mg CaCO3/L	2.00	NA	1	-	11/07/18 09:14	121,2320B	BR
Nitrogen, Nitrate/Nitrite	0.26		mg/l	0.10	0.033	1	-	11/09/18 22:44	121,4500NO3-F	MR
Sulfate	210		mg/l	100	14.	10	11/07/18 14:56	11/07/18 14:56	1,9038	BR
Chemical Oxygen Demand	46.		mg/l	20	6.0	1	11/07/18 18:25	11/07/18 20:53	44,410.4	TL
BOD, 5 day	2.6		mg/l	2.0	NA	1	11/08/18 04:15	11/12/18 23:55	121,5210B	TE
Total Organic Carbon	11		mg/l	1.0	0.23	2	-	11/08/18 12:48	1,9060A	DW



Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

SAMPLE RESULTS

Lab ID: L1845465-03
Client ID: MW05_110618
Sample Location: NY, NY

Date Collected: 11/06/18 12:30
Date Received: 11/06/18
Field Prep: Refer to COC

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	244.		mg CaCO3/L	2.00	NA	1	-	11/07/18 09:14	121,2320B	BR
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	0.033	1	-	11/09/18 22:45	121,4500NO3-F	MR
Sulfate	33.		mg/l	20	2.7	2	11/07/18 14:56	11/07/18 14:56	1,9038	BR
Chemical Oxygen Demand	21.		mg/l	20	6.0	1	11/07/18 18:25	11/07/18 20:53	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	11/08/18 04:15	11/12/18 23:55	121,5210B	TE
Total Organic Carbon	3.7		mg/l	1.0	0.23	2	-	11/08/18 13:20	1,9060A	DW



Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1176823-1										
Alkalinity, Total	ND		mg CaCO ₃ /L	2.00	NA	1	-	11/07/18 09:14	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1176849-1										
Sulfate	1.6	J	mg/l	10	1.4	1	11/07/18 14:56	11/07/18 14:56	1,9038	BR
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1177081-1										
Chemical Oxygen Demand	ND		mg/l	20	6.0	1	11/07/18 18:25	11/07/18 20:51	44,410.4	TL
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1177174-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	11/08/18 04:15	11/12/18 23:55	121,5210B	TE
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1177241-1										
Total Organic Carbon	ND		mg/l	0.50	0.11	1	-	11/08/18 08:53	1,9060A	DW
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1177931-1										
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	0.033	1	-	11/09/18 20:03	121,4500NO ₃ -F	MR

Lab Control Sample Analysis

Batch Quality Control

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845465

Report Date: 11/13/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1176823-2								
Alkalinity, Total	102		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1176849-2								
Sulfate	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1177081-2								
Chemical Oxygen Demand	99		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1177174-2								
BOD, 5 day	95		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1177241-2								
Total Organic Carbon	90		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1177931-2								
Nitrogen, Nitrate/Nitrite	108		-		90-110	-		20

Matrix Spike Analysis **Batch Quality Control**

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845465

Report Date: 11/13/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03				QC Batch ID: WG1176823-4			QC Sample: L1845390-05			Client ID: MS Sample		
Alkalinity, Total	48.0	100	146	98		-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 01-03				QC Batch ID: WG1176849-4			QC Sample: L1845390-01			Client ID: MS Sample		
Sulfate	6.6J	20	27	135		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 01-03				QC Batch ID: WG1177081-3			QC Sample: L1845465-02			Client ID: MW03_110618		
Chemical Oxygen Demand	46.	238	280	100		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03				QC Batch ID: WG1177174-4			QC Sample: L1845524-01			Client ID: MS Sample		
BOD, 5 day	3.5	100	120	114		-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 01-03				QC Batch ID: WG1177241-4			QC Sample: L1845661-16			Client ID: MS Sample		
Total Organic Carbon	3.5	8	12	106		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-03				QC Batch ID: WG1177931-4			QC Sample: L1845526-01			Client ID: MS Sample		
Nitrogen, Nitrate/Nitrite	3.9	4	7.8	95		-	-		80-120	-		20

Lab Duplicate Analysis *Batch Quality Control*

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845465

Report Date: 11/13/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG1176823-3	QC Sample: L1845390-01	Client ID: DUP Sample		
Alkalinity, Total	6.90	7.00	mg CaCO ₃ /L	1		10
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG1176849-3	QC Sample: L1845390-01	Client ID: DUP Sample		
Sulfate	6.6J	5.6J	mg/l	NC		14
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG1177081-4	QC Sample: L1845465-02	Client ID: MW03_110618		
Chemical Oxygen Demand	46.	48	mg/l	4		20
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG1177174-3	QC Sample: L1845524-01	Client ID: DUP Sample		
BOD, 5 day	3.5	3.3	mg/l	6		35
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG1177241-3	QC Sample: L1845661-16	Client ID: DUP Sample		
Total Organic Carbon	3.5	3.6	mg/l	3		20
General Chemistry - Westborough Lab	Associated sample(s): 01-03	QC Batch ID: WG1177931-3	QC Sample: L1845526-01	Client ID: DUP Sample		
Nitrogen, Nitrate/Nitrite	3.9	4.0	mg/l	0		20

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Serial_No:11131816:44
Lab Number: L1845465
Report Date: 11/13/18

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**
A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1845465-01A	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-01B	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-01C	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-01D	Bacteria Cup unpreserved	A	NA		4.1	Y	Absent		HOLD-WETCHEM()
L1845465-01E	Bacteria Cup unpreserved	A	NA		4.1	Y	Absent		HOLD-WETCHEM()
L1845465-01F	Plastic 250ml unpreserved/No Headspace	A	NA		4.1	Y	Absent		ALK-T-2320(14)
L1845465-01G	Plastic 250ml HNO3 preserved	A	<2	<2	4.1	Y	Absent		MN-6020S(180),FE-6020S(180)
L1845465-01H	Plastic 250ml HNO3 preserved split	A	7	<2	4.1	N	Absent		FE-6020T(180),MN-6020T(180)
L1845465-01I	Plastic 250ml H2SO4 preserved	A	<2	<2	4.1	Y	Absent		COD-410(28),NO3/NO2-4500(28)
L1845465-01J	Plastic 950ml unpreserved	A	7	7	4.1	Y	Absent		SO4-9038(28),BOD-5210(2)
L1845465-02A	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-02B	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-02C	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-02D	Bacteria Cup unpreserved	A	NA		4.1	Y	Absent		HOLD-WETCHEM()
L1845465-02E	Bacteria Cup unpreserved	A	NA		4.1	Y	Absent		HOLD-WETCHEM()
L1845465-02F	Plastic 250ml unpreserved/No Headspace	A	NA		4.1	Y	Absent		ALK-T-2320(14)
L1845465-02G	Plastic 250ml HNO3 preserved	A	<2	<2	4.1	Y	Absent		MN-6020S(180),FE-6020S(180)
L1845465-02H	Plastic 250ml HNO3 preserved	A	<2	<2	4.1	Y	Absent		FE-6020T(180),MN-6020T(180)
L1845465-02I	Plastic 250ml H2SO4 preserved	A	<2	<2	4.1	Y	Absent		COD-410(28),NO3/NO2-4500(28)
L1845465-02J	Plastic 950ml unpreserved	A	7	7	4.1	Y	Absent		SO4-9038(28),BOD-5210(2)
L1845465-03A	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-03B	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)
L1845465-03C	Vial H2SO4 preserved	A	NA		4.1	Y	Absent		TOC-9060(28)

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Serial_No:11131816:44
Lab Number: L1845465
Report Date: 11/13/18

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1845465-03D	Bacteria Cup unpreserved	A	NA		4.1	Y	Absent		HOLD-WETCHEM()
L1845465-03E	Bacteria Cup unpreserved	A	NA		4.1	Y	Absent		HOLD-WETCHEM()
L1845465-03F	Plastic 250ml unpreserved/No Headspace	A	NA		4.1	Y	Absent		ALK-T-2320(14)
L1845465-03G	Plastic 250ml HNO3 preserved	A	<2	<2	4.1	Y	Absent		MN-6020S(180),FE-6020S(180)
L1845465-03H	Plastic 250ml HNO3 preserved	A	<2	<2	4.1	Y	Absent		FE-6020T(180),MN-6020T(180)
L1845465-03I	Plastic 250ml H2SO4 preserved	A	<2	<2	4.1	Y	Absent		COD-410(28),NO3/NO2-4500(28)
L1845465-03J	Plastic 950ml unpreserved	A	7	7	4.1	Y	Absent		SO4-9038(28),BOD-5210(2)

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: 551 GREENWICH ST.**Lab Number:** L1845465**Project Number:** 190043701**Report Date:** 11/13/18**Data Qualifiers**

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845465
Report Date: 11/13/18

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO₃-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH₃-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO₃-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO₄-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L1845465



ANALYTICAL REPORT

Lab Number:	L1845526
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Paul McMahon
Phone:	(212) 479-5429
Project Name:	551 GREENWICH ST.
Project Number:	190043701
Report Date:	11/14/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1845526-01	MW26_110718	WATER	NY, NY	11/07/18 08:10	11/07/18

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Kelly Stenstrom

Title: Technical Director/Representative

Date: 11/14/18

METALS

Project Name: 551 GREENWICH ST.**Lab Number:** L1845526**Project Number:** 190043701**Report Date:** 11/14/18**SAMPLE RESULTS**

Lab ID: L1845526-01

Date Collected: 11/07/18 08:10

Client ID: MW26_110718

Date Received: 11/07/18

Sample Location: NY, NY

Field Prep: None

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total	1.15		mg/l	0.0500	0.0191	1	11/09/18 13:09	11/12/18 12:42	EPA 3005A	1,6020B	AM
Manganese, Total	1.201		mg/l	0.00100	0.00044	1	11/09/18 13:09	11/12/18 12:42	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Iron, Dissolved	0.0690	J	mg/l	0.0750	0.0191	1	11/13/18 15:54	11/14/18 09:44	EPA 3005A	1,6020B	AM
Manganese, Dissolved	1.284		mg/l	0.00100	0.00044	1	11/13/18 15:54	11/14/18 09:44	EPA 3005A	1,6020B	AM



Project Name: 551 GREENWICH ST.

Lab Number: L1845526

Project Number: 190043701

Report Date: 11/14/18

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1177861-1										
Iron, Total	ND		mg/l	0.0500	0.0191	1	11/09/18 13:09	11/12/18 11:18	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	11/09/18 13:09	11/12/18 11:18	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG1178973-1										
Iron, Dissolved	0.0730	J	mg/l	0.0750	0.0191	1	11/13/18 15:54	11/14/18 09:15	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	11/13/18 15:54	11/14/18 09:15	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845526

Report Date: 11/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1177861-2								
Iron, Total	112		-		80-120	-		
Manganese, Total	106		-		80-120	-		
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1178973-2								
Iron, Dissolved	117		-		80-120	-		
Manganese, Dissolved	109		-		80-120	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1177861-3 QC Sample: L1845671-01 Client ID: MS Sample												
Iron, Total	0.115	1	1.21	110		-	-		75-125	-		20
Manganese, Total	0.00769	0.5	0.5270	104		-	-		75-125	-		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1178973-3 QC Sample: L1846074-06 Client ID: MS Sample												
Iron, Dissolved	0.561	1	1.75	119		-	-		75-125	-		20
Manganese, Dissolved	1.588	0.5	1.996	82		-	-		75-125	-		20

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1845526
Report Date: 11/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1177861-4 QC Sample: L1845671-01 Client ID: DUP Sample						
Iron, Total	0.115	0.149	mg/l	26	Q	20
Manganese, Total	0.00769	0.00681	mg/l	12		20

INORGANICS & MISCELLANEOUS

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

SAMPLE RESULTS

Lab ID: L1845526-01
Client ID: MW26_110718
Sample Location: NY, NY

Date Collected: 11/07/18 08:10
Date Received: 11/07/18
Field Prep: None

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Alkalinity, Total	296.		mg CaCO3/L	2.00	NA	1	-	11/08/18 09:53	121,2320B	BR
Nitrogen, Nitrate/Nitrite	3.9		mg/l	0.10	0.033	1	-	11/09/18 23:49	121,4500NO3-F	MR
Sulfate	94.		mg/l	50	6.8	5	11/08/18 15:52	11/08/18 15:52	1,9038	BR
Chemical Oxygen Demand	120		mg/l	20	6.0	1	11/08/18 17:20	11/08/18 20:01	44,410.4	TL
BOD, 5 day	ND		mg/l	2.0	NA	1	11/08/18 22:10	11/13/18 20:40	121,5210B	CW
Total Organic Carbon	2.4		mg/l	1.0	0.23	2	-	11/12/18 13:13	1,9060A	DW



Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1177324-1										
Alkalinity, Total	ND		mg CaCO ₃ /L	2.00	NA	1	-	11/08/18 09:53	121,2320B	BR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1177370-1										
Sulfate	1.7	J	mg/l	10	1.4	1	11/08/18 15:52	11/08/18 15:52	1,9038	BR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1177528-1										
Chemical Oxygen Demand	ND		mg/l	20	6.0	1	11/08/18 17:20	11/08/18 19:58	44,410.4	TL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1177586-1										
BOD, 5 day	ND		mg/l	2.0	NA	1	11/08/18 22:10	11/13/18 20:40	121,5210B	CW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1177931-1										
Nitrogen, Nitrate/Nitrite	ND		mg/l	0.10	0.033	1	-	11/09/18 20:03	121,4500NO ₃ -F	MR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1178407-1										
Total Organic Carbon	ND		mg/l	0.50	0.11	1	-	11/12/18 09:24	1,9060A	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845526

Report Date: 11/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1177324-2								
Alkalinity, Total	102		-		90-110	-		10
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1177370-2								
Sulfate	95		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1177528-2								
Chemical Oxygen Demand	98		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1177586-2								
BOD, 5 day	97		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1177931-2								
Nitrogen, Nitrate/Nitrite	108		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1178407-2								
Total Organic Carbon	90		-		90-110	-		

Matrix Spike Analysis **Batch Quality Control**

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845526

Report Date: 11/14/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177324-4 QC Sample: L1845496-03 Client ID: MS Sample												
Alkalinity, Total	92.6	100	195	102		-	-		86-116	-		10
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177370-4 QC Sample: L1845601-03 Client ID: MS Sample												
Sulfate	100	500	600	101		-	-		55-147	-		14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177528-3 QC Sample: L1845496-03 Client ID: MS Sample												
Chemical Oxygen Demand	ND	238	250	104		-	-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177586-4 QC Sample: L1845602-01 Client ID: MS Sample												
BOD, 5 day	ND	100	110	109		-	-		50-145	-		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177931-4 QC Sample: L1845526-01 Client ID: MW26_110718												
Nitrogen, Nitrate/Nitrite	3.9	4	7.8	95		-	-		80-120	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1178407-4 QC Sample: L1845800-16 Client ID: MS Sample												
Total Organic Carbon	160	400	560	100		-	-		80-120	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 551 GREENWICH ST.

Project Number: 190043701

Lab Number: L1845526

Report Date: 11/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177324-3 QC Sample: L1845496-01 Client ID: DUP Sample						
Alkalinity, Total	115.	116	mg CaCO3/L	1		10
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177370-3 QC Sample: L1845601-03 Client ID: DUP Sample						
Sulfate	100	100	mg/l	0		14
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177528-4 QC Sample: L1845496-03 Client ID: DUP Sample						
Chemical Oxygen Demand	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177586-3 QC Sample: L1845602-01 Client ID: DUP Sample						
BOD, 5 day	ND	ND	mg/l	NC		35
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1177931-3 QC Sample: L1845526-01 Client ID: MW26_110718						
Nitrogen, Nitrate/Nitrite	3.9	4.0	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1178407-3 QC Sample: L1845800-16 Client ID: DUP Sample						
Total Organic Carbon	160	150	mg/l	6		20

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Serial_No:11141814:10
Lab Number: L1845526
Report Date: 11/14/18

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1845526-01A	Vial H2SO4 preserved	A	NA		4.0	Y	Absent		TOC-9060(28)
L1845526-01B	Vial H2SO4 preserved	A	NA		4.0	Y	Absent		TOC-9060(28)
L1845526-01C	Vial H2SO4 preserved	A	NA		4.0	Y	Absent		TOC-9060(28)
L1845526-01D	Plastic 250ml unpreserved/No Headspace	A	NA		4.0	Y	Absent		ALK-T-2320(14)
L1845526-01E	Plastic 250ml H2SO4 preserved	A	<2	<2	4.0	Y	Absent		COD-410(28),NO3/NO2-4500(28)
L1845526-01F	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		HOLD-METAL-DISSOLVED(180)
L1845526-01G	Plastic 250ml HNO3 preserved	A	<2	<2	4.0	Y	Absent		FE-6020T(180),MN-6020T(180)
L1845526-01H	Plastic 950ml unpreserved	A	7	7	4.0	Y	Absent		SO4-9038(28),BOD-5210(2)
L1845526-01Q	Plastic 120ml HNO3 preserved Filtrates	A	NA		4.0	Y	Absent		MN-6020S(180),FE-6020S(180)

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: 551 GREENWICH ST.
Project Number: 190043701

Lab Number: L1845526
Report Date: 11/14/18

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg. EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3286		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 11/7/18		ALPHA Job # L1845526													
		Project Information Project Name: <u>SSI Greenwich St</u> Project Location: <u>NY NY</u> Project # <u>190543704</u> (Use Project name as Project #) ☐		Deliverables ☐ ASP-A ☐ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other		Billing Information ☒ Same as Client Info PO #															
Client Information Client: <u>LANGAN</u> Address: <u>360 W. 31st St 8FL</u> <u>NY NY</u> Phone: <u>212-479-5400</u> Fax: _____ Email: <u>PmcMahon@langan.com</u>		Project Manager: <u>Paul McMahon</u> ALPHAQuote #: _____ Turn-Around Time Standard ☐ Due Date: _____ Rush (only if pre approved) ☐ # of Days: _____		Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:															
These samples have been previously analyzed by Alpha ☐						ANALYSIS COD, BOD, TOC, ALKALINITY SULFIDE, nitrate/nitrite Iron (total + dissolved) manganese (total + dissolved)		Sample Filtration ☐ Done ☐ Lab to do ☒ Lab to do (Please Specify below)		Total Bottle											
Other project specific requirements/comments: Please specify Metals or TAL.								Sample Specific Comments													
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection Date Time		Sample Matrix		Sampler's Initials													
45526-01		MW26-110718		11/7/18 0810		GW		DP		X X X											
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type Preservative														Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
				Relinquished By:		Date/Time		Received By:		Date/Time											
				DP		11/7/18 12:00		K. Santos		11/7/18 12:00											
				D. Santos APL		11/7/18 13:20		D. Santos APL		11/7/18 18:30											
				D. Santos APL		11/7/18 22:30				11/7/18 22:30											

ANALYTICAL REPORT

Job Number: 420-145223-1

SDG Number: L1845533

Job Description: Alpha Analytical, Inc.

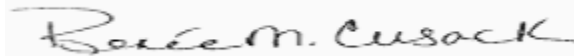
For:

Alpha Analytical

8 Walkup Drive

Westborough, MA 01581

Attention: Subcontract Reports



Renee Cusack

Lab Director

rcusack@envirotestlaboratories.com

11/12/2018

NYSDOH ELAP does not certify for all parameters. EnviroTest Laboratories does hold certification for all analytes where certification is offered by ELAP unless otherwise specified in the Certification Information section of this report. Pursuant to NELAP, this report may not be reproduced, except in full, without written approval of the laboratory. EnviroTest Laboratories Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our laboratory. All questions regarding this report should be directed to the EnviroTest Customer Service Representative.

EnviroTest Laboratories, Inc. Certifications and Approvals: NYSDOH 10142, NJDEP NY015, CTDOH PH-0554

METHOD SUMMARY

Client: Alpha Analytical

Job Number: 420-145223-1

SDG Number: L1845533

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Heterotropic Plate Count	EnvTest	IDEXX SIMPLATE	

Lab References:

EnvTest = EnviroTest

Method References:

IDEXX =

METHOD / ANALYST SUMMARY

Client: Alpha Analytical

Job Number: 420-145223-1

SDG Number: L1845533

Method	Analyst	Analyst ID
IDEXX SIMPLATE	Lacy, Megan	ML

SAMPLE SUMMARY

Client: Alpha Analytical

Job Number: 420-145223-1

SDG Number: L1845533

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
420-145223-1	MW02_110718	Water	11/07/2018 1040	11/07/2018 1430
420-145223-2	MW03_110718	Water	11/07/2018 1125	11/07/2018 1430
420-145223-3	MW05_110718	Water	11/07/2018 1200	11/07/2018 1430
420-145223-4	MW26_110718	Water	11/07/2018 0810	11/07/2018 1430

SAMPLE RESULTS

Subcontract Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

Job Number: 420-145223-1
Sdg Number: L1845533

Client Sample ID: MW02_110718
Lab Sample ID: 420-145223-1

Date Sampled: 11/07/2018 1040
Date Received: 11/07/2018 1430
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: SIMPLATE					
Heterotrophic Plate Count	560	CFU/mL	2.0	2.0	1.0

Subcontract Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

Job Number: 420-145223-1
Sdg Number: L1845533

Client Sample ID: MW03_110718
Lab Sample ID: 420-145223-2

Date Sampled: 11/07/2018 1125
Date Received: 11/07/2018 1430
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: SIMPLATE					
Heterotrophic Plate Count	620	CFU/mL	2.0	2.0	1.0

Subcontract Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

Job Number: 420-145223-1
Sdg Number: L1845533

Client Sample ID: MW05_110718
Lab Sample ID: 420-145223-3

Date Sampled: 11/07/2018 1200
Date Received: 11/07/2018 1430
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: SIMPLATE					
Heterotrophic Plate Count	>738	CFU/mL	2.0	2.0	1.0

Date Analyzed: 11/07/2018 1737

Subcontract Reports
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

Job Number: 420-145223-1
Sdg Number: L1845533

Client Sample ID: MW26_110718
Lab Sample ID: 420-145223-4

Date Sampled: 11/07/2018 0810
Date Received: 11/07/2018 1430
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	RL	Dilution
Method: SIMPLATE					
Heterotrophic Plate Count	510	CFU/mL	2.0	2.0	1.0

DATA REPORTING QUALIFIERS

Client: Alpha Analytical

Job Number:
Sdg Number: L1845533

Lab Section	Qualifier	Description
Biology	U	The analyte was analyzed for but not detected at or above the lowest stated limit.

Definitions and Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Percent Recovery
DL, RA, RE	Indicates a Dilution, Reanalysis or Reextraction.
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit - an estimate of the minimum amount of a substance that an analytical process can reliably detect. A MDL is analyte- and matrix-specific and may be laboratory-dependent.
ND	Not detected at the reporting limit (or MDL if shown).
QC	Quality Control
RL	Reporting Limit - the minimum levels, concentrations, or quantities of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence.
RPD	Relative Percent Difference - a measure of the relative difference between two points

PAGE 1 OF 1

Westborough, MA	Mansfield, MA
TEL: 508-898-9220	TEL: 508-822-9300
FAX: 508-898-9193	FAX: 508-822-3288

Date Rec'd in Lab:

ALPHA Job #:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Total P														Sample Specific Comments
		Date	Time																	
①	MW02_110718	11/7/18	10:40	GW	DP	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
②	MW03_110718	11/7/18	11:25	GW	DP	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
③	MW05_110718	11/7/18	12:00	GW	DP	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
④	MW26_110718	11/7/18	08:10	GW	DP	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

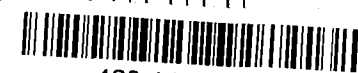


420-145223-A-1

MW02_110718

Date Sampled: 11/7/2018

420-1268016



420-145223-A-1

MW02 110718

Date Sampled: 11/7/2018

420-1268016

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

IR4 2.5°C

LOGIN SAMPLE RECEIPT CHECK LIST

Client: Alpha Analytical

Job Number: 420-145223-1

SDG Number: L1845533

Login Number: 145223

Question	T/F/NA	Comment
Samples were collected by ETL employee as per SOP-SAM-1	NA	
The cooler's custody seal, if present, is intact.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is recorded.	True	2.5 C
Cooler Temp. is within method specified range.(0-6 C PW, 0-8 C NPW, or BAC <10 C	True	
If false, was sample received on ice within 6 hours of collection.	NA	
Based on above criteria cooler temperature is acceptable.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	NA	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

NEW YORK CHAIN OF CUSTODY

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers

Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page

1 of 1

Date Rec'd
in Lab

11/7/18

ALPHA Job #

11845533

Project Information

Project Name: 551 Greenwich St

Project Location: Manhattan NY

Project # 190049701

(Use Project name as Project #) ☐

Project Manager: Paul McMahon

ALPHAQuote #:

Turn-Around Time

Standard ☐

Due Date:

Rush (only if pre approved) ☐

of Days:

Deliverables:

☐ ASP-A

☐ ASP-B

☐ EQUIS (1 File)

☐ EQUIS (4 File)

☐ Other

Billing Information

☒ Same as Client Info

PO #

Client Information

Client: LANGAN

Address: 360 W. 31st St 8FL
NY, NY

Phone: 212-479-5400

Fax:

Email: pmcmahon@langan.com

Regulatory Requirement

☐ NY TOGS

☐ NY Part 375

☐ AWQ Standards

☐ NY CP-51

☐ NY Restricted Use

☐ Other

☐ NY Unrestricted Use

☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of
applicable disposal facilities.

Disposal Facility:

☐ NJ

☐ NY

☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Total Plate Count

Sample Filtration

☐ Done

☐ Lab to do

Preservation

☐ Lab to do

(Please Specify below)

Sample Specific Comments

Total Bottle

ALPHA Lab ID
(Lab Use Only)

Sample ID

Collection

Date

Time

Sample
Matrix

Sampler's
Initials

45533 -01 MW02-110718
-02 MW03-110718
-03 MW05-110718
-04 MW26-110718

11/7/18 1040
↓ 1125
↓ 1200
↓ 0810

GW
↓
↓
↓

DP
↓
↓
↓

X
X
X
X

Preservative Code:

A = None
B = HCl
C = HNO₃
D = H₂SO₄
E = NaOH
F = MeOH
G = NaHSO₄
H = Na₂S₂O₃
K/E = Zn Ac/NaOH
O = Other

Container Code

P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935

Mansfield: Certification No: MA015

Container Type

Preservative

Please print clearly, legibly
and completely. Samples can
not be logged in and
turnaround time clock will not
start until any ambiguities are
resolved. BY EXECUTING
THIS COC, THE CLIENT
HAS READ AND AGREES
TO BE BOUND BY ALPHA'S
TERMS & CONDITIONS.
(See reverse side.)

Relinquished By:

Date/Time

Received By:

Date/Time

Paul McMahon
D. Santos

11/7/18 12:00
11/7/18 13:30
11/7/18 2230

Paul McMahon
D. Santos

11/7/18 12:00
11/7/18 1830