REMEDIAL INVESTIGATION WORK PLAN

for

335 BOND STREET
BROOKLYN, NEW YORK
NYSDEC BCP Site No. C224225

Prepared For:

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335 Bond Street
Brooklyn, New York 11231

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January 11, 2015
Langan Project No. 170362501

LANGAN

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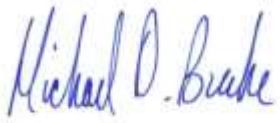
CERTIFICATION

I, Michael Burke, certify that I am currently a Qualified Environmental Professional as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and that this Remedial Investigation Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).



Michael D. Burke, CHMM

1.0 INTRODUCTION

This Remedial Investigation Work Plan (RIWP) was prepared on behalf of E & M Realty Corp. (the Volunteer) for the property located at 335 Bond Street in Brooklyn, New York (the Site). The Volunteer will implement the RIWP for Site No. C224225 under the New York State Brownfield Cleanup Program, pursuant to a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC), executed on August 25, 2015.

The Remedial Investigation (RI) will be conducted in accordance with 6NYCRR Part 375-3.8, New York State Department of Environmental Conservation (NYSDEC) DER-10, and applicable New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. The objectives and goals of the RI will be to:

- Define the nature and extent of contamination in all media at or emanating from the site;
- Generate sufficient data to evaluate the remedial action alternatives; and
- Generate sufficient data to evaluate the actual and potential threats to human health and the environment.

2.0 SITE BACKGROUND

2.1 Site Description

The Site is located at 335 Bond Street in the Gowanus neighborhood of Brooklyn, New York and is identified as Block 445, Lot 1 on the New York City Tax Map. The Site has an area of approximately 0.36 acres, and is occupied by a one-story office building and garage operated by NYC Two Way International, a private car and limousine service. The building includes a partial cellar that houses an inactive aboveground storage tank (AST) in a concrete vault. A Site location map is provided as Figure 1 and the Site boundaries are shown on Figure 2.

2.2 Surrounding Property Land Use

The Site is located in an urban setting that is characterized by residential, commercial and industrial buildings. The Site is bordered by a two-story residential building and an industrial lot to the north; a two-story industrial and commercial building to the east; Carroll Street to the south; and Bond Street to the west. Surrounding properties are predominantly occupied by mixed-use industrial and commercial developments (north, east and south) and residential developments (west).

The nearest ecological receptor is the Gowanus Canal, which is located about 175 feet east of the Site. Sensitive receptors, as defined in DER-10, located within a half mile of the Site include those listed below:

Number	Name (Approximate distance from Site)	Address
1	New Horizons School (approximately 0.13 miles northwest)	317 Hoyt Street Brooklyn, NY 11231
2	P.S. 32 Samuels Mills Sprole School (approximately 0.14 miles northwest)	317 Hoyt Street Brooklyn, NY 11231
3	Rivendell School (approximately 0.25 miles east)	277 3rd Avenue Brooklyn, NY 11215
4	Bethel Day Care Center (approximately 0.30 miles northwest)	242 Hoyt Street Brooklyn, NY 11217
5	New Dawn Charter High School (approximately 0.30 miles northwest)	242 Hoyt Street Brooklyn, NY 11217
6	P.S. 372 The Children's School (approximately 0.30 miles east)	512 Carroll Street Brooklyn, NY 11215
7	Hannah Senesh Community School (approximately 0.30 miles west)	342 Smith Street Brooklyn, NY 11231
8	P.S. 58 The Carroll School (approximately 0.32 miles northwest)	330 Smith Street Brooklyn, NY 11231
9	The Olive Treehouse Group, LLP (approximately 0.33 miles southwest)	413 Smith Street Brooklyn, NY 11231
10	Al Madinah School (approximately 0.33 miles south)	383 3rd Avenue Brooklyn, NY 11215
11	Bumble Bee Daycare (approximately 0.35 miles southeast)	258 4th Avenue Brooklyn, NY 11218
12	Child's Play NY (approximately 0.37 miles west)	389 Court Street Brooklyn, NY 11231
13	Cobble Hill School of American Studies (approximately 0.42 miles north)	347 Baltic Street Brooklyn, NY 11201
14	Wyckoff Gardens Community Center (approximately 0.44 miles northeast)	272 Wyckoff Street Brooklyn, NY 11217
15	Bambi Childcare (approximately 0.45 miles west)	73 3rd Place Brooklyn, NY 11231
16	International School of Brooklyn (approximately 0.47 miles southwest)	477 Court Street Brooklyn, NY 11231

Number	Name (Approximate distance from Site)	Address
17	Court Street AMICO Daycare (approximately 0.47 miles northwest)	292 Court Street Brooklyn, NY 11231
18	Open House Nursery School (approximately 0.47 miles north)	381 Warren Street Brooklyn, NY 111201
19	Strong Place for Hope Day Care Center (approximately 0.47 miles southeast)	333 2nd Street Brooklyn, NY 11215
20	School for International Studies (approximately 0.48 miles northwest)	284 Baltic Street Brooklyn, NY 11201
21	P.S. 133 William A Butler (approximately 0.49 miles northeast)	610 Baltic Street Brooklyn, New York 11217
22	Natalie's Sunflower Academy LLC (approximately 0.50 miles east)	238 5th Avenue Brooklyn, NY 11215
23	J.H.S. 051 William Alexander School (approximately 0.50 miles southeast)	350 5th Avenue Brooklyn, NY 11215

Due to its urban nature, major infrastructure (storm drains, sewers, and underground utility lines) exist around the Site.

2.3 Site Physical Conditions

2.3.1 Topography

According to the United States Geological Survey (USGS) Brooklyn, N.Y. Quadrangle 7.5-minute Series Topographic Map, the Site sits at an elevation of approximately 10 feet above mean sea level (msl)[1]. The topography of the Site is generally level, and the surrounding area slopes gently east toward the Gowanus Canal.

2.3.2 Geology

Soil and bedrock stratigraphy throughout Brooklyn typically consists of a layer of historic fill that overlies glacial till, decomposed unconsolidated bedrock, and bedrock. The USGS "Bedrock and Engineering Geologic Maps of New York County and Parts of Kings and Queens Counties, New York, and Parts of Bergen and Hudson Counties, New Jersey" indicates that the bedrock underlying the Site is part of the Hartland Formation. The Hartland Formation is comprised of mica schist and quartz-feldspar granulite, with localized intrusions of granite and pegmatite. Based on a geotechnical investigation completed by Langan in the vicinity of the Site, the minimum depth of bedrock is expected to be 100 feet below grade surface (bgs).

[1] Mean sea level as defined by the United States Geological Survey National Geodetic Vertical Datum of 1929 (USGS NGVD 1929) at Sandy Hook New Jersey.

According to previous environmental investigations conducted at the Site, the subsurface strata consists of fill material characterized by loose, brown, fine to coarse sand with some brick and concrete fragments, and trace coal ash. The fill layer extended to depths ranging from approximately 4 feet bgs to 8.5 feet bgs and was intersected by layers of degraded concrete and brick at varying depths. The fill layer was underlain by native soil characterized by sand and silty sand.

2.3.3 Hydrogeology

Groundwater flow is typically topographically influenced, as shallow groundwater tends to originate in areas of topographic highs and flows toward areas of topographic lows, such as rivers, stream valleys, ponds, and wetlands. A broader, interconnected hydrogeologic network often governs groundwater flow at depth or in the bedrock aquifer. Groundwater depth and flow direction are also subject to hydrogeologic and anthropogenic variables such as precipitation, evaporation, extent of vegetation cover, and coverage by impervious surfaces. Other factors influencing groundwater include depth to bedrock, the presence of artificial fill, and variability in local geology and groundwater sources or sinks.

According to previous environmental investigations conducted at the Site, the groundwater table is approximately 7 feet bgs. Groundwater is expected to flow east toward the Gowanus Canal.

The Brooklyn-Queens Aquifer is part of the United States Environmental Protection Agency (USEPA)-designated Sole Source Aquifer in Long Island, and has been used as a public water supply in the past, and may again in the future. Groundwater in the Gowanus section of Brooklyn is not used as a potable water source. Potable water provided to the City of New York is derived from surface impoundments in the Croton, Catskill, and Delaware watersheds.

2.3.4 Wetlands

Wetlands on or near the Site were evaluated by reviewing the National Wetlands Inventory and NYSDEC regulated wetlands map. There are no wetlands located on the Site; however, the Gowanus Canal, which is located about 175 feet east of the Site, is identified as an estuarine and marine deepwater wetland.

2.4 Environmental History

Langan reviewed Certified Sanborn Maps dating back to 1886. Findings of the Certified Sanborn Map review, as they relate to the Site, are as follows:

Certified Sanborn Map	Site	Adjacent Properties
1886	A lath and lumber yard operated by Loomis	North: Loomis lumber and lath yard East: John Morton & Sons Lime & Brick Shed w/ multiple stables South: Rankin & Ross Stone Yard West: residential
1904	Materials (i.e., sand) storage for Newton & Co. with a stable noted in the northeast corner of the property	North: Lubricating Oils facility, residences, and the remainder of Newton & Co's property East/South/West: same as above
1915	Lath storage with two sheds identified on the property. Operated by John Morton's Sons & Co. Masons Materials	North: poultry market and residences East: storage and stables for John Morton's Sons & Co. Masons Materials South: same as above West: residences, junk yard & paper storage
1928	Operated by B. Goetz & Bro. – actual operations are not noted, but a Certificate of Occupancy (included with this attachment) from July 25, 1925 notes the property as operating as a public garage	North/East: noted as B. Goetz & Bro. property South/West: no operations noted
1938	The Site footprint is occupied by a garage with two gasoline tanks and three hoses noted on the property.	North: poultry market East: storage and a vacant lot South: garage with three gas tanks noted West: residential and an electric bulb warehouse
1950	Operating as a crating for export. The building is noted as having steel beams and columns, masonry reinforcing columns in the walls, and concrete floors. The three hoses from the 1938 Sanborn are evident, but the gas tanks are no longer noted.	North: residences, iron works, and truck parking East: welding operations and warehouse South: Motor Frt. Sta. West: same as above
1969	The building is now noted as a commercial delivery service.	North: residences, truck parking and repair East: woodworking operations and warehouse South: same as above West: residences, storage warehouse
1981	The building is now noted as manufacturing.	North/East/South/West: same as above
2001	The building is now noted as a car service.	North/East/South/West: same as above

2.5 Summary of Previous Environmental Investigations

Previous environmental investigations at the Site are summarized below:

May 6, 2015 Subsurface Investigation Letter Report, prepared by Langan

The subsurface investigation was implemented on May 2, 2015 and included:

- A geophysical survey to locate potential underground storage tanks (USTs) and other subsurface structures;
- The advancement of five soil borings to depths of up to nine feet bgs and collection of five soil samples;
- Installation of one temporary groundwater monitoring well and collection of one groundwater sample; and,
- Installation of one temporary sub-slab soil vapor sampling point and collection of one soil vapor sample.

The observations, findings, and conclusions of the Subsurface Investigation are summarized below:

- Subsurface Observations:
    - Chlorinated Solvent Impacts – Based on field observations and analytical results, soil, groundwater, and soil vapor has been impacted by chlorinated solvents including tetrachloroethene (PCE).
    - Abandoned Aboveground Storage Tank (AST) – Langan observed an abandoned, approximately 1,000-gallon AST located within a concrete vault in the building basement. Upon observation, the AST was significantly corroded and approximately 3 to 4 inches of standing water was noted at the base of the vault. The fill line associated with the AST was observed to be cut, and evidence of fill port removal operations were observed (i.e., a concrete sidewalk patch) on the adjacent sidewalk along Carroll Street.
    - Potential Drainage Features – One approximately 14-inch by 14-inch perforated, steel plate covering a potential drainage feature was located in the central portion of the garage. Debris including a concrete block, bricks, and soil were observed beneath the steel plate. The top four inches of the potential drainage feature were exposed and appeared to be constructed of the existing concrete slab and brick. A second potential drainage feature was observed approximately 2 feet to the southwest and was covered by an approximately 24-inch by 24-inch solid, steel plate. The function of the potential drainage features is unknown.

- Soil – Below the garage slab, the subsurface strata consists of fill material characterized by loose, brown, fine to coarse sand with some brick and concrete fragments, and trace coal ash. The fill layer extended to depths ranging from approximately 4 to 8.5 feet bgs and was intersected by layers of degraded concrete and brick at varying depths. Native sand and silty sand were observed beneath the fill layer at depth intervals ranging from approximately 4 to 9 feet bgs. A sweet, solvent-like odor was noted in one of the soil borings (SB03) at a depth interval of 5 to 6 feet bgs.

- Analytical Results:
  - Soil – One volatile organic compound (VOC), PCE; three semivolatile organic compounds (SVOCs), benzo(a)anthracene, benzo(k)fluoranthene, chrysene; and five metals, arsenic, copper, lead, nickel, mercury and zinc were detected at concentrations exceeding Unrestricted Use and/or Restricted Use Residential Soil Cleanup Objectives (SCOs).
  - Groundwater – One VOC, cis-1,2-dichloroethene; and five metals, aluminum, iron, manganese, selenium and sodium were detected at concentrations exceeding NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) for Class GA.
  - Soil Vapor – Two VOCs, PCE and trichloroethene (TCE), were detected in soil vapor at concentrations exceeding New York State Department of Health (NYSDOH) Air Guidance Values (AGV).

Subsurface investigation soil, groundwater and soil vapor sample locations and analytical results are presented in Figures 3 through 5. Sample results are also summarized on Tables 1 through 3 of the Investigation Report, which is included in Appendix A.

2.6 Areas of Concern

The site development history and the observations and findings of the May 2015 Subsurface Investigation were used to determine the areas of concern (AOCs) to be further investigated by this RIWP. The AOCs are described below:

AOC 1: Historic Fill

AOC 1 represents a layer of historic fill of unknown origin identified between ground surface and about 4 to 8.5 feet bgs. Analytical data for soil samples collected from this material during the May 2015 Subsurface Investigation indicates the fill material contains VOC, SVOCs and metals in excess of Unrestricted Use and Restricted Use Residential SCOs. The nature and extent of historic fill impacts will be delineated and characterized during the RI.

AOC 2: Historic Site Use

AOC 2 represents historic site uses that included industrial, manufacturing and commercial properties. A parking garage is currently located on the property and historic records indicate the presence of gasoline storage tanks. Impacts related to historic site use will be investigated during the RI.

AOC 3: Potential Gasoline Storage Tanks

AOC 3 represents potential gasoline storage tanks located in the western portion of the Site. Certified Sanborn Maps identify the storage tanks in 1938. Impacts related to the potential gasoline storage tanks will be investigated during the RI.

AOC 4: Drainage Features

AOC 4 represents existing drainage features in the garage area of the Site building. Historic Site use included manufacturing and industrial activities. Chlorinated VOCs were detected in soil, groundwater and soil vapor samples in Langan's May 2015 Subsurface Investigation (SI) in the vicinity of drainage features. Impacts related to the drainage features will be further investigated during the RI to supplement environmental findings from the SI.

AOC 5: Existing On-Site AST

AOC 5 represents an inactive 1,000-gallon AST located in a concrete vault in the partial cellar. Impacts related to the AST will be investigated during the RI.

3.0 SCOPE OF WORK

The objective of this RIWP is the "investigation and characterization of the nature and extent of the contamination within the boundary of the Site", per Environmental Conservation Law Article 27, Title 14 (Brownfield Legislation).

The RI will be conducted in accordance with 6NYCRR Part 375-3.8, NYSDEC DER-10, and applicable NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. The objectives and goals of the RI will be:

- Define the nature and extent of contamination in all media at or emanating from the Site;
- Generate sufficient data to evaluate the remedial action alternatives; and
- Generate sufficient data to evaluate the actual and potential threats to human health and the environment.

The field investigation will include the tasks listed below to supplement the data and findings of the May 2015 Subsurface Investigation. The rationale for each investigation point in relation to the AOCs is provided in Table 1 and in Section 3.2. These tasks are discussed in more detail in the following sections.

- Geophysical Survey
    - Completion of a geophysical survey to identify potential USTs and underground structures and to clear sample locations to avoid subsurface utilities.
- Soil Borings and Sampling
    - Advancement of nine soil borings to approximately 15 feet bgs.
    - Collection of at least two soil samples from each soil boring location for a total of 18 soil samples (plus quality assurance/quality control [QA/QC] sampling).
- Sediment Sampling
    - Collection of one sediment sample from each of the drainage features for a total of up to two sediment samples (plus quality assurance/quality control [QA/QC] sampling).
- Monitoring Well Installation and Sampling
    - Installation of five permanent monitoring wells co-located with five soil boring locations.
    - Collection of one groundwater sample from each monitoring well for a total of five groundwater samples (plus QA/QC sampling).
    - Survey and gauging of monitoring wells to evaluate flow direction.
- Sub-slab Vapor Points Installation and Sampling
    - Installation of two sub-slab soil vapor points.
    - Collection of one soil vapor sample from each sub-slab soil vapor point and one ambient air sample for a total of three samples (plus QA/QC sampling).
- Indoor Air Sampling
    - Completion of a product inventory of interior spaces prior to the soil vapor intrusion (SVI) evaluation to identify any chemicals currently used by tenants that may be detected during vapor sampling.

- Collection of two indoor air samples from common/ office areas of the Site building, paired with the sub-slab soil vapor sample locations, to determine the potential for SVI.

Modifications to this scope of work may be required: 1) due to Site operations, equipment or restrictions; 2) in the event that unexpected contamination is detected and additional analytical data is needed; and 3) to attempt to confirm that impacts are adequately characterized and delineated in compliance with the Brownfield Law, regulations and applicable investigation guidance documents (e.g., DER-10).

The field investigation work will be completed in accordance with the procedures specified in Langan's Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP) provided in Appendices B and C, respectively. The investigation will be performed within the one-story office building and garage that occupy the Site; therefore, a community air monitoring program (CAMP) will not be implemented.

Names, contact information and roles of the principal personnel who will participate in the investigation including the project manager, contractor and subcontractor contacts are listed below.

Personnel	Investigation Role	Contact Information
Michael Burke, CHMM Langan Engineering	Project Director	Phone – 212-479-5413 Email – mburke@langan.com
Jason Hayes, P.E. Langan Engineering	Project Engineer	Phone – 212-479-5427 Email – jhayes@langan.com
Ryan Manderbach, CHMM Langan Engineering	Project Manager	Phone – 212-479-5582 Email – rmanderbach@langan.com
Tony Moffa, CHMM Langan Engineering	Langan Health & Safety Officer	Phone – 215-491-6500 Email – tmoffa@langan.com
Bill Bohrer Langan Engineering	Field Safety Officer	Phone – 410-984-3068 Email – wbohrer@langan.com
Albert Tashji Langan Engineering	Field Team Leader	Phone – 212-549-5527 Email – atashji@langan.com
Nicole Rice Langan Engineering	Quality Assurance Officer	Phone – 212-479-5491 Email – nrice@langan.com
Steve Plofker AARCO Environmental Services Corp.	Drilling Contractor	Phone – 631-586-5900 Email –splofker@aarcoenvironmental.com
Rich August York Analytical	Laboratory Contractor	Phone – 203-325-1371 Email – raugust@yorklab.com
Emily Strake Langan Engineering	Data Validator	Phone – 215-491-6526 Email – estrake@langan.com

3.1 Geophysical Survey

A geophysical contractor will be retained to clear boring locations of potential subsurface utilities and structures across the site. The geophysical survey will be completed using a range of geophysical instruments, including electromagnetic and utility line locator instruments, and ground-penetrating radar (GPR). The results of the survey may necessitate relocation of boring locations.

3.2 Soil Investigation

An environmental drilling subcontractor will advance nine soil borings (designated SB06 through SB14). Limited access drilling equipment will be used to advance soil borings inside the building. Soil boring locations are shown on Figure 6. The purpose of these borings is to further investigate AOCs identified in Section 2.6 and supplement the Subsurface Investigation performed in May, 2015. The table below indicates which boring is associated with each AOC.

AOC	Associated Soil Boring
AOC 1 – Historic Fill	SB08, SB10, SB12, SB14
AOC 2 – Historic Site Use	SB06, SB07, SB09, SB11, SB13
AOC 3 – Potential Gas Tanks	SB06
AOC 4 – Drainage Features	SB07 and SB09
AOC 5 – Existing On-Site AST	SB11 and SB13

The soil borings will be advanced using direct-push drilling methodologies. A Langan engineer/scientist will document the work, screen the soil samples for environmental impacts, and collect environmental samples for laboratory analyses. Soil will be screened continuously to the boring termination depth for organic vapors with a PID equipped with a 11.7 electron volt (eV) bulb, and for visual and olfactory indications of environmental impacts (e.g., staining and odor). Soil descriptions will be recorded in a field log. Work will comply with the safety guidelines outlined in the HASP (Appendix B). Non-disposable, down-hole drilling equipment and sampling apparatus will be decontaminated between locations with Alconox® and water.

Two grab soil samples will be collected for laboratory analysis from each boring location to further investigate AOCs and to provide vertical and horizontal delineation of identified impacts. For AOC 1, samples will be collected from shallow fill (upper two feet of soil beneath the concrete slab) and from the bottom of historic fill. For AOCs 2 through 5, samples will be collected from the interval of the greatest observable impact (staining, odor, PID readings above background) and from the interval immediately beneath impacted soil that does not exhibit signs of contamination. Sampling will be biased toward intervals where visual, olfactory,

or instrumental evidence of a chemical or petroleum release are apparent. Additional samples may be collected based on field conditions. Non-disposable, down-hole drilling equipment and sampling apparatus will be decontaminated between locations with Alconox and water.

The samples will be collected in laboratory-supplied containers and will be sealed, labeled, and placed in a cooler containing ice (to maintain a temperature of approximately four degrees Celsius) for delivery to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. Soil samples will be analyzed for 6 NYCRR Part 375 List (Part 375)/Target Compound List (TCL) VOCs, SVOCs, PCBs, and pesticides, and Part 375/Target Analyte List (TAL) metals. If free product is encountered, representative samples of the product will be collected for laboratory fingerprint analysis. QA/QC procedures to be followed are described in the QAPP provided as Appendix C.

3.3 Drainage Feature Sediment Investigation

One grab sediment sample will be collected for laboratory analysis from each drainage feature to further investigate AOC 4. Following sample collection, debris within the drainage features, if any, will be removed to determine if they have concrete or soil bottoms, or if drain pipes are present. Drain pipes will be traced if observed.

The samples will be collected in laboratory-supplied containers and will be sealed, labeled, and placed in a cooler containing ice (to maintain a temperature of approximately four degrees Celsius) for delivery to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. Sediment samples will be analyzed for 6 NYCRR Part 375 List (Part 375)/Target Compound List (TCL) VOCs. QA/QC procedures to be followed are described in the QAPP provided as Appendix C.

3.3 Groundwater Investigation

Five of the proposed borings (SB06, SB09 through SB11, and SB14) will be converted into permanent groundwater monitoring wells (MW06, MW09 through MW11, and MW14, respectively). Proposed monitoring well locations are shown on Figure 6. All monitoring wells will be used to investigate AOC 2. Monitoring well MW06 will be installed to investigate AOC 3, MW09 and MW10 will be installed to investigate AOC 4, and MW11 will be installed to investigate AOC 5.

Soil conditions will be screened, logged and sampled as described in Section 3.2. The wells will be constructed using 2-inch diameter polyvinyl chloride (PVC) riser pipe with 0.02-inch slotted screens. Monitoring well screens will be set to straddle the observed groundwater table. The well annulus around the screen will be backfilled with No. 2 sand up to approximately 2 feet above the top of the screen. A minimum 1-foot bentonite seal will be

installed above the sand pack, and the borehole annulus will be grouted to the surface with bentonite/cement slurry. The wells will be finished with flush-mounted metal manhole covers.

Following installation, the wells will be developed by surging a weighted bailer across the well screen to agitate and remove fines. The bailer will be surged across the well screen in 2- to 3-foot increments for approximately 2 minutes per increment. After surging, the well will be purged via pumping until the water becomes clear (having turbidity less than 50 Nephelometric Turbidity Units [NTU]). The well will then be allowed to sit for a minimum of one week.

One groundwater sample will be collected from each of the five wells. Prior to sampling, the monitoring wells will be gauged for static water levels, each well will be purged, and physical and chemical parameters (e.g., temperature, dissolved oxygen, oxygen reduction potential, turbidity) will be allowed to stabilize to the ranges specified in the United States Environmental Protection Agency's (USEPA's) Low Stress Purging and Sampling Procedure for the Collection of Groundwater Samples From Monitoring Wells, Dated July 30, 1996 and Revised January 19, 2010. Samples will be collected with a submersible monsoon pump or equivalent and dedicated polyethylene tubing. The pump will be decontaminated with Alconox® and water between each sample location. Development and purge water will be containerized for off-Site disposal.

Groundwater samples will be analyzed for Part 375/TCL VOCs, SVOCs, PCBs, and pesticides, and Part 375/ TAL total and dissolved metals. QA/QC procedures are described in the QAPP provided as Appendix C.

3.4 Monitoring Well Survey

Langan will survey the location and elevation of the groundwater monitoring wells (top of casing elevations). This data will be used with the groundwater well gauging data to prepare a groundwater contour map and document the direction of groundwater flow. Vertical control will be established by surveying performed relative to the North American Vertical Datum of 1988 (NAVD88) by a New York State-licensed land surveyor. Elevations of the top of monitoring well casings and protective well casings will be surveyed to the nearest 0.01 foot.

3.5 Soil Vapor Air Investigation

A soil vapor investigation will be completed investigate soil gas immediately below the slab, consisting of the installation of two sub-slab soil vapor sampling points (designated SS01 and SS02). Proposed soil vapor sampling point locations are shown on Figure 6. All soil vapor points will be used to investigate AOCs 2 through 5. Soil vapor sampling will be conducted in accordance with the October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. An environmental driller will install each point to a maximum depth of 6 inches

below the existing building slab. Each soil vapor sample location will consist of a new, dedicated stainless-steel screen implant connected to polyethylene or Teflon tubing. Clean sand filter pack will be placed around the screen implant. The remaining annular space will be backfilled to grade with hydrated bentonite. The seal on the vapor points will be checked with a helium tracer gas test both before and after sample collection.

Prior to sampling, three well volumes will be purged from the point using a MultiRAE multi-gas monitor at a rate of less than 0.2 liters per minute. The multi-gas monitor will also be used to screen the soil vapor for the presence of VOCs. Following purging, each soil vapor point will be sampled using laboratory-provided, 6-Liter air canisters equipped with 2-hour sample interval flow controllers. Soil vapor samples will be analyzed for VOCs by USEPA Method TO-15. QA/QC procedures to be followed are described in the QAPP provided as Appendix C, and include the collection of one outdoor ambient air sample.

3.6 Indoor Air Investigation

Indoor air sampling will be conducted in general accordance with the NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in New York. Prior to sample collection, a NYSDOH Indoor Air Quality Questionnaire and Building Survey will be completed to document the potential presence of equipment or chemicals in the "Green Building" that could interfere with the laboratory analytical results. The building will be screened with a PID that can detect organic vapors at concentrations of parts per billion (ppb) during the survey.

Approximately 48 hours prior to sample collection, the building should be ventilated either with commercial grade fans, an increase in the heating, ventilation, and air conditioning (HVAC) system air exchange rate, or a combination of the two methods. Ventilation should be conducted for 24 hours, with a minimum 24-hour window between the termination of ventilation and sample collection. All windows and exterior doors will remain closed and the sample area should be sealed with limited usage during the 24-hour window and during sample collection.

The indoor air sample will be collected into individually certified-clean Summa canister that is calibrated for an 8-hour sampling period. The sample will be submitted to an NYSDOH Environmental Laboratory Approval Program certified laboratory for analysis of VOCs via EPA Method TO-15 with selective ion monitoring (SIM).

3.7 Data Management and Validation

All laboratory analyses of soil, groundwater, and soil vapor samples will be conducted by a NYSDOH ELAP-approved laboratory. Laboratory analyses will be conducted in accordance with USEPA SW-846 methods and NYSDEC Analytical Services Protocol (ASP) B deliverable format.

Environmental data will be reported electronically using the database software application EQuIS as part of NYSDEC's Environmental Information Management System (EIMS).

Table 1 summarizes the anticipated samples and analytes for laboratory analysis. We will follow the QA/QC procedures required by the NYSDEC ASP and SW-846 methods, including initial and continuing instrument calibrations, standard compound spikes, surrogate compound spikes, and analysis of other samples (blanks, laboratory control samples, and matrix spikes/matrix spike duplicates). The laboratory will provide sample bottles, which have been pre-cleaned and preserved in accordance with the SW-846 methods. Where there are differences in the SW-846 and NYSDEC ASP requirements, the NYSDEC ASP shall take precedence.

We will perform data validation in accordance with the USEPA validation guidelines for organic and inorganic data review. Validation will include the following:

- Verification of QC sample results (both qualitative and quantitative).
- Verification of sample results (both positive hits and non-detects).
- Recalculation of 10 percent of all investigative sample results.
- Preparation of Data Usability Summary Report (DUSR).

The DUSR will be prepared and reviewed by the Program Quality Assurance Monitor (PQAM) before issuance. The DUSR will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and Chain of Custody (COC) procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. A detailed assessment of each sample delivery group (SDG) will follow. Additional details on the DUSR are provided in the QAPP in Appendix C.

3.8 Management of Investigation-Derived Waste

Soil cuttings and groundwater investigation-derived wastes (IDW) will be containerized and disposed properly at an off-Site facility. Soil to be disposed off-Site will be placed in 55-gallon, Department of Transportation (DOT) approved drums. Decontamination and well development/purging fluids will be placed in DOT-approved fluid drums with closed tops. All drums will be properly labeled, sealed, and waste characterized as necessary. The drums will be staged in a secure area on site, pending disposal to an appropriate disposal facility upon receipt of analytical results.

3.9 Air Monitoring

We will conduct air monitoring of the breathing zone periodically during all drilling and sampling activities to document health and safety protection for the work team[2]. We will monitor VOCs with a PID, MultiRAE Plus PGM-50, or equivalent, in accordance with the HASP (Appendix B). If air monitoring during intrusive operations identifies the presence of VOCs, we will follow the guidelines outlined in the HASP, regarding action levels, permissible exposure, engineering controls, and personal protective equipment. If the VOCs action level is exceeded, work will cease and the work location will be evacuated. Monitoring will be continued until the levels drops to safe limits. At that time, work can resume with continued monitoring. If high levels persist, field activities will be halted and the work relocated to another area. If dust emissions are observed, work will stop and dust suppression measures will be used. Periodic air monitoring results and mitigation measures taken, if any, will be recorded in the field book during the investigation activities.

We will also conduct periodic monitoring for VOCs during non-intrusive activities such as the collection of groundwater samples. Periodic monitoring may include obtaining measurements upon arrival at a location, when opening a monitoring well cap, when bailing/purging a well, as well as upon departure from the location.

Since the proposed work is planned to be performed inside the building, CAMP will not be implemented.

3.10 Qualitative Human Health Exposure Assessment

A Qualitative Human Health Exposure Assessment will be conducted in accordance with Appendix 3B of the NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation. The assessment will be submitted in the Remedial Investigation Report (RIR).

4.0 REMEDIAL INVESTIGATION REPORT

Following completion of the RI and receipt of analytical data, an RIR will be prepared. The report will include: 1) a summary of the Site history and previous investigations; 2) description of Site conditions and this remedial investigation; 3) evaluation of the results and findings; and 4) conclusions and recommendations. Additionally, the Standards, Criteria, and Guidance (SCGs) which pertain to the Site location and contaminants, as well as potential remedial action objectives, will be identified in the report. The soil boring and well and soil vapor point construction logs, sampling logs, and laboratory analytical reports will be appended to the report. Conclusions and recommendations will be provided that: 1) summarize the nature and

[2] Each Contractor and Subcontractor performing work on Site shall comply with its own Site-specific or task-specific HASP for its organization, that at a minimum complies with federal, state and local regulation and the HASP attached to the RIWP.

extent of potential impact for each areas of concern; 2) identify unacceptable exposure pathways (as determined through a Qualitative Human Health Exposure Assessment); and 3) recommend future work or remedial actions, as required.

The sampling results that exceed Unrestricted Use and Restricted Commercial Use SCOs, the groundwater standards or other applicable SCGs will be summarized in tables (organized by areas of concern). The tables will include sample location, media sampled, sample depth, field/laboratory identification numbers, analytical results and the applicable SCG for comparison. Scaled Site maps will be used to show the boring, monitoring well, and soil vapor point locations, SCG exceedances, groundwater elevation contours, groundwater flow direction, and, if appropriate, groundwater contaminant concentration contours.

5.0 SCHEDULE

The table below presents an estimated schedule for the proposed remedial investigation and reporting. If the schedule changes, it will be updated and submitted to NYSDEC.

Schedule Milestone	Weeks from Submittal of RIWP	Duration (weeks)
Prepare and Submit RIWP	0	-
DEC Preliminary Review/Revision of RIWP	0	4
RIWP 30-day Public Comment Period	4	4
Final RIWP Revisions and DEC Approval	8	2
Mobilization	10	2
Field Work (drilling, well installation, surveying, sampling)	12	2
Lab Analysis	14	2
Report Preparation	16	6
Report Submittal	22	-

TABLES

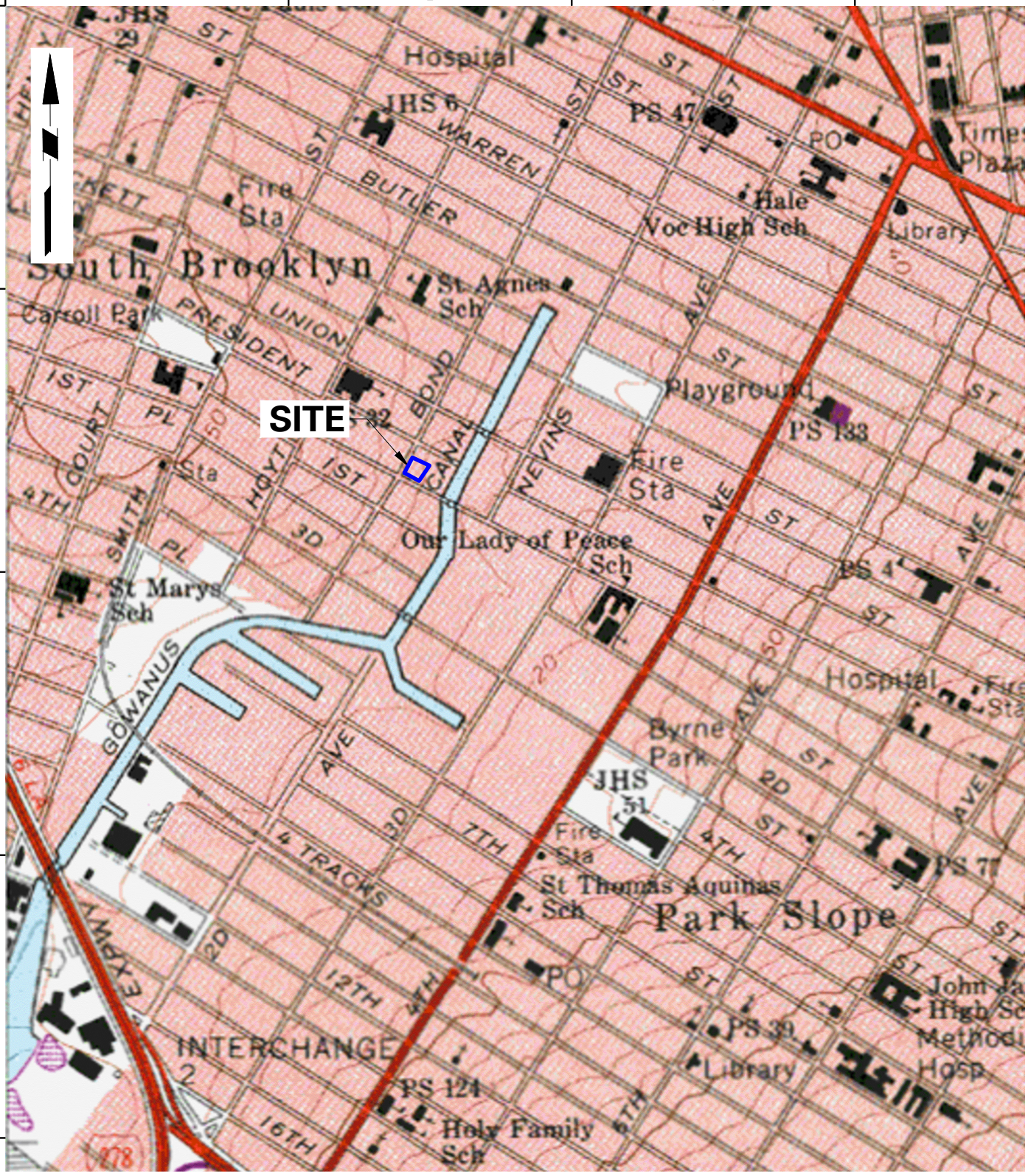
Table 1
Proposed Sample Summary Table
335 Bond Street Brooklyn, NY
Langan Project No. 170632501
NYSDEC BCP No. C224225

No.	Sample Name	Boring Location	Sample Depth(feet bgs)	Rationale	Analysis
SOIL					
1	SB06_XX-XX	SB06	Greatest Observable Impact	Investigate AOC 2, AOC 3 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
2	SB06_XX-XX		Immediately Beneath Impacts		
3	SB07_XX-XX	SB07	Greatest Observable Impact	Investigate AOC 2, AOC4 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
4	SB07_XX-XX		Immediately Beneath Impacts		
5	SB08_0-2	SB08	Shallow Fill	Investigate AOC 1 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
6	SB08_XX-XX		Bottom of Fill		
7	SB09_XX-XX	SB09	Greatest Observable Impact	Investigate AOC 2, AOC4 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
8	SB09_XX-XX		Immediately Beneath Impacts		
9	SB10_0-2	SB10	Shallow Fill	Investigate AOC 1 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
10	SB10_XX-XX		Bottom of Fill		
11	SB11_XX-XX	SB11	Greatest Observable Impact	Investigate AOC 2, AOC 5 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
12	SB11_XX-XX		Immediately Beneath Impacts		
13	SB12_0-2	SB12	Shallow Fill	Investigate AOC 1 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
14	SB12_XX-XX		Bottom of Fill		
15	SB13_XX-XX	SB13	Greatest Observable Impact	Investigate AOC 2, AOC 5 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
16	SB13_XX-XX		Immediately Beneath Impacts		
17	SB14_0-2	SB14	Shallow Fill	Investigate AOC 1 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
18	SB14_XX-XX		Bottom of Fill		
19	SBDUP01_date	TBD	-	QA/QC	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
20	MS/MSD-SB01_date	TBD			
21	SBFB01_date	NA			
22	SBTB01_date	NA			Part 375/TCL VOCs
SEDIMENT					
1	SD01_XX-XX	NA	Greatest Observable Impact	Investigate AOC 4.	Part 375/ TCL VOCs
2	SD02_XX-XX	NA	Greatest Observable Impact	Investigate AOC4.	Part 375/ TCL VOCs
GROUNDWATER					
1	MW06_date	MW06	Straddle water table	Investigate AOC 2, AOC 3 and Close Data Gap.	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
2	MW09_date	MW09		Investigate AOC 2, AOC4 and Close Data Gap.	
3	MW10_date	MW10		Investigate AOC 2, AOC4 and Close Data Gap.	
4	MW11_date	MW11		Investigate AOC 2, AOC 5 and Close Data Gap.	
5	MW14_date	MW14		Investigate AOC 2 and Close Data Gap.	
6	GWDUP01_date	TBD	-	QA/QC	Part 375/ TCL VOCs, SVOCs, PCBs, Pesticides and Part 375/ TAL Total and Dissolved Metals
7	MS/MSD-GW01_date	TBD			
8	GWFB01_date	NA			
9	GWTB01_date	NA			TCL VOC
SUB-SLAB SOIL VAPOR					
1	SS01_date	SS01	Below basement slab	Investigate AOC 2, AOC 3, AOC 4, AOC 5 and Close Data Gap.	TO-15 VOCs
2	SS02_date	SS02	Below basement slab	Investigate AOC 2, AOC 3, AOC 4, AOC 5 and Close Data Gap.	TO-15 VOCs
3	SVDUP01_date	TBD	Below basement slab	QA/QC	TO-15 VOCs
4	AA01_date	NA	Ambient Air		TO-15 VOCs
INDOOR AIR					
1	IA01_date	IA01	Indoor Air	Investigate Potential for Soil Vapor Intrusion	TO-15 VOCs
2	IA02_date	IA02	Indoor Air	Investigate Potential for Soil Vapor Intrusion	TO-15 VOCs

Notes:

1. Full list includes Part 375 Total Compound List (TCL) - list of VOCs, SVOCs and pesticides, and Part 375 Total Analyte List (TAL) metals.
2. All volatile soil samples will be collected using Encore or Terra Core sampler kits.
3. TO-15 - Compendium Method TO-15 used to determin toxic organic compounds in soil vapor and ambient air samples.
4. AOC - area of concern
5. VOCs- Volatile organic compounds
6. SVOCs- Semivolatile organic compounds
7. PCBs - Polychlorinated Biphenyls
8. TCL- Target compound list
9. TAL - Target analyte list
10. QA/QC- Quality assurance/quality control
11. bgs - below grade surface
12. SBTB01-date* = one trip blank sample per each cooler containing samples being analyzed for Part 375/TCL VOCs.

FIGURES



MAP REFERENCE: USGS 7.5-MINUTE BROOKLYN, N.Y., TOPOGRAPHIC QUADRANGLE, DATED 1967, REVISED 1979

LANGAN

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Langan International LLC
Collectively known as Langan

Project

335 BOND STREET

BLOCK No. 445, LOT No. 1
BROOKLYN

KINGS NEW YORK

Figure Title

SITE LOCATION MAP

Project No.	170362501
Date	05/01/2015
Scale	NTS
Drawn By	MLR
Checked By	RM
Submission Date	

Figure 1

Sheet 1 of 6

Filename: \\langan.com\data\NY\data5\170362501\Cadd Data - 170362501\2D-DesignFiles\BCP App\Figure 1 - Site Location Map.dwg Date: 9/28/2015 Time: 08:57 User: arosenblatt Style Table: Langan.stb Layout: ANSIA-BP

LEGEND:

SITE BOUNDARY

NOTES :

1. DATA, PROPERTY BOUNDARIES, AND BUILDING LOCATIONS ARE APPROXIMATE.

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BLOCK No. 445, LOT No. 1
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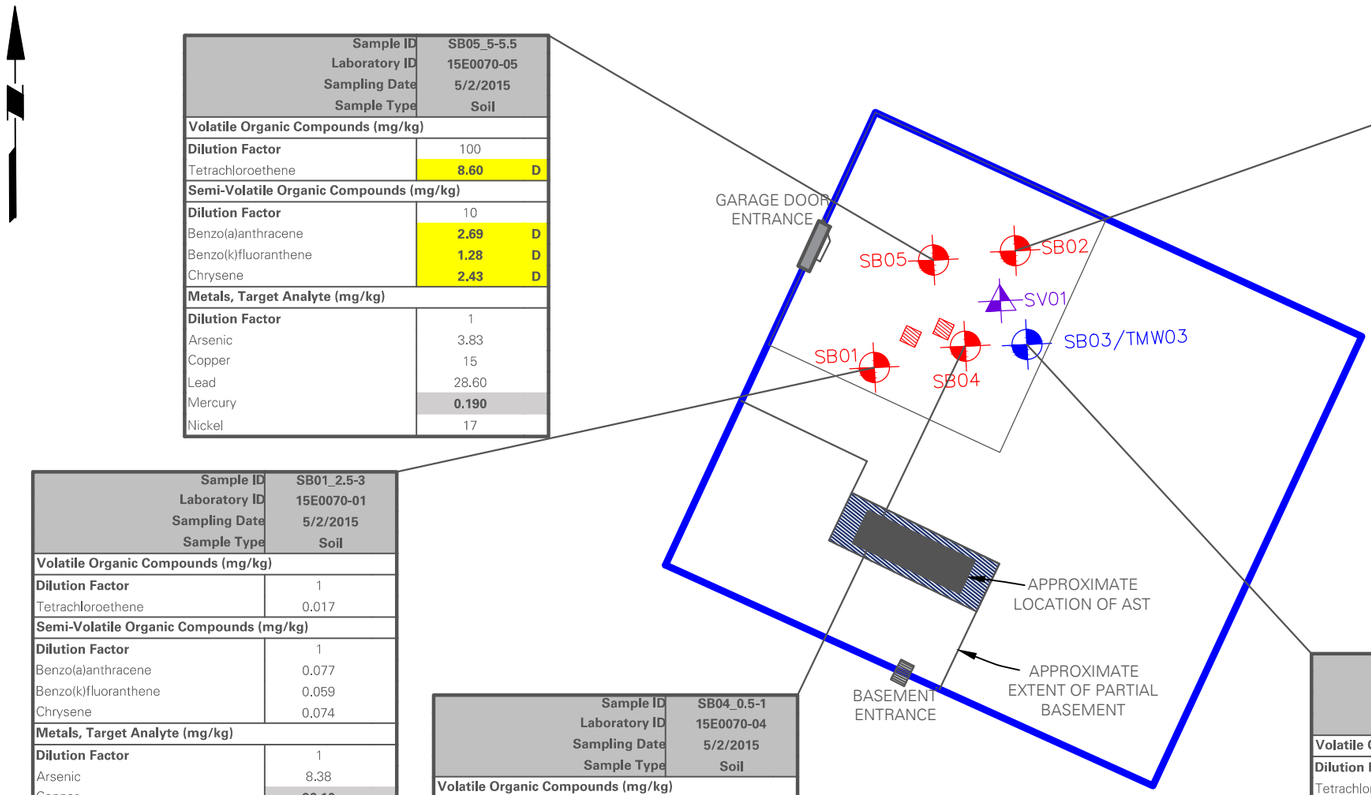
Figure Title
SITE MAP

Project No. 170362501	Figure No. 2
Date 09/25/2015	
Scale NTS	
Drawn By AR	
Submission Date	Sheet 2 of 6

Filename: \\langan.com\data\NY\data5\170362501\Cadd Data - 170362501\2D-DesignFiles\Figure 2 - Site Map.dwg Date: 9/30/2015 Time: 11:54 User: arosenblatt Style Table: Langan.stb Layout: ANSIB-BL



Sample ID	SB05_5-5.5	
Laboratory ID	15E0070-05	
Sampling Date	5/2/2015	
Sample Type	Soil	
Volatile Organic Compounds (mg/kg)		
Dilution Factor	100	
Tetrachloroethene	**8.60**	D
Semi-Volatile Organic Compounds (mg/kg)		
Dilution Factor	10	
Benzo(a)anthracene	**2.69**	D
Benzo(k)fluoranthene	**1.28**	D
Chrysene	**2.43**	D
Metals, Target Analyte (mg/kg)		
Dilution Factor	1	
Arsenic	3.83	
Copper	15	
Lead	28.60	
Mercury	**0.190**	
Nickel	17	

Sample ID	SB01_2.5-3
Laboratory ID	15E0070-01
Sampling Date	5/2/2015
Sample Type	Soil
Volatile Organic Compounds (mg/kg)	
Dilution Factor	1
Tetrachloroethene	0.017
Semi-Volatile Organic Compounds (mg/kg)	
Dilution Factor	1
Benzo(a)anthracene	0.077
Benzo(k)fluoranthene	0.059
Chrysene	0.074
Metals, Target Analyte (mg/kg)	
Dilution Factor	1
Arsenic	8.38
Copper	**96.10**
Lead	**247**
Mercury	**0.664**
Nickel	16.60

Sample ID	SB04_0.5-1	
Laboratory ID	15E0070-04	
Sampling Date	5/2/2015	
Sample Type	Soil	
Volatile Organic Compounds (mg/kg)		
Dilution Factor	1	
Tetrachloroethene	0.23	E
Semi-Volatile Organic Compounds (mg/kg)		
Dilution Factor	2	
Benzo(a)anthracene	0.86	D
Benzo(k)fluoranthene	0.35	D
Chrysene	0.84	D
Metals, Target Analyte (mg/kg)		
Dilution Factor	1	
Arsenic	4.83	
Copper	31	
Lead	**109**	
Mercury	**0.310**	
Nickel	**55.40**	

Sample ID	SB02_2.5-3	
Laboratory ID	15E0070-02	
Sampling Date	5/2/2015	
Sample Type	Soil	
Volatile Organic Compounds (mg/kg)		
Dilution Factor	1	
Tetrachloroethene	0.20	
Semi-Volatile Organic Compounds (mg/kg)		
Dilution Factor	2	
Benzo(a)anthracene	0.93	D
Benzo(k)fluoranthene	0.56	D
Chrysene	0.91	D
Metals, Target Analyte (mg/kg)		
Dilution Factor	1	
Arsenic	**22.90**	
Copper	**100**	
Lead	**304**	
Mercury	**0.914**	
Nickel	12.30	

Sample ID	SB03_5-5.5
Laboratory ID	15E0070-03
Sampling Date	5/2/2015
Sample Type	Soil
Volatile Organic Compounds (mg/kg)	
Dilution Factor	1
Tetrachloroethene	0.051
Semi-Volatile Organic Compounds (mg/kg)	
Dilution Factor	1
Benzo(a)anthracene	0.094
Benzo(k)fluoranthene	0.065
Chrysene	0.093
Metals, Target Analyte (mg/kg)	
Dilution Factor	1
Arsenic	7.95
Copper	12.60
Lead	52.40
Mercury	**4.67**
Nickel	9.45

LEGEND:

- SITE BOUNDARY
- ABOVEGROUND STORAGE TANK (AST)
- POTENTIAL DRAINAGE FEATURE
- SB04 — APPROXIMATE SOIL BORING LOCATION
- SV01 — APPROXIMATE SUB-SLAB VAPOR SAMPLE LOCATION
- SB03/TMW03 — APPROXIMATE TEMPORARY GROUNDWATER MONITORING WELL LOCATION

NOTES :

1. SAMPLES WERE COLLECTED AS PART OF A SUBSURFACE INVESTIGATION CONDUCTED BY LANGAN IN MAY 2015.
2. PROPERTY BOUNDARIES, AND BUILDING LOCATIONS ARE APPROXIMATE.
3. BASEMAP PROVIDED BY ESRI, HERE, DELORME, USGS, INTERMAP, INCREMENT P CORP., NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI (THAILAND), TOM TOM, MAPMY INDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY.
4. NYSDEC PART 375 UNRESTRICTED USE SCO EXCEEDANCES ARE BOLDED AND HIGHLIGHTED GRAY.
5. NYSDEC PART 375 RESTRICTED USE RESIDENTIAL SCO EXCEEDANCES ARE BOLDED AND HIGHLIGHTED YELLOW.
6. ONLY COMPOUNDS WITH EXCEEDANCES ARE SHOWN IN THE TABLES.
7. MG/KG = MICROGRAM PER KILOGRAM.
8. D=RESULT IS FROM AN ANALYSIS THAT REQUIRED A DILUTION.
9. E = RESULT IS ESTIMATED AND CANNOT BE ACCURATELY REPORTED DUE TO LEVELS ENCOUNTERED OR INTERFERENCES.

Sample ID	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Residential Soil Cleanup Objectives
Laboratory ID		
Sampling Date		
Sample Type		
Volatile Organic Compounds (mg/kg)		
Dilution Factor		
Tetrachloroethene	1.3	5.5
Semi-Volatile Organic Compounds (mg/kg)		
Dilution Factor		
Benzo(a)anthracene	1	1
Benzo(k)fluoranthene	0.8	1
Chrysene	1	1
Metals, Target Analyte (mg/kg)		
Dilution Factor		
Arsenic	13	16
Copper	50	270
Lead	63	400
Mercury	0.18	0.81
Nickel	30	140

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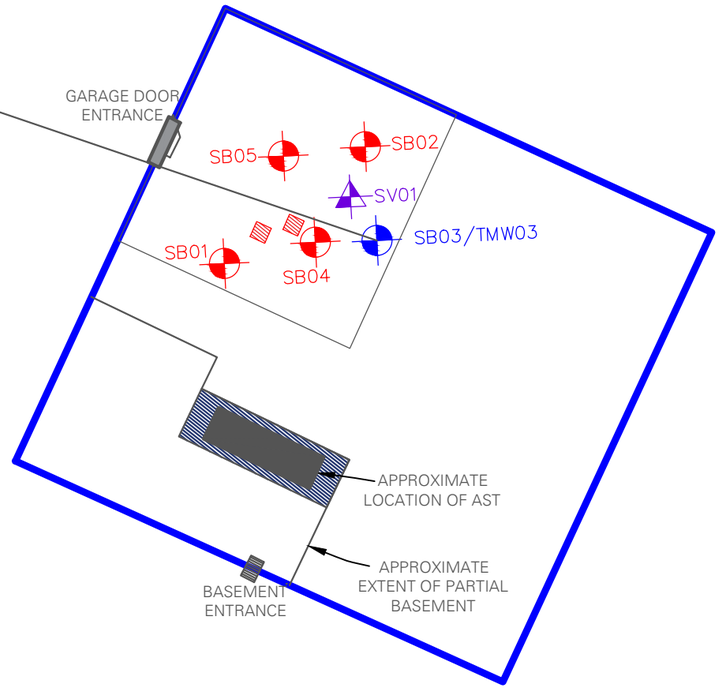
Figure Title
SUBSURFACE INVESTIGATION SOIL SAMPLE LOCATION AND RESULTS MAP

Project No. 170362501
Date 09/23/2015
Scale NTS
Drawn By AR
Submission Date

Figure No. 3

Filename: \\langan.com\data\NY\data5\170362501\Cadd Data - 170362501\2D-DesignFiles\Figure 3 - Subsurface Investigation Sample Location and Results Map.dwg Date: 9/28/2015 Time: 08:31 User: arosenblatt Style Table: Langan.stb Layout: ANSIB-BL

Location/Sample ID	TMW01_050215	
Sampling Date	5/2/2015	
LabSample ID	15E0070-06	
Sample Type	Groundwater	
Volatile Organic Compounds (µg/l)		
Dilution Factor	1	
cis-1,2-Dichloroethene	**100**	**D**
Metals, Target Analyte (µg/l)		
Dilution Factor	1	
Aluminum	**129**	
Iron	**6,100**	
Manganese	**1,040**	
Selenium	**13**	
Sodium	**109,000**	



LEGEND:

- SITE BOUNDARY
- ABOVEGROUND STORAGE TANK (AST)
- POTENTIAL DRAINAGE FEATURE
- SB04 — APPROXIMATE SOIL BORING LOCATION
- SV01 — APPROXIMATE SUB-SLAB VAPOR SAMPLE LOCATION
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4. NYSDEC AWQS EXCEEDANCES ARE BOLDED AND HIGHLIGHTED YELLOW.
5. ONLY COMPOUNDS WITH EXCEEDANCES ARE SHOWN IN THE TABLES.
6. µg/l = MICROGRAMS PER LITER.
7. D=RESULT IS FROM AN ANALYSIS THAT REQUIRED A DILUTION.

Location/Sample ID	NYSDEC TOGS Ambient Water Quality Standards
Sampling Date	
LabSample ID	
Sample Type	
Volatile Organic Compounds (µg/l)	
cis-1,2-Dichloroethene	5
Metals, Target Analyte (µg/l)	
Aluminum	100
Iron	600
Manganese	300
Selenium	10
Sodium	20,000

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Figure Title
SUBSURFACE INVESTIGATION GROUNDWATER SAMPLE LOCATION AND RESULTS MAP

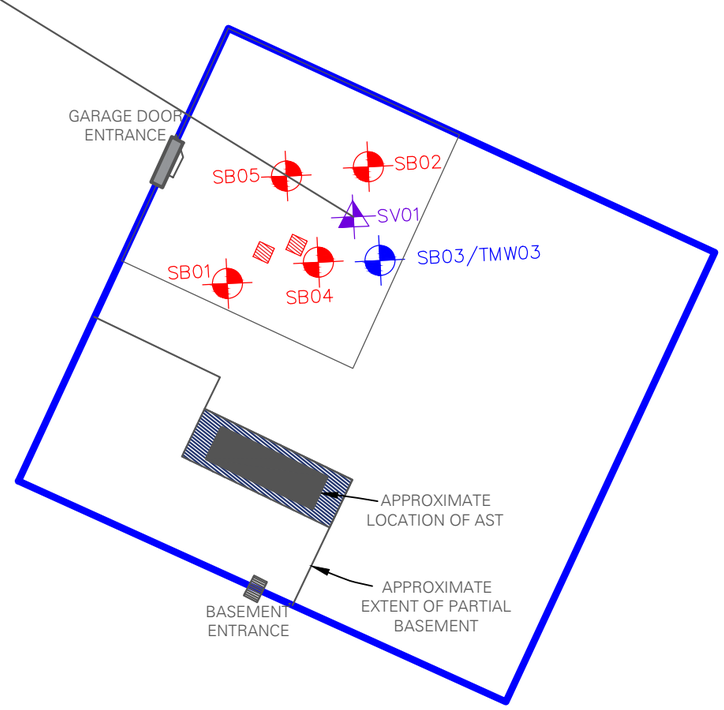
Project No. 170362501
Date 09/23/2015
Scale NTS
Drawn By AR
Submission Date

Figure No. 4

Sheet 4 of 6

Filename: \\langan.com\data\NY\data5\170362501\Cadd Data - 170362501\2D-DesignFiles\Figure 3 - Subsurface Investigation Groundwater Sample Location and Results Map.dwg Date: 9/28/2015 Time: 08:45 User: arosenblatt Style Table: Langan.stb Layout: ANSIB-BL

Sample ID	SV01_050215
Laboratory ID	15E0069
Sampling Date	5/2/2015
Sample Type	Soil Vapor
Volatile Organic Compounds (µg/m³)	
Dilution Factor	23.44
1,1,1-Trichloroethane	180
1,1-Dichloroethane	14
Acetone	130
Benzene	19
Chloroform	30
Isopropanol	800
n-Hexane	17
Tetrachloroethene	**2500**
Toluene	38
Trichloroethene	**120**



LEGEND:

- SITE BOUNDARY
- ABOVEGROUND STORAGE TANK (AST)
- POTENTIAL DRAINAGE FEATURE
- SB04 — APPROXIMATE SOIL BORING LOCATION
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NOTES :

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4. SOIL VAPOR SAMPLE ANALYTICAL RESULTS ABOVE THE NYSDOH AGVS ARE BOLDED AND HIGHLIGHTED.
5. ONLY COMPOUNDS WITH DETECTIONS ARE SHOWN IN THE TABLE.
6. µg/m3 = MICROGRAM PER CUBIC METER.
7. ALL SAMPLES WERE DILUTED DURING ANALYSIS.

Sample ID Laboratory ID Sampling Date Sample Type	New York State Department of Health Air Guidance Value (AGV) (µg/m3)
Volatile Organic Compounds (µg/m³)	
1,1,1-Trichloroethane	~
1,1-Dichloroethane	~
Acetone	~
Benzene	~
Chloroform	~
Isopropanol	~
n-Hexane	~
Tetrachloroethene	30
Toluene	~
Trichloroethene	5

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KINGS NEW YORK

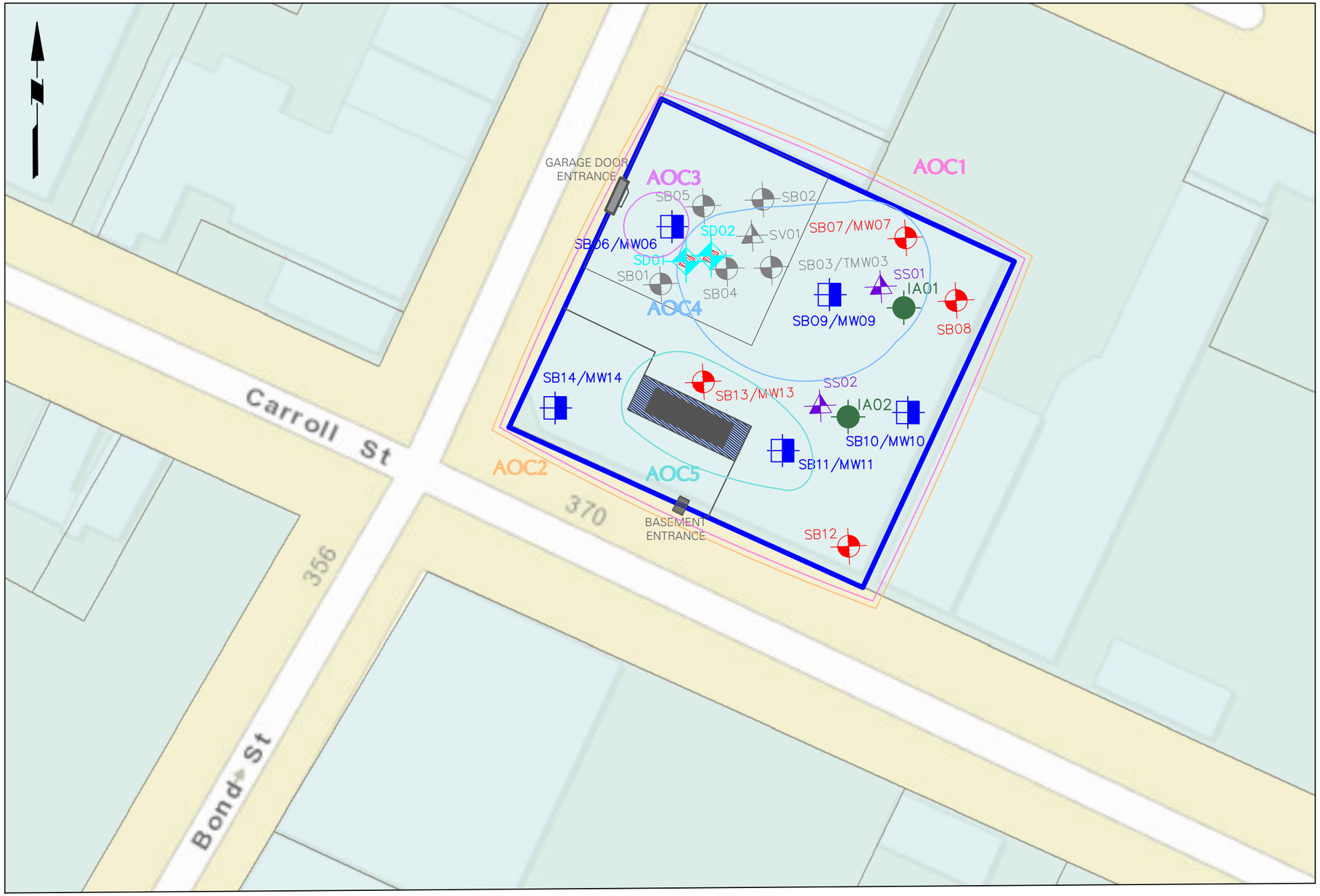
Figure Title: SUBSURFACE INVESTIGATION SOIL VAPOR SAMPLE LOCATION AND RESULTS MAP

Project No. 170362501
Date 09/23/2015
Scale NTS
Drawn By AR
Submission Date

Figure No. 5

Sheet 5 of 6

Filename: \\langan.com\data\NY\data5\170362501\Cadd Data - 170362501\2D-DesignFiles\Figure X - Subsurface Investigation Soil Vapor Sample Location and Results Map.dwg Date: 9/28/2015 Time: 08:28 User: arosenblatt Style Table: Langan.stb Layout: ANSIB-BL



LEGEND:

- SITE BOUNDARY
- ABOVEGROUND STORAGE TANK (AST)
- POTENTIAL DRAINAGE FEATURE
- SB04 — APPROXIMATE SOIL BORING L LOCATION
- SB06/MW06 — APPROXIMATE SOIL BORING/ GROUNDWATER MONITORING WELL LOCATION
- SD01 — APPROXIMATE SEDIMENT SAMPLE LOCATION TO BE COLLECTED FROM EACH POTENTIAL DRAINAGE FEATURE
- SS01 — APPROXIMATE SUB-SLAB VAPOR SAMPLE LOCATION
- IA01 — APPROXIMATE INDOOR AIR SAMPLE LOCATION
- SB04 — PREVIOUS SOIL BORING/ TEMPORARY GROUNDWATER MONITORING WELL LOCATION FROM MAY 2015 INVESTIGATION
- SV01 — PREVIOUS SOIL VAPOR LOCATION FROM MAY 2015 INVESTIGATION
- AOC1 — AREA OF CONCERN 1: HISTORIC FILL
- AOC2 — AREA OF CONCERN 2: HISTORIC SITE USE
- AOC3 — AREA OF CONCERN 3: POTENTIAL GASOLINE STORAGE TANKS
- AOC4 — AREA OF CONCERN 4: DRAINAGE FEATURES
- AOC5 — AREA OF CONCERN 5: EXISTING ABOVE GROUND STORAGE TANK

NOTES :

1. DATA, PROPERTY BOUNDARIES, AND BUILDING LOCATIONS ARE APPROXIMATE.
2. BASEMAP PROVIDED BY ESRI, HERE, DELORME, USGS, INTERMAP, INCREMENT P CORP., NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI (THAILAND), TOM TOM, MAPMY INDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY.

LANGAN
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Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan Engineering and Environmental Services, Inc.
Langan International LLC
Collectively known as Langan

Project
335 BOND STREET
BLOCK No. 445, LOT No. 1
BROOKLYN
KINGS **NEW YORK**

Figure Title
PROPOSED SAMPLE LOCATION MAP

Project No.	170362501
Date	09/23/2015
Scale	NTS
Drawn By	AR
Submission Date	

Figure No. **6**

Sheet 6 of 6

Filename: \\langan.com\data\NY\data5\170362501\Cadd Data - 170362501\2D-DesignFiles\Figure 4 - Proposed Sample Location Map_V2_10.05.2015.dwg Date: 1/11/2016 Time: 15:48 User: esnead Style Table: Langan.stb Layout: ANSIB-BL

APPENDIX A
Previous Environmental Reports

May 6, 2015

Mr. Eduard Slinin
E&M Realty Corp.
335 Bond Street
Brooklyn, NY 11231

Re: Subsurface Investigation Letter Report
335 Bond Street
Brooklyn, New York 11231
Langan Project No.: 170362501

Dear Mr. Slinin:

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. (Langan) conducted a subsurface investigation on behalf of E&M Realty Corp. for the property located at 335 Bond Street in Brooklyn, New York. The purpose of this investigation was to evaluate possible impacts to soil, soil vapor, and groundwater due to historical use of the site. This letter report provides a description of the site background, investigation methodologies, investigation results, and conclusions.

Site Background

The site is located at 335 Bond Street in the Gowanus neighborhood of Brooklyn, New York and is identified as Block 445, Lot 1 on the New York City Tax Map. The site has an area of approximately 0.36 acres, and is occupied by a one-story office building and garage operated by NYC Two Way International, a private car and limousine service. The building includes a partial cellar, which houses an abandoned aboveground storage tank (AST) in a concrete vault. The site is bound by a two-story residential building and an industrial lot to the north; a two-story industrial and commercial building to the east; Carroll Street to the south; and Bond Street to the west. Surrounding properties are predominantly occupied by mixed-use industrial and commercial developments (north, east and south) and residential developments (west).

Field Investigation

The subsurface investigation was implemented on May 2, 2015 and included:

- A geophysical survey to locate potential underground storage tanks (USTs) and other subsurface structures;
- The advancement of five soil borings to depths of up to 9 feet below grade surface (bgs) and collection of five soil samples;

- Installation of one temporary groundwater monitoring well and collection of one groundwater sample; and,
- Installation of one temporary sub-slab soil vapor sampling point and collection of one soil vapor sample.

Geophysical Survey

NOVA Geophysical Services (NOVA) conducted a geophysical survey under the supervision of a Langan field engineer to identify USTs and subsurface structures located beneath the basement slab. The survey included ground penetrating radar (GPR) and electromagnetic (EM) detectors.

Soil Investigation

Five soil borings were advanced in the building's garage by AARCO Environmental Services Corp. (AARCO). Langan field personnel documented drilling activities and collected samples. Soil boring locations are shown on Figure 1. The soil borings were advanced to depths up to 9 feet bgs, using a Geoprobe® 420M direct-push drill rig. Soil samples were inspected for visual and olfactory evidence of contamination and screened for organic vapors with a photoionization detector (PID). The five soil borings were advanced in the garage to evaluate the extent of potential impacts due to historic use. A total of five grab soil samples were collected for laboratory analysis. Where present, one sample was collected from the interval in each boring that exhibited the highest PID readings and/or visual and olfactory indications of contamination. Soil boring logs are provided in Attachment 1.

Samples were collected into laboratory-supplied containers and delivered via courier under standard chain-of-custody protocol to York Analytical, Inc. (York). York is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. Samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), metals, toxicity characteristic leachate procedure (TCLP) metals, pesticides, and polychlorinated biphenyls (PCB).

Groundwater Investigation

One temporary groundwater monitoring well (TMW01) was installed in the eastern-most soil boring, SB03. TMW01 was constructed of a 1-inch diameter, 9-foot-long Schedule 40 polyvinyl chloride (PVC) screen comprised of machine-slotted 0.020-inch-wide slots. The temporary groundwater monitoring well location is shown on Figure 1.

Following installation, TMW01 was developed to remove fine-grained sediment from the filter pack and enhance the hydraulic efficiency of the surrounding formation. Well development of TMW01 was conducted using a peristaltic pump with dedicated polyethylene tubing.

Water levels were measured using a Solinst oil/water interface probe. TMW01 was purged using low-flow purge and sample techniques. The well was purged using clean, dedicated, polyethylene tubing attached to a peristaltic pump. During purging, groundwater was

monitored for dissolved oxygen, pH, temperature, turbidity, specific conductivity, and oxidation reduction potential using a Horiba U-52 water quality meter. Purging was considered complete after at least three well volumes were removed and all parameter readings were stabilized for three successive readings within a reasonable time frame. The monitored parameters were recorded on the well sampling logs provided in Attachment 2.

The groundwater samples were collected into laboratory-supplied containers and delivered via courier under standard chain-of-custody protocol to York. The groundwater samples were analyzed for VOCs, SVOCs, total metals, pesticides, and PCBs. One trip blank was analyzed for VOCs for quality assurance/quality control (QA/QC) purposes.

Soil Vapor Investigation

One sub-slab soil vapor point was installed in the eastern portion of the garage. The sub-slab soil vapor point was installed by AARCO and documented by Langan field personnel. The soil vapor point was installed to a depth of approximately 1- to 2-inches beneath the floor slab. At the sub-slab location, a 2-inch stainless steel probe attached to dedicated polyethylene tubing was inserted into a 1/2-inch diameter borehole. The annulus around the tubing was filled with #2 filter sand to just below the underside of the floor slab. Bentonite slurry was then used to seal the top of the sample point. The soil vapor point location is shown in Figure 1.

The soil vapor point was purged using a MultiRAE five-gas meter at an approximate rate of 0.05 liters per minute (L/min) to evacuate a minimum of three tubing/vapor point volumes prior to sample collection. The soil vapor sample was collected into a laboratory-supplied, batch-certified clean, 6-liter Summa® canister that was calibrated for a 2-hour sampling period. The sub-slab vapor sampling log is provided in Attachment 3.

The canisters were labeled and transported via courier under standard chain-of-custody protocol to York. The soil vapor sample was analyzed for VOCs via United States Environmental Protection Agency (USEPA) Method TO-15.

Observations and Results

Site Observations

Langan observed an abandoned, approximately 1,000-gallon AST within a concrete vault in the building basement. Upon observation, the AST was significantly corroded and approximately 3- to 4-inches of standing water was noted at the base of the vault. The fill line associated with the AST was observed to be cut, and evidence of fill port removal operations were observed (i.e., a concrete sidewalk patch) on the adjacent sidewalk along Carroll Street.

An approximately 14-inch by 14-inch, perforated, steel plate covering a potential drainage feature was located in the central portion of the garage. Debris including a concrete block, bricks, and soil were observed beneath the steel plate. The top four inches of the potential drainage feature were exposed and appeared to be constructed of the existing concrete slab and brick. A second potential drainage feature was observed approximately 2 feet to the

southwest and was covered by an approximately 24-inch by 24-inch, solid, steel plate. The function of the potential drainage features is unknown.

Geophysical Survey

The geophysical survey identified subsurface anomalies indicative of utilities and possible former utilities in the garage. Approximately 3- to 4-inches of standing water was observed in the building basement. Due to the high reflectance and interference of water, a geophysical survey could not be completed in this area of the site.

Soil Observations

Below the garage slab, the subsurface strata at the site consists of fill material characterized by loose, brown, fine to coarse sand with some brick and concrete fragments, and trace coal ash. The fill layer extended to depths ranging from approximately 4 to 8.5 feet bgs and was intersected by layers of degraded concrete and brick at varying depths. Native sands and silty sands were observed beneath the fill layer at depth intervals ranging from approximately 4 to 9 feet bgs. A sweet, solvent-like odor was noted in SB03 at a depth interval of 5 to 6 feet bgs.

Groundwater Observations

Groundwater was encountered in all five soil borings at depths ranging from 6 to 8.5 feet bgs. The site is located approximately 180 feet west of the Gowanus Canal, which is tidally influenced. Depth to groundwater was measured using a Solinst oil/water interface probe in TMW01, and was observed at 6.87 feet below the top of casing.

Soil Analytical Results

Several VOCs, SVOCs and metals were detected at concentrations exceeding Title 6 of the New York Codes, Rules and Regulations (6 NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs). Tetrachloroethene (PCE), benzo(a)anthracene, arsenic, and mercury were detected at concentrations exceeding their respective Restricted Use Residential SCOs. Table 1 provides a summary of SCO exceedances. The laboratory analytical report is provided in Attachment 4.

Groundwater Analytical Results

One VOC, cis-1,2-dichloroethene, and several metals were detected at concentrations exceeding the New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) and Guidance Values for Class GA groundwater. Table 2 provides a summary of TOGS AWQS exceedances. The laboratory analytical report is provided in Attachment 4.

Sub-Slab Vapor Analytical Results

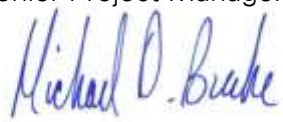
PCE and trichloroethene (TCE) were detected in soil vapor samples at concentrations exceeding their respective NYSDOH Air Guidance Values (AGV). It is important to note that in this capacity, the AGVs are used as reference comparisons only, as they are technically related to indoor air sample results. Per Matrix 1 of the NYSDOH October 2006 Final Guidance on Soil Vapor Intrusion, the TCE and 1,1,1-trichloroethane concentrations exceed the guideline for monitoring and/or mitigation depending on the indoor air concentration, which is unknown. Per Matrix 2, the PCE concentration exceeds the guideline for mitigation no matter what the indoor air concentration. Therefore, per the NYSDOH soil vapor intrusion guidance matrices, mitigation is recommended. Table 3 provides a summary of VOC detections. The laboratory analytical report is provided in Attachment 4.

Conclusions

Site soil was found to be impacted with PCE, several SVOCs and several metals at concentrations exceeding their 6 NYCRR Part 375 Restricted Use Residential SCOs. Groundwater was found to be impacted with cis-1,2-dichloroethene and several metals at concentrations exceeding the TOGS AWQS for Class GA groundwater. Site soil vapor was found to be impacted with PCE and TCE. Comparison of the sub-slab sample PCE concentration to Matrix 2 of the NYSDOH October 2006 Final Guidance on Soil Vapor Intrusion found that mitigation was recommended with regards to future on-site redevelopment.

Sincerely,
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.

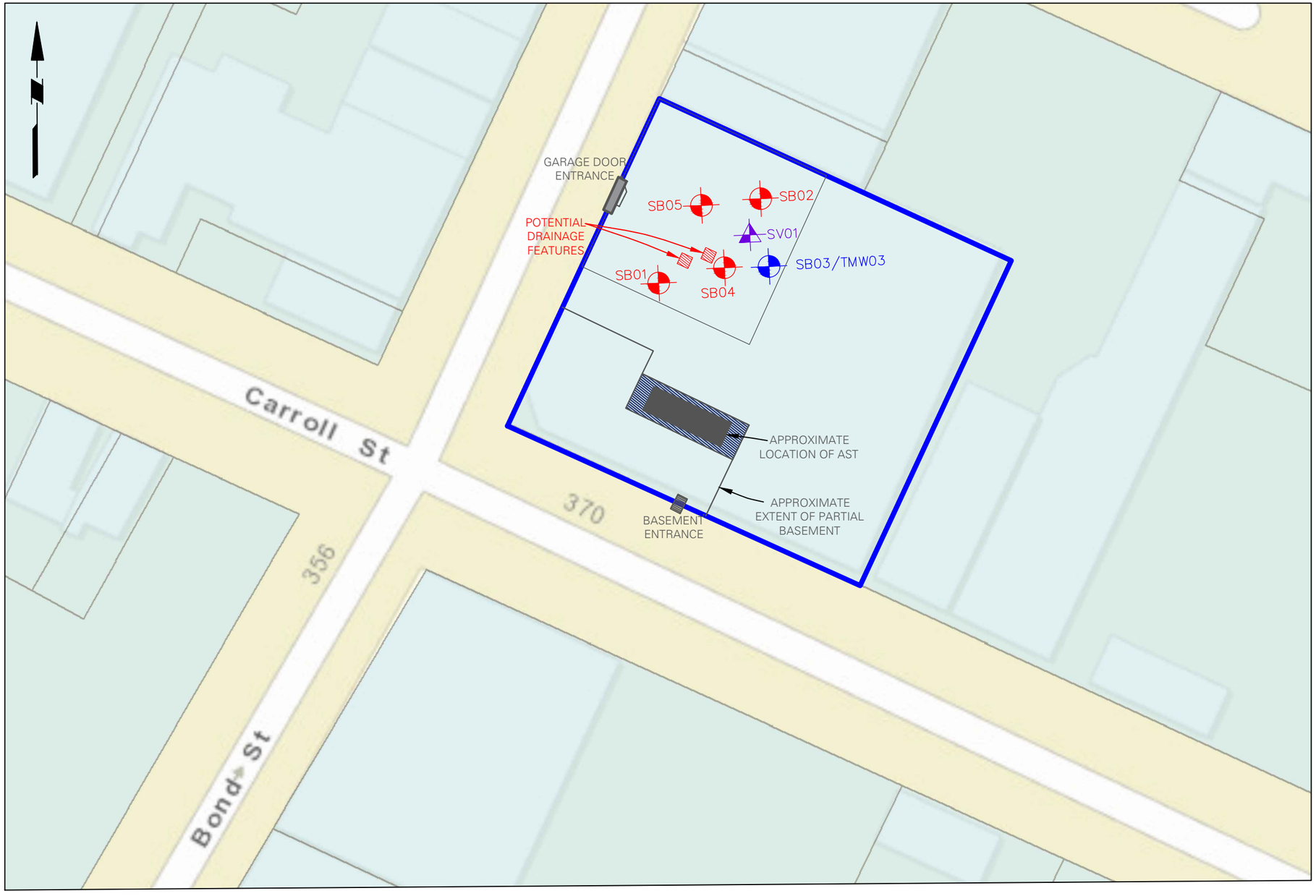
Ryan Manderbach, CHMM
Senior Project Manager



Michael Burke, CHMM
Senior Associate/Vice President

Enclosure(s): Figure 1 – Sample Location Map
Table 1 – Soil Sample Analysis Results Summary
Table 2 – Groundwater Sample Analysis Results Summary
Table 3 – Soil Vapor Analysis Results Summary
Attachment 1 – Soil Boring Logs
Attachment 2 – Groundwater Sampling Log
Attachment 3 – Sub-Slab Soil Vapor Sampling Log
Attachment 4 – Laboratory Analytical Reports

FIGURES



LEGEND:

- SITE BOUNDARY
- ABOVEGROUND STORAGE TANK (AST)
- POTENTIAL DRAINAGE FEATURE
- SB04 — APPROXIMATE SOIL BORING LOCATION
- SV01 — APPROXIMATE SUB-SLAB VAPOR SAMPLE LOCATION
- SB03/TMW03 — APPROXIMATE TEMPORARY GROUNDWATER MONITORING WELL LOCATION

NOTES :

1. SAMPLES WERE COLLECTED AS PART OF A SUBSURFACE INVESTIGATION CONDUCTED BY LANGAN IN MAY 2015.
2. DATA, PROPERTY BOUNDARIES, AND BUILDING LOCATIONS ARE APPROXIMATE.
3. Basemap provided by ESRI, HERE, DELorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), Tom Tom, Mapmy India, © OpenStreetmap contributors, and the GIS User Community.

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Langan International LLC
Collectively known as Langan

Project
335 BOND STREET
BLOCK No. 445, LOT No. 1
BROOKLYN
KINGS NEW YORK

Figure Title
SAMPLE LOCATION MAP

Project No. 170362501	Figure No. 1
Date 05/04/2015	
Scale NTS	
Drawn By MLR	
Submission Date	Sheet 1 of 1

Filename: \\langan.com\data\NY\data5\170362501\Cadd Data - 170362501\2D-DesignFiles\Phase II\Figure 1 - Sample Location Map.dwg Date: 5/5/2015 Time: 16:12 User: mrogers Style Table: Langan.stb Layout: ANSIB-BL

TABLES

Table 1 - Soil Sample Analysis Results Summary
Subsurface Investigation Report
335 Bond Street Brooklyn, NY 11231
Langan Project No. 170362501

Sample ID / Laboratory ID / Sampling Date / Sample Type	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives - Restricted Residential	SB01_2.5-3 15E0070-01 5/2/2015 Soil		SB02_2.5-3 15E0070-02 5/2/2015 Soil		SB03_5-5.5 15E0070-03 5/2/2015 Soil		SB04_0.5-1 15E0070-04 5/2/2015 Soil		SB05_5-5.5 15E0070-05 5/2/2015 Soil	
Volatile Organic Compounds (mg/kg)												
Dilution Factor			1		1		1		1		100	
1,1,1-Trichloroethane	0.68	~	0.0040	U	0.0030	U	0.0035	U	0.0057		0.29	U
2-Butanone	0.12	100	0.0040	U	0.0030	U	0.0043	J	0.0025	U	0.29	U
Acetone	0.05	100	0.018		0.012	J	0.049		0.013		0.59	U
Tetrachloroethylene	1.3	19	0.017		0.20		0.051		0.23	E	**8.60**	**D**
Trichloroethylene	0.47	21	0.0040	U	0.0087		0.0035	U	0.018		0.43	JD
Semi-Volatile Organic Compounds (mg/kg)												
Dilution Factor			1		2		1		2		10	
1,1'-Biphenyl	~	~	0.027	U	0.050	U	0.029	U	0.047	U	0.17	D
2-Methylnaphthalene	~	~	0.027	U	0.050	U	0.029	U	0.047	U	0.53	D
Acenaphthene	20	100	0.027	U	0.11	D	0.029	U	0.087	JD	1.39	D
Acenaphthylene	100	100	0.027	U	0.050	U	0.029	U	0.047	U	0.075	JD
Anthracene	100	100	0.027	U	0.23	D	0.029	U	0.23	D	1.43	D
Benzo(a)anthracene	1	1	0.077		0.93	D	0.094		0.86	D	**2.69**	**D**
Benzo(a)pyrene	1	1	0.053	J	0.55	D	0.063		0.37	D	0.86	D
Benzo(b)fluoranthene	1	1	0.047	J	0.52	D	0.056	J	0.34	D	0.87	D
Benzo(g,h,i)perylene	100	10	0.027	U	0.15	D	0.029	U	0.12	D	0.48	D
Benzo(k)fluoranthene	0.8	3.9	0.059		0.56	D	0.065		0.35	D	**1.28**	**D**
Carbazole	~	~	0.027	U	0.081	JD	0.029	U	0.064	JD	0.93	D
Chrysene	1	3.9	0.074		0.91	D	0.093		0.84	D	**2.43**	**D**
Dibenzo(a,h)anthracene	0.33	0.33	0.027	U	0.079	JD	0.029	U	0.062	JD	0.18	D
Dibenzofuran	7	59	0.027	U	0.050	U	0.029	U	0.047	U	1.03	D
Fluoranthene	100	100	0.16		1.71	D	0.22		1.49	D	10.20	D
Fluorene	30	100	0.027	U	0.074	JD	0.029	U	0.065	JD	1.25	D
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.027	U	0.16	D	0.029	U	0.13	D	0.43	D
Naphthalene	12	100	0.027	U	0.050	U	0.029	U	0.047	U	1.04	D
Phenanthrene	100	100	0.10		1.02	D	0.13		0.86	D	10.90	D
Pyrene	100	100	0.12		1.60	D	0.17		1.35	D	7.57	D
Pesticides (mg/kg)												
No Detections												
Polychlorinated Biphenyls (mg/kg)												
No Detections												
Metals, Target Analyte (mg/kg)												
Dilution Factor			1		1		1		1		1	
Aluminum	~	~	4,910		4,210		9,170		5,350		4,200	
Antimony	~	~	1.86		1.31		0.68	U	0.56	U	0.57	U
Arsenic	13	16	8.38		**22.90**		7.95		4.83		3.83	
Barium	350	400	139		141		81		62.70		36	
Calcium	~	~	7,710		44,900		130,000		16,400		56,800	
Chromium	~	180	11		7.22		8.86		12.50		8	
Cobalt	~	~	7.46		3.31		3.97		7.79		5.33	
Copper	50	270	**96.10**		**100**		12.60		31		15	
Iron	~	~	7,700		11,500		10,000		12,300		9,510	
Lead	63	400	**247**		**304**		52.40		**109**		28.60	
Magnesium	~	~	769		4,010		10,500		5,830		2,960	
Manganese	1600	2000	120		170		237		259		186	
Nickel	30	310	16.60		12.30		9.45		**55.40**		17	
Potassium	~	~	841		980		1,380		1,100		1,410	
Selenium	3.9	180	3.26		1.20	U	1.37	U	1.48		1.14	U
Sodium	~	~	1,170		588		533		597		303	
Vanadium	~	~	18.60		14		21.20		16.90		15.70	
Zinc	109	10000	126		99.10		28.10		81.40		38.40	
Metals, TCLP RCRA (mg/kg)												
Dilution Factor			1		1		1		1		1	
Arsenic	13	16	0.022		0.04		0.00	U	0.00	U	0.00	U
Barium	350	400	0.243		0.22		0.14		0.49		0.22	
Lead	63	400	0.042		0.02		0.00	U	0.02		0.00	U
Selenium	3.9	180	0.012		0.02		0.01		0.02		0.01	
Mercury (mg/kg)												
Dilution Factor			1		1		1		1		1	
Mercury	0.18	0.81	**0.664**		**0.914**		**4.67**		**0.310**		**0.190**	
Total Solids (%)												
% Solids	NS	NS	78.70		83.00		73.20		89.80		88	

Notes:

1. Soil sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the New York Codes, Rules and Regulations (6 NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCO) and Restricted Use Restricted-Residential SCOs.
2. NYSDEC Part 375 Unrestricted Use SCO exceedances are bolded and highlighted gray.
3. NYSDEC Part 375 Restricted Use Restricted-Residential SCO exceedances are bolded and highlighted yellow.
4. Only compounds with detections are shown in the table.
5. mg/kg = microgram per kilogram.

Qualifiers:

Q=qualifier.
D=result is from an analysis that required a dilution.
E = result is estimated and cannot be accurately reported due to levels encountered or interferences.
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.
~ = regulatory limit has not been established for this analyte.

Table 2 - Groundwater Sample Analysis Results Summary
Subsurface Investigation Report
335 Bond Street
Brooklyn, New York 11231
Langan Project No. 170362501

Location/Sample ID Sampling Date LabSample ID Sample Type	NYSDEC TOGS Ambient Water Quality Standards	TMW01_050215 5/2/2015 15E0070-06 Groundwater	
Volatile Organic Compounds (µg/l)			
Dilution Factor		1	
1,1-Dichloroethane	5	0.93	
1,1-Dichloroethene	0.7	0.23	J
1,2,3-Trichlorobenzene	~	0.28	JB
1,2,4-Trichlorobenzene	~	0.24	JB
Benzene	1	0.61	
cis-1,2-Dichloroethene	5	**100**	**D**
Cyclohexane	~	0.29	J
Tetrachloroethene	0.7	0.34	J
trans-1,2-Dichloroethene	5	0.37	J
Trichloroethene	5	0.22	J
Semivolatile Organic Compounds (µg/l)			
Dilution Factor		1	
Acenaphthylene	20	0.21	
Bis(2-ethylhexyl)phthalate	5	1.13	B
Fluoranthene	50	0.10	
Fluorene	50	0.28	
Naphthalene	10	0.16	
Phenanthrene	50	0.060	
Pyrene	50	0.15	
Metals, Target Analyte (µg/l)			
Dilution Factor		1	
Aluminum	100	**129**	
Barium	1,000	133	
Calcium	~	127,000	
Copper	200	4	
Iron	600	**6,100**	
Lead	25	4	
Magnesium	35,000	26,400	
Manganese	300	**1,040**	
Potassium	~	21,400	
Selenium	10	**13**	
Sodium	20,000	**109,000**	
Zinc	2,000	12	

Notes:

1. Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) and Guidance Values for Class GA groundwater.

2. NYSDEC AWQS exceedances are bolded and highlighted yellow.

3. µg/l = micrograms per liter.

Qualifiers:

J = analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit). Result is an estimated concentration.

D = result is from an analysis that required a dilution.

B = analyte found in the analysis batch blank

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

Table 3 - Soil Vapor Sample Analysis Results Summary
Subsurface Investigation Report
335 Bond Street
Brooklyn, New York 11231
Langan Project No. 70362501

Sample ID Laboratory ID Sampling Date Sample Type	New York State Department of Health Air Guidance Value (AGV) (µg/m3)	SV01_050215 15E0069 5/2/2015 Soil Vapor
Volatile Organic Compounds (µg/m^3)		
Dilution Factor		23.44
1,1,1-Trichloroethane	~	180
1,1-Dichloroethane	~	14
Acetone	~	130
Benzene	~	19
Chloroform	~	30
Isopropanol	~	800
n-Hexane	~	17
Tetrachloroethene	30	**2500**
Toluene	~	38
Trichloroethene	5	**120**

Notes:

1. Only compounds with detections are shown in the table.
2. All samples were diluted during analysis.
3. Soil vapor sample analytical results are compared to the New York State Department of Health (NYSDOH) Air Guidance Values (AGV).
4. Soil vapor sample analytical results above the NYSDOH AGVs are bolded and highlighted.
5. µg/m^3 = microgram per cubic meter

ATTACHMENT 1 – SOIL BORING LOGS

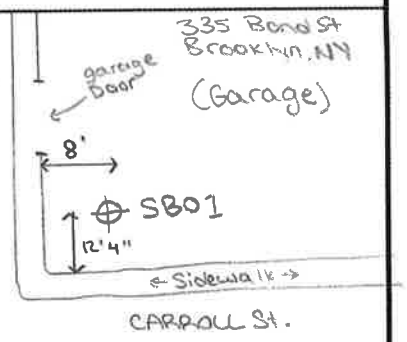
LANGAN
ENGINEERING & ENVIRONMENTAL SERVICES

LOG OF BORING SB01 **SHEET** 1 **OF** 1

PROJECT 335 Bond St.		PROJECT NO. 170362501	
LOCATION 335 Bond St. Brooklyn, NY		ELEVATION AND DATUM n/a	
DRILLING AGENCY AARCO		DATE STARTED 5/2/15	DATE FINISHED 5/2/15
DRILLING EQUIPMENT GeoProbe 420M		COMPLETION DEPTH 9'	ROCK DEPTH n/a
SIZE AND TYPE OF BIT Direct Push, 2"		NO. SAMPLES DIST. 3	UNDIST n/a CORE n/a
CASING n/a		WATER LEVEL FIRST 6'	COMPL. n/a 24 HR. n/a
CASING HAMMER n/a WEIGHT n/a	DROP n/a	FOREMAN Tom Sikol	
SAMPLER 36" macrocore		INSPECTOR Emily Snead	
SAMPLER HAMMER n/a WEIGHT n/a	DROP n/a		

	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES NO./LOC.	SAMPLES TYPE	SAMPLES RECOV. FT.	SAMPLES PENETR. RESIST BL/6 in.
C	6" Concrete Slab					
Fill	R1A: (0-8") Loose, red-brown medium to fine SAND, trace coarse Sand. (dry) (Fill) R1B: (8"-14") Loose, brown-black coarse SAND, brick fragments, black coal ash. (dry) (Fill)	1 2 3	R-1	macrocore	14"/30"	0.0 0.0 0.0
Silty Sand	R2A: (0-12") Loose, red-brown fine SAND, trace c. Sand, trace Silt (dry) (native Sand) R2B: (12-14") Loose dark brown weathered SCHIST rock fragments, some mica (dry) (native) R2C: (14-16") Loose, red-brown medium to fine SAND, trace Silt. (wet) (native sand) R3: (0-23") Loose, red-brown medium to fine SAND, some Silt. (wet) (native Sand)	4 5 6 7 8 9	R-2	macrocore	16"/36"	0.0 0.0 0.0
			R-3	macrocore	23"/36"	0.0 0.0 0.0 0.0
	EOB @ 9' bgs	10 11 12 13 14				

REMARKS
(DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)



(NTS)

5-2-15

0830 - Begin coring cement slab in SB01 location

1000 - Begin macrocore sampling in SB01 location

1028 - Complete macrocore sampling in SB01, final depth 9' bgs. Water observed @ 6' bgs.

1030 - Collect SB01-2.5-3' Soil Sample. Place on ice.

1500 - Patch concrete in SB01 location with drill cuttings + new cement to grade.

EOB @ 9' bgs

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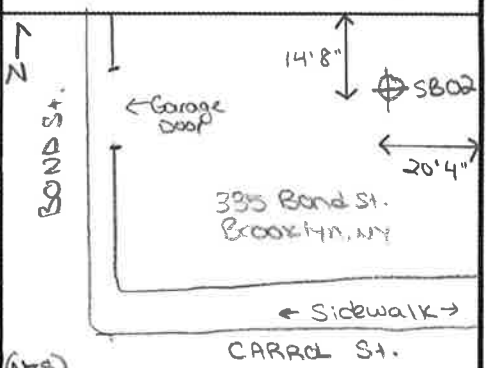
LOG OF BORING SB02 **SHEET** 1 **OF** 1

PROJECT 335 Bond St.		PROJECT NO. 170362501	
LOCATION 335 Bond St. Brooklyn, NY		ELEVATION AND DATUM n/a	
DRILLING AGENCY AARCO		DATE STARTED 5/2/15	DATE FINISHED 5/2/15
DRILLING EQUIPMENT GeoProbe 420M		COMPLETION DEPTH 9'	ROCK DEPTH n/a
SIZE AND TYPE OF BIT Direct push, 2"		NO. SAMPLES DIST. 3	UNDIST. n/a CORE n/a
CASING n/a		WATER LEVEL FIRST 7.5'	COMPL. n/a 24 HR. n/a
CASING HAMMER n/a WEIGHT n/a	DROP n/a	FOREMAN Tom Sikol	
SAMPLER 36" macrocore		INSPECTOR Emily Snead	
SAMPLER HAMMER n/a WEIGHT n/a	DROP n/a		

	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES NO./LOC.	SAMPLES TYPE	SAMPLES RECOV. FT.	SAMPLES PENETR. RESIST BL/6 in.
C	6" Concrete Slab					
Fill	R1A: Loose, brown coarse to medium (0-12") SAND, trace brick fragments (dry) (Fill)	1	R-1	macrocore	25"/30"	0.0 0.7 1.7 2.1
Concrete	R1B: Loose, light tan degraded (12-19") CONCRETE layer. (dry) (Concrete)	2				
Fill	R1C: Loose, black-brown coarse to (19-25") medium SAND, trace gravel, brick fragments (dry) (fill)	3				
		4	R-2	macrocore	20"/36"	
Concrete	R2A: Loose, reddish-tan mottled (0-8") degraded CONCRETE (moist) (concrete)	5				1.9 0.4
BRICK	R2B: Loose, red-brown degraded (8-16") BRICK layer (Dry) (Brick)	6				0.9 0.2
Fill	R2C: Loose, black-brown fine (16-20") SAND, trace m. sand, trace silt (wet) (Fill)	7				
Silty Sand	R3: Loose, brown fine SAND, (0-12.5") trace silt. (wet) (native sand)	8	R-3	macrocore	12.5"/36"	0.0
	EOB @ 9' bgs	9				0.0
		10				
		11				
		12				
		13				
		14				

REMARKS
(DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)



(NTS)

5-2-15

10:30 - Begin coring cement slab in SB02 location

10:35 - Begin macrocore sampling SB02

11:00 - Complete macrocore sampling SB02. final depth 9' bgs. water observed @ 7.5' bgs

11:20 - collect SB02_2.5-3 Soil Sample. Place on ice.

1500 - Patch Slab SB02 location with new concrete.

EOB @ 9' bgs

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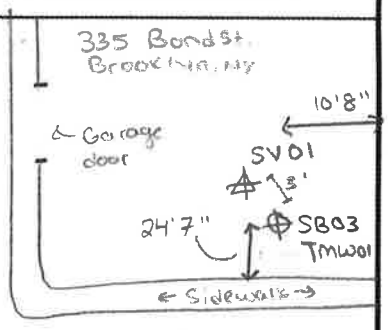
LOG OF BORING SB03 **SHEET** 1 **OF** 1

PROJECT 335 Bond St.	PROJECT NO. 170362501
LOCATION 335 Bond St. Brooklyn, NY	ELEVATION AND DATUM n/a
DRILLING AGENCY AARCO	DATE STARTED 5/2/15 — DATE FINISHED 5/2/15
DRILLING EQUIPMENT GeoProbe 420M	COMPLETION DEPTH 9' — ROCK DEPTH n/a
SIZE AND TYPE OF BIT Direct push, 2"	NO. SAMPLES 3 — DIST. n/a — UNDIST. n/a — CORE n/a
CASING n/a	WATER LEVEL FIRST 8.5' — COMPL. n/a — 24 HR. n/a
CASING HAMMER n/a — WEIGHT n/a — DROP n/a	FOREMAN Tom Sikol
SAMPLER 36" macrocore	INSPECTOR Emily Snead
SAMPLER HAMMER n/a — WEIGHT n/a — DROP n/a	

	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES NO.LOC.	SAMPLES TYPE	SAMPLES RECOV. FT.	SAMPLES PENETR. RESIST BL/6 in.
C	6" Concrete Slab					
Fill	R1A: Loose, red-brown medium to coarse SAND, brick fragments. (dry) (Fill) (0-9")	1	R-1	macrocore	22"/30"	0.0
	R1B: Loose, gray-brown coarse SAND, trace gravel (dry) (fill) (9-13")	2				0.0
	R1C: Loose, medium to fine SAND, trace c. Sand. (dry) (Fill) (13-22")	3				0.0
concrete	R2A: Loose, reddish-tan mottled degraded CONCRETE layer, (dry) (concrete) (0-10")	4	R-2	macrocore	16"/36"	1.0
Brick	R2B: Loose, red-brown degraded BRICK layer (dry) (Brick) (10-16")	5				0.1
Sand		6				0.5
	R3: Loose, brown fine SAND, some c. Sand, trace Silt. (wet) (native sand) (0-6")	7	R-3	macrocore	6"/36"	0.0
	EOB @ 9' bgs	8 ▽				
		9				
		10				
		11				
		12				
		13				
		14				

REMARKS
(DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)



(NTS)

5-2-15

1110 - Core through concrete slab in SB03 location

1115 - Begin macrocore sampling SB03 location

1140 - Complete macrocore sampling SB03. Final depth 9' bgs. Water observed at 7.5' bgs. Install TMW01 to 9', running sands, cannot log installation. Sweet odor, Solvent-like + 0.5 ppm PID reading at 5-6' bgs.

1150 - Collect Sample SB03.5-5.5 Soil sample. Place on ice

1500 - Patch concrete slab in SB03 with new concrete.

EOB @ 9' bgs

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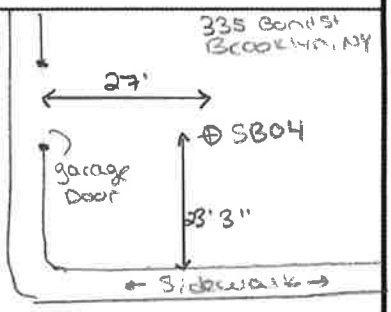
LOG OF BORING SB04 **SHEET** 1 **OF** 1

PROJECT 335 Bond St.		PROJECT NO. 170362501	
LOCATION 335 Bond St. Brooklyn, NY		ELEVATION AND DATUM n/a	
DRILLING AGENCY AARCO		DATE STARTED 5/2/15	DATE FINISHED 5/2/15
DRILLING EQUIPMENT Geoprobe 420M		COMPLETION DEPTH 9'	ROCK DEPTH n/a
SIZE AND TYPE OF BIT Direct push, 2"		NO. SAMPLES	DIST. 3 / UNDIST. n/a / CORE n/a
CASING n/a		WATER LEVEL	FIRST 6' / COMPL. n/a / 24 HR. n/a
CASING HAMMER n/a / WEIGHT n/a / DROP n/a		FOREMAN Tom Sikol	
SAMPLER 36" macrocore		INSPECTOR Emily Snead	
SAMPLER HAMMER n/a / WEIGHT n/a / DROP n/a			

	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES NO.LOC.	TYPE	RECOV. FT.	PENETR. RESIST BL/6 in.
C	4.5" Concrete slab					
Fill	R1A: Loose red-brown medium to fine (0-17") SAND, some C. Sand, brick fragments, (dry) (Fill)	1	R-1	macrocore	20 / 33.5"	3.7
Concrete	R2A: Loose, reddish-tan mottled (17-20") degraded CONCRETE layer (dry) (Concrete)	2				1.8
Fill	R2A: Loose, red-brown coarse to (0-8") medium SAND, brick fragments, trace gravel (moist) (Fill)	3				1.3
		4	R-2	macrocore	13 / 36"	
		5				1.6
Brick	R2B: Loose, red-brown degraded (8-13") BRICK layer (wet) (Fill)	6				1.4
Sand	R3: Loose, brown fine SAND, (0-10") trace C. Sand (wet) (native sand)	7	R-3	macrocore	10 / 36"	
		8				0.0
	EOB @ 9' bgs	9				0.0
		10				
		11				
		12				
		13				
		14				

REMARKS
(DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)



(NTS)

5-2-15

1308: Begin coring concrete slab in SB04 location

1332: Begin macrocore sampling SB04

1345: Complete macrocore sampling SB04. Final depth 9' bgs. Water observed at 6' bgs.

1450: Collect soil sample SB04_0.5-1', place on ice

1500: patch concrete slab in SB04 w/ new concrete.

EOB @ 9' bgs

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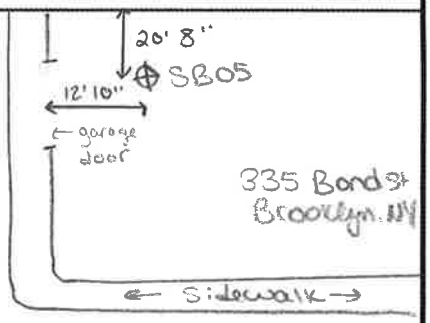
LOG OF BORING SB05 **SHEET** 1 **OF** 1

PROJECT: 335 Bond St.		PROJECT NO.: 170362501	
LOCATION: 335 Bond St. Brooklyn, NY		ELEVATION AND DATUM: n/a	
DRILLING AGENCY: AARCO		DATE STARTED: 5/2/15	DATE FINISHED: 5/2/15
DRILLING EQUIPMENT: GeoProbe 420M		COMPLETION DEPTH: 9'	ROCK DEPTH: n/a
SIZE AND TYPE OF BIT: Direct push, 2"		NO. SAMPLES: DIST. 3	UNDIST. n/a CORE n/a
CASING: n/a		WATER LEVEL: FIRST 8.5	COMPL. n/a 24 HR. n/a
CASING HAMMER: n/a WEIGHT: n/a	DROP: n/a	FOREMAN: Tom Sikol	
SAMPLER: 36" macrocore		INSPECTOR: Emily Snead	
SAMPLER HAMMER: n/a WEIGHT: n/a	DROP: n/a		

	SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES NO./LOC.	SAMPLES TYPE	SAMPLES RECOV. FT.	SAMPLES PENETR. RESIST BL/6 in.
C	6" Concrete Slab					
Fill	R1A: Loose, brown medium to fine SAND, Brick fragments, glass and gravel. (Dry) (Fill)	1	R-1	macrocore	24"/30"	0.8, 0.0, 0.0, 0.0
Concrete	R1B: Loose, light tan degraded CONCRETE. (dry) (Concrete)	2				
Brick	R1C: Loose, red-brown degraded BRICK layer (dry) (brick)	3				
Fill	R2A: Loose, tan-brown coarse to medium SAND, concrete + brick fragments, trace gravel (dry) (Fill)	4	R-2	macrocore	21"/36"	0.4, 0.6, 0.1, 0.8
	R2B: Loose, black-brown COAL ASH, Some c. Sand (dry) (Fill)	5				
Brick	R2C: Loose, red-brown BRICK layer (dry) (Brick)	6				
Fill	R2D: Loose, black-brown coarse to medium SAND, concrete fragments (dry) (Fill)	7	R-3	macrocore	5"/36"	
Sand	R3: Loose, brown coarse to medium SAND (wet) (native sand)	8				0.0
	EOB @ 9' bgs	9				
		10				
		11				
		12				
		13				
		14				

REMARKS
(DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)



(NTS)

5-2-15

1320 - Begin coring concrete slab in SB05 location

1350 - Begin macrocore sampling SB05

1405 - Complete macrocore sampling SB05. Final depth 9' bgs. Water observed at ~8.5' bgs

1500 - Collect soil sample SB05-5-5.5'

Patch concrete slab with new concrete.

EOB @ 9' bgs

ATTACHMENT 2 – GROUNDWATER SAMPLING LOG

GROUND WATER SAMPLE FIELD INFORMATION FORM

Site: 335 Bond ST	Well#/Location: TMW 01	Job No. [redacted] 17036250
Date: 5-2-2015	Weather: Clear, 66 °F	Sampling Personnel: Emily Sneed

Well Information

Sample ID	TW01-050215
Well Depth (ft)	9'
Screened Interval (ft)	0-9'
Casing Elevation (msl)	n/a
Casing Diameter (in)	2"
Depth to Water (ft)	6.87'
Water Elevation (msl)	n/a
Casing Volume (gal)	n/a
PID/FID Reading (ppm)	2.4 ppm

Purging Information

Purging Method	Low-Flow
Purging Rate (l/m; gpm)	200 mL/min
Start Purge Time	1305
End Purge Time	1400
Volume Purged (gal)	3.6 gal

Sampling Information

Sampling Method	bottom peristaltic
Start Sampling Time	1400
End Sampling Time	1415
Depth Before Sampling (ft)	n/a
Number Bottles Collected	7

	Parameters							
Sample Time	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C)	ORP (mV)	Depth to Water (ft)	Purged Volume (gallons)
1305	6.88	1.46	76	1.86	17.56	-67	6.87	0.0
1310	4.36	1.42	44.3	1.12	17.56	-98	-	0.75
1315	4.71	1.40	29.5	0.93	17.56	-108	-	0.90
1320	4.89	1.39	29.5	0.82	17.56	-113	-	1.5
1325	4.98	1.38	23.0	0.81	17.56	-115	-	1.67
1330	5.04	1.38	33.2	0.98	17.57	-117	-	1.80
1335	5.07	1.36	14.9	0.93	17.58	-118	-	2.05
1340	5.04	1.37	17.9	1.06	17.59	-119	-	2.30
1345	5.07	1.36	22.5	0.89	17.6	-119	-	2.75
1350	5.10	1.35	11.9	0.61	17.59	-120	-	2.90
1355	5.10	1.35	10.5	0.58	17.58	-120	-	3.30
1400	5.10	1.35	9.8	0.58	17.59	-120	-	3.60

Notes/Remarks

Calibrate Horiba @ 1251 → Auto

pH = 3.9

ms/cm = 4.49

NTU = 0.2

DO = 1060

Initial purge rate = 4 min, 5 sec per 37.8L

Well installation → Running sands, unable to log

1400 - Collect Sample TMW01-050215

Stablility

- PH - ± 0.1 unit
- Specific Conductance - ± 3%
- Temperature - ± 3%
- Dissolved Oxygen - ±10% above 0.5 mg/L
- Turbidity - ± 10% above 5 NTU
- ORP/Eh - ±10 millivolts
- Maximum flow rate - <0.5 L/m or 0.13 gpm
- Maximum drawdown - <0.33 feet

Remember: Battery Connections - **RED** is **POSITIVE** and **BLACK** is **NEGATIVE**

ATTACHMENT 3 – SUB-SLAB SOIL VAPOR SAMPLING LOG

SOIL VAPOR SAMPLING LOG SHEET

Sample Number: SV01

PROJECT: 335 Bond St.	PROJECT NO.: 170362501
LOCATION: 335 Bond St. Brooklyn, NY	SURFACE ELEVATION AND DATUM: n/a
DRILLING FIRM OR LANGAN INSTALLER: AARCO	INSTALLATION DATE STARTED: 5/2/15 DATE FINISHED: 5/2/15
INSTALLATION FOREMAN: Tom Sikol	SAMPLE DATE STARTED: 5/2/15 DATE FINISHED: 5/2/15
INSTALLATION EQUIPMENT: Hammer Drill	TYPE OF SAMPLING DEVICE: 6L. Summa Canister
INSPECTOR: Emily Snead	SAMPLER: 2" Stainless Steel Probe
POTENTIAL SAMPLE INTERFERENCES: None	WEATHER CONDITIONS (PRECIP., TEMP., PRESS., WIND SPEED AND DIR.): Installed in indoor garage Weather: Clear, 51-66°F, 78% humidity Atmospheric pressure = 30.02in.

METHOD OF INSTALLATION AND PURGING:

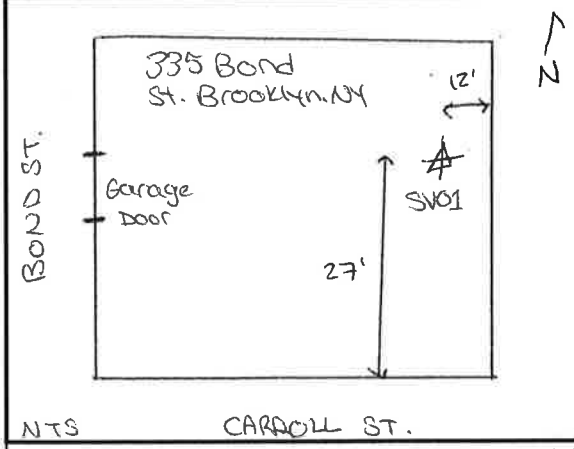
Hammerdrill, multiRae set to 200ml/min (Low Setting) purge rate.

TUBING TYPE/DIAMETER: Teflon 3/16" ID, 1/4" OD	TYPE OF MATERIAL ABOVE SEAL: N/A Concrete Slab Surface
IMPLANT SCREEN TYPE/LENGTH/DIAMETER: 2" Length, 1/4" Diameter	SEAL MATERIAL (Bentonite, Beeswax, Modeling Clay, etc.): Bentonite Clay
BOREHOLE DIAMETER: 0.5 inches	FILTER PACK MATERIAL (Sand or Glass Beads): NO.2 Sand

PURGE VOLUME (L):	400 ml
PURGE FLOW RATE (ML/MIN):	200 ml/minute
PID AFTER PURGE (PPM):	0.8 ppm
HELIUM TEST IN BUCKET(%):	35 %
HELIUM TEST IN TUBE (PPM):	0.0 ppm
SAMPLE START DATE/TIME:	5/2/15 12:26
SAMPLE STOP DATE/TIME:	5/2/15 14:18
TOTAL SAMPLE TIME (MIN):	112 min
FLOW RATE (L/MIN):	0.05 L/min
VOLUME OF SAMPLE (LITERS):	6 Liters
PID AFTER SAMPLE (PPM):	1.2 ppm
SAMPLE MOISTURE CONTENT:	n/a
CAN SERIAL NUMBER:	17351
REGULATOR SERIAL NUMBER:	T13
CAN START VACUUM PRESS. (" HG):	-30" HG
CAN STOP VACUUM PRESS. (" HG):	-6.5" HG

IMPLANT/PROBE DETAILS (SEAL, FILTER, ETC.)	DEPTH (FEET FROM SURFACE)	NOTES
Top of Seal	0.0"	Bentonite Clay
Top of Pack	1.5"	NO.2 Sand Pack
	4"	2" Stainless Steel Probe

SAMPLE LOCATION SKETCH



NOTES

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor, New York, New York 10001-2727

ATTACHMENT 4 – LABORATORY ANALYTICAL REPORTS

Technical Report

prepared for:

Langan Engineering & Environmental Services (NYC)
21 Penn Plaza, 360 West 31st Street
New York NY, 10001
Attention: Ryan Manderbach

Report Date: 05/04/2015
Client Project ID: 170362501
York Project (SDG) No.: 15E0070

Report Date: 05/04/2015
Client Project ID: 170362501
York Project (SDG) No.: 15E0070

Langan Engineering & Environmental Services (NYC)
21 Penn Plaza, 360 West 31st Street
New York NY, 10001
Attention: Ryan Manderbach

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 May 02, 2015 and listed below. The project was identified as your project: **170362501**.

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

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

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15E0070-01	SB01_2.5-3	Soil	05/02/2015	05/02/2015
15E0070-02	SB02_2.5-3	Soil	05/02/2015	05/02/2015
15E0070-03	SB03_5-5.5	Soil	05/02/2015	05/02/2015
15E0070-04	SB04_.5-1	Soil	05/02/2015	05/02/2015
15E0070-05	SB05_5-5.5	Soil	05/02/2015	05/02/2015
15E0070-06	TMW01_050215	Water	05/02/2015	05/02/2015
15E0070-07	Trip Blank	Water	05/02/2015	05/02/2015

General Notes for York Project (SDG) No.: 15E0070

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

Approved By: 

Date: 05/04/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:09	BK
123-91-1	1,4-Dioxane	ND		ug/kg dry	80	160	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
78-93-3	2-Butanone	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
591-78-6	2-Hexanone	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:09	BK

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	**Acetone**	**18**	CCV-E, SCAL-E	ug/kg dry	8.0	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
107-02-8	Acrolein	ND		ug/kg dry	8.0	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
107-13-1	Acrylonitrile	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
71-43-2	Benzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
74-97-5	Bromochloromethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-27-4	Bromodichloromethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-25-2	Bromoform	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
74-83-9	Bromomethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-15-0	Carbon disulfide	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
56-23-5	Carbon tetrachloride	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
108-90-7	Chlorobenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-00-3	Chloroethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
67-66-3	Chloroform	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
74-87-3	Chloromethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
110-82-7	Cyclohexane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
124-48-1	Dibromochloromethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
74-95-3	Dibromomethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
108-87-2	Methylcyclohexane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-09-2	Methylene chloride	ND		ug/kg dry	8.0	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
95-47-6	o-Xylene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	05/04/2015 07:53	05/04/2015 11:09	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	8.0	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854	05/04/2015 07:53	05/04/2015 11:09	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
100-42-5	Styrene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
127-18-4	**Tetrachloroethylene**	**17**	CCV-E	ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
108-88-3	Toluene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 11:09	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
79-01-6	Trichloroethylene	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
75-01-4	Vinyl Chloride	ND		ug/kg dry	4.0	8.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	12	24	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 11:09	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*98.2 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*97.5 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*	*76-130*

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
98-86-2	Acetophenone	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP	KH
62-53-3	Aniline	ND		ug/kg dry	106	212	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP,PADEP	KH
120-12-7	Anthracene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
1912-24-9	Atrazine	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP	KH
100-52-7	Benzaldehyde	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP	KH
92-87-5	Benzidine	ND		ug/kg dry	106	212	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854	KH
56-55-3	**Benzo(a)anthracene**	**77.0**		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
50-32-8	**Benzo(a)pyrene**	**52.5**	J	ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
205-99-2	**Benzo(b)fluoranthene**	**46.6**	J	ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
65-85-0	Benzoic acid	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP	KH
207-08-9	**Benzo(k)fluoranthene**	**58.8**		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP,PADEP	KH
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
105-60-2	Caprolactam	ND		ug/kg dry	53.0	106	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP	KH
86-74-8	Carbazole	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
106-47-8	4-Chloroaniline	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
218-01-9	**Chrysene**	**73.7**		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
132-64-9	Dibenzofuran	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP	KH
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	53.0	106	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	53.0	106	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 NELAC-NY10854,NJDEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 17:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	**Fluoranthene**	**161**		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
118-74-1	Hexachlorobenzene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-72-1	Hexachloroethane	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-59-1	Isophorone	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-48-7	2-Methylphenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
91-20-3	Naphthalene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
100-01-6	4-Nitroaniline	ND		ug/kg dry	53.0	106	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
88-74-4	2-Nitroaniline	ND		ug/kg dry	53.0	106	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
99-09-2	3-Nitroaniline	ND		ug/kg dry	53.0	106	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-95-3	Nitrobenzene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
88-75-5	2-Nitrophenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-02-7	4-Nitrophenol	ND		ug/kg dry	53.0	106	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
87-86-5	Pentachlorophenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	**Phenanthrene**	**103**		ug/kg dry	26.5	53.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 17:53	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-95-2	Phenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 17:53	KH
129-00-0	**Pyrene**	**120**		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 17:53	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	53.0	106	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 17:53	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	53.0	106	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 17:53	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 17:53	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 17:53	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	26.5	53.0	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 17:53	KH

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*29.8 %*	*10-95*
4165-62-2	*Surrogate: Phenol-d5*	*33.1 %*	*10-107*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*36.8 %*	*10-95*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*30.4 %*	*10-97*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*46.2 %*	*10-103*
1718-51-0	*Surrogate: Terphenyl-d14*	*34.9 %*	*19-99*

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 10:51	JW
319-84-6	alpha-BHC	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 10:51	JW
319-85-7	beta-BHC	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 10:51	JW
319-86-8	delta-BHC	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 10:51	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 10:51	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:18	05/04/2015 10:51	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:18	05/04/2015 10:51	JW
57-74-9	Chlordane, total	ND		ug/kg dry	8.38	8.38	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 10:51	JW
72-54-8	4,4'-DDD	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 10:51	JW

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-55-9	4,4'-DDE	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
60-57-1	Dieldrin	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
959-98-8	Endosulfan I	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
72-20-8	Endrin	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 10:51	JW
76-44-8	Heptachlor	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	2.10	2.10	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
72-43-5	Methoxychlor	ND		ug/kg dry	10.5	10.5	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:51	JW
8001-35-2	Toxaphene	ND		ug/kg dry	106	106	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 10:51	JW

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*66.7 %*	*30-140*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*65.7 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:26	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:26	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:26	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:26	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:26	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:26	AMC

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Polychlorinated Biphenyls (PCB)

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 11:26	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0212	0.0212	1	EPA 8082A Certifications:	05/03/2015 13:18	05/04/2015 11:26	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*55.2 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*52.7 %*	*30-140*

Metals, Target Analyte

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

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4910**		mg/kg dry	6.35	6.35	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-36-0	**Antimony**	**1.86**		mg/kg dry	0.635	0.635	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-38-2	**Arsenic**	**8.38**		mg/kg dry	1.27	1.27	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-39-3	**Barium**	**139**		mg/kg dry	1.27	1.27	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.127	0.127	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.381	0.381	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-70-2	**Calcium**	**7710**		mg/kg dry	0.635	6.35	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-47-3	**Chromium**	**11.0**		mg/kg dry	0.635	0.635	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-48-4	**Cobalt**	**7.46**		mg/kg dry	0.635	0.635	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-50-8	**Copper**	**96.1**		mg/kg dry	0.635	0.635	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7439-89-6	**Iron**	**7700**		mg/kg dry	2.54	2.54	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7439-92-1	**Lead**	**247**		mg/kg dry	0.381	0.381	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:00	MW
7439-95-4	**Magnesium**	**769**		mg/kg dry	6.35	6.35	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7439-96-5	**Manganese**	**120**		mg/kg dry	0.635	0.635	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:00	MW
7440-02-0	**Nickel**	**16.6**		mg/kg dry	0.635	0.635	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:00	MW

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Metals, Target Analyte

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

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-09-7	**Potassium**	**841**		mg/kg dry	6.35	6.35	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:00	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7782-49-2	**Selenium**	**3.26**		mg/kg dry	1.27	1.27	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:00	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.635	0.635	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:00	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**1170**		mg/kg dry	12.7	12.7	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:00	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-28-0	Thallium	ND		mg/kg dry	1.27	1.27	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:00	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-62-2	**Vanadium**	**18.6**		mg/kg dry	1.27	1.27	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:00	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-66-6	**Zinc**	**126**		mg/kg dry	1.27	1.27	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:00	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Metals, TCLP RCRA

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

Sample Prepared by Method: EPA 3010A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.022**		mg/L	0.004	0.004	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:11	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**0.243**		mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:11	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:11	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:11	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.042**		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:11	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.012**	M-SeTC	mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:11	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:11	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.664**		mg/kg dry	0.0381	0.0381	1	EPA 7473	05/03/2015 07:58	05/03/2015 12:26	ALD
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

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

Sample Prepared by Method: EPA 7473 water

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

Sample Information

Client Sample ID: SB01_2.5-3 **York Sample ID:** 15E0070-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 10:30 am	05/02/2015

Mercury TCLP by 7473

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

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	05/04/2015 06:51	05/04/2015 12:07	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**78.7**		%	0.100	0.100	1	SM 2540G	05/04/2015 10:12	05/04/2015 14:24	SCA
								Certifications: CTDOH			

TCLP Extraction for METALS EPA 1311

Log-in Notes: **Sample Notes:** EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	05/02/2015 16:29	05/04/2015 12:59	SCA
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	05/04/2015 07:53	05/04/2015 11:45	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	05/04/2015 07:53	05/04/2015 11:45	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	05/04/2015 07:53	05/04/2015 11:45	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	05/04/2015 07:53	05/04/2015 11:45	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	05/04/2015 07:53	05/04/2015 11:45	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	05/04/2015 07:53	05/04/2015 11:45	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C	05/04/2015 07:53	05/04/2015 11:45	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
123-91-1	1,4-Dioxane	ND		ug/kg dry	59	120	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
78-93-3	2-Butanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
591-78-6	2-Hexanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
67-64-1	**Acetone**	**12**	CCV-E, SCAL-E, J	ug/kg dry	5.9	12	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
107-02-8	Acrolein	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
107-13-1	Acrylonitrile	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
71-43-2	Benzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
74-97-5	Bromochloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
75-25-2	Bromoform	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-15-0	Carbon disulfide	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP	BK
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
108-90-7	Chlorobenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-00-3	Chloroethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
67-66-3	Chloroform	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
74-87-3	Chloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
110-82-7	Cyclohexane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 NELAC-NY10854,NJDEP	BK
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 NELAC-NY10854,NJDEP,PADEP	BK
74-95-3	Dibromomethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 NELAC-NY10854,NJDEP	BK
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 NELAC-NY10854,NJDEP	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 NELAC-NY10854,NJDEP	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP	BK
79-20-9	Methyl acetate	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 NELAC-NY10854,NJDEP	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP	BK
108-87-2	Methylcyclohexane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 NELAC-NY10854,NJDEP	BK
75-09-2	Methylene chloride	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854,NJDEP	BK
95-47-6	o-Xylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.9	12	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 11:45 CTDOH,NELAC-NY10854	BK

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
100-42-5	Styrene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
127-18-4	**Tetrachloroethylene**	**200**	CCV-E	ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
108-88-3	Toluene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:45	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
79-01-6	**Trichloroethylene**	**8.7**		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.0	5.9	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.9	18	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:45	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*95.1 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*99.1 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*105 %*	*76-130*

Semi-Volatiles, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	**Acenaphthene**	**111**		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:59	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:59	KH
98-86-2	Acetophenone	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:59	KH
62-53-3	Aniline	ND		ug/kg dry	201	402	2	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:59	KH
120-12-7	**Anthracene**	**226**		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:59	KH

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1912-24-9	Atrazine	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 18:59	KH
100-52-7	Benzaldehyde	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 18:59	KH
92-87-5	Benzidine	ND		ug/kg dry	201	402	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854	05/03/2015 13:15	05/03/2015 18:59	KH
56-55-3	**Benzo(a)anthracene**	**932**		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
50-32-8	**Benzo(a)pyrene**	**545**		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
205-99-2	**Benzo(b)fluoranthene**	**522**		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
191-24-2	**Benzo(g,h,i)perylene**	**149**	CCV-E	ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
65-85-0	Benzoic acid	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 18:59	KH
207-08-9	**Benzo(k)fluoranthene**	**557**		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 18:59	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
105-60-2	Caprolactam	ND		ug/kg dry	100	201	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 18:59	KH
86-74-8	**Carbazole**	**81.1**	J	ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
106-47-8	4-Chloroaniline	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 18:59	KH

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
218-01-9	**Chrysene**	**912**		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	**Dibenzo(a,h)anthracene**	**78.7**	CCV-E, J	ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
132-64-9	Dibenzofuran	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	NELAC-NY10854		
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	NELAC-NY10854		
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	NELAC-NY10854		
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
84-66-2	Diethyl phthalate	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
131-11-3	Dimethyl phthalate	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	100	201	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	100	201	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	NELAC-NY10854,NJDEP		
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	**Fluoranthene**	**1710**		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	**Fluorene**	**73.9**	J	ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
118-74-1	Hexachlorobenzene	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	50.4	100	2	EPA 8270D	05/03/2015 13:15	05/03/2015 18:59	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
67-72-1	Hexachloroethane	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**155**	CCV-E	ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
78-59-1	Isophorone	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP	KH
95-48-7	2-Methylphenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP	KH
91-20-3	Naphthalene	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP	KH
100-01-6	4-Nitroaniline	ND		ug/kg dry	100	201	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
88-74-4	2-Nitroaniline	ND		ug/kg dry	100	201	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
99-09-2	3-Nitroaniline	ND		ug/kg dry	100	201	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
98-95-3	Nitrobenzene	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
88-75-5	2-Nitrophenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	100	201	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP	KH
87-86-5	Pentachlorophenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
85-01-8	**Phenanthrene**	**1020**		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
108-95-2	Phenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
129-00-0	**Pyrene**	**1600**		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	100	201	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 NELAC-NY10854,NJDEP	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	100	201	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:59 NELAC-NY10854,NJDEP	KH

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:59	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:59	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	50.4	100	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:59	KH

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*27.3 %*	*10-95*
4165-62-2	*Surrogate: Phenol-d5*	*33.0 %*	*10-107*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*36.8 %*	*10-95*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*35.3 %*	*10-97*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*48.2 %*	*10-103*
1718-51-0	*Surrogate: Terphenyl-d14*	*43.3 %*	*19-99*

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 11:06	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 11:06	JW
57-74-9	Chlordane, total	ND		ug/kg dry	7.95	7.95	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
72-54-8	4,4'-DDD	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
33213-65-9	Endosulfan II	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
72-20-8	Endrin	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:06	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.99	1.99	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.94	9.94	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:06	JW
8001-35-2	Toxaphene	ND		ug/kg dry	101	101	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:06	JW

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*53.0 %*	*30-140*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*46.7 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:55	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:55	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:55	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:55	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:55	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:55	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 11:55	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0201	0.0201	1	EPA 8082A Certifications:	05/03/2015 13:18	05/04/2015 11:55	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*44.3 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*43.8 %*	*30-140*

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4210**		mg/kg dry	6.02	6.02	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-36-0	**Antimony**	**1.31**		mg/kg dry	0.602	0.602	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	**Arsenic**	**22.9**		mg/kg dry	1.20	1.20	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**141**		mg/kg dry	1.20	1.20	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/kg dry	0.120	0.120	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-43-9	Cadmium	ND		mg/kg dry	0.361	0.361	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-70-2	**Calcium**	**44900**		mg/kg dry	0.602	6.02	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-47-3	**Chromium**	**7.22**		mg/kg dry	0.602	0.602	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-48-4	**Cobalt**	**3.31**		mg/kg dry	0.602	0.602	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-50-8	**Copper**	**100**		mg/kg dry	0.602	0.602	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-89-6	**Iron**	**11500**		mg/kg dry	2.41	2.41	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-92-1	**Lead**	**304**		mg/kg dry	0.361	0.361	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-95-4	**Magnesium**	**4010**		mg/kg dry	6.02	6.02	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-96-5	**Manganese**	**170**		mg/kg dry	0.602	0.602	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-02-0	**Nickel**	**12.3**		mg/kg dry	0.602	0.602	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**980**		mg/kg dry	6.02	6.02	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7782-49-2	Selenium	ND		mg/kg dry	1.20	1.20	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.602	0.602	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**588**		mg/kg dry	12.0	12.0	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-28-0	Thallium	ND		mg/kg dry	1.20	1.20	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-62-2	**Vanadium**	**14.0**		mg/kg dry	1.20	1.20	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-66-6	**Zinc**	**99.1**		mg/kg dry	1.20	1.20	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:04	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: SB02_2.5-3 **York Sample ID:** 15E0070-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:20 am	05/02/2015

Metals, TCLP RCRA

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

Sample Prepared by Method: EPA 3010A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	**Arsenic**	**0.037**		mg/L	0.004	0.004	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:31	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**0.221**		mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:31	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:31	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:31	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.015**		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:31	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.017**	M-SeTC	mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:31	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:31	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.914**		mg/kg dry	0.0361	0.0361	1	EPA 7473	05/03/2015 07:58	05/03/2015 12:38	ALD
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

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

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	05/04/2015 06:51	05/04/2015 12:07	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**83.0**		%	0.100	0.100	1	SM 2540G	05/04/2015 10:12	05/04/2015 14:24	SCA
								Certifications: CTDOH			

TCLP Extraction for METALS EPA 1311

Log-in Notes: **Sample Notes:** EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	05/02/2015 16:29	05/04/2015 12:59	SCA
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: **SB03_5-5.5** **York Sample ID:** **15E0070-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
123-91-1	1,4-Dioxane	ND		ug/kg dry	71	140	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
78-93-3	**2-Butanone**	**4.3**	J	ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
591-78-6	2-Hexanone	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	**Acetone**	**49**	CCV-E, SCAL-E	ug/kg dry	7.1	14	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
107-02-8	Acrolein	ND		ug/kg dry	7.1	14	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
107-13-1	Acrylonitrile	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
71-43-2	Benzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
74-97-5	Bromochloromethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
75-25-2	Bromoform	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
74-83-9	Bromomethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
75-15-0	Carbon disulfide	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
108-90-7	Chlorobenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
75-00-3	Chloroethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
67-66-3	Chloroform	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
74-87-3	Chloromethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
110-82-7	Cyclohexane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
74-95-3	Dibromomethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:21	BK
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:21	BK

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
108-87-2	Methylcyclohexane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
75-09-2	Methylene chloride	ND		ug/kg dry	7.1	14	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
95-47-6	o-Xylene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854	05/04/2015 12:21	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	7.1	14	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854	05/04/2015 12:21	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
100-42-5	Styrene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
127-18-4	**Tetrachloroethylene**	**51**	CCV-E	ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK
108-88-3	Toluene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:21	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK
79-01-6	Trichloroethylene	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.5	7.1	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	11	21	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:21	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*96.9 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*99.2 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*108 %*	*76-130*

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
98-86-2	Acetophenone	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
62-53-3	Aniline	ND		ug/kg dry	114	228	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
120-12-7	Anthracene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
1912-24-9	Atrazine	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
100-52-7	Benzaldehyde	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
92-87-5	Benzidine	ND		ug/kg dry	114	228	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854	05/03/2015 18:26	KH
56-55-3	**Benzo(a)anthracene**	**93.8**		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
50-32-8	**Benzo(a)pyrene**	**63.3**		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
205-99-2	**Benzo(b)fluoranthene**	**56.0**	J	ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
65-85-0	Benzoic acid	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
207-08-9	**Benzo(k)fluoranthene**	**65.1**		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
100-51-6	Benzyl alcohol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
105-60-2	Caprolactam	ND		ug/kg dry	57.0	114	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
86-74-8	Carbazole	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
106-47-8	4-Chloroaniline	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
218-01-9	**Chrysene**	**92.5**		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
132-64-9	Dibenzofuran	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP	KH
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 NELAC-NY10854	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 NELAC-NY10854	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 NELAC-NY10854	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 NELAC-NY10854,NJDEP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	57.0	114	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	57.0	114	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 NELAC-NY10854,NJDEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 18:26 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	**Fluoranthene**	**215**		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
118-74-1	Hexachlorobenzene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
67-72-1	Hexachloroethane	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
78-59-1	Isophorone	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
95-48-7	2-Methylphenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
91-20-3	Naphthalene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
100-01-6	4-Nitroaniline	ND		ug/kg dry	57.0	114	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
88-74-4	2-Nitroaniline	ND		ug/kg dry	57.0	114	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
99-09-2	3-Nitroaniline	ND		ug/kg dry	57.0	114	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-95-3	Nitrobenzene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
88-75-5	2-Nitrophenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-02-7	4-Nitrophenol	ND		ug/kg dry	57.0	114	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		
87-86-5	Pentachlorophenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	**Phenanthrene**	**133**		ug/kg dry	28.6	57.0	1	EPA 8270D	05/03/2015 13:15	05/03/2015 18:26	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-95-2	Phenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
129-00-0	**Pyrene**	**168**		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	57.0	114	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	57.0	114	1	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 18:26	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 18:26	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	28.6	57.0	1	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:26	KH

	Surrogate Recoveries	Result		Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*1.53 %*	S-01	*10-95*
4165-62-2	*Surrogate: Phenol-d5*	*8.47 %*	S-01	*10-107*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*43.9 %*		*10-95*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*34.6 %*		*10-97*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*1.29 %*	S-01	*10-103*
1718-51-0	*Surrogate: Terphenyl-d14*	*35.6 %*		*19-99*

Pesticides, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
319-84-6	alpha-BHC	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
319-85-7	beta-BHC	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
319-86-8	delta-BHC	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 11:20	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 11:20	JW
57-74-9	Chlordane, total	ND		ug/kg dry	9.02	9.02	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
72-54-8	4,4'-DDD	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
72-55-9	4,4'-DDE	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
60-57-1	Dieldrin	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
959-98-8	Endosulfan I	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
72-20-8	Endrin	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:20	JW
76-44-8	Heptachlor	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	2.26	2.26	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
72-43-5	Methoxychlor	ND		ug/kg dry	11.3	11.3	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:20	JW
8001-35-2	Toxaphene	ND		ug/kg dry	114	114	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:20	JW

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*67.4 %*	*30-140*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*66.9 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:20	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:20	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:20	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:20	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:20	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:20	AMC

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Polychlorinated Biphenyls (PCB)

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 12:20	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0228	0.0228	1	EPA 8082A Certifications:	05/03/2015 13:18	05/04/2015 12:20	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*59.6 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*59.7 %*	*30-140*

Metals, Target Analyte

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

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**9170**		mg/kg dry	6.83	6.83	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-36-0	Antimony	ND		mg/kg dry	0.683	0.683	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-38-2	**Arsenic**	**7.95**		mg/kg dry	1.37	1.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-39-3	**Barium**	**81.2**		mg/kg dry	1.37	1.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.137	0.137	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.410	0.410	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-70-2	**Calcium**	**130000**		mg/kg dry	0.683	6.83	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-47-3	**Chromium**	**8.86**		mg/kg dry	0.683	0.683	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-48-4	**Cobalt**	**3.97**		mg/kg dry	0.683	0.683	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-50-8	**Copper**	**12.6**		mg/kg dry	0.683	0.683	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7439-89-6	**Iron**	**10000**		mg/kg dry	2.73	2.73	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7439-92-1	**Lead**	**52.4**		mg/kg dry	0.410	0.410	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7439-95-4	**Magnesium**	**10500**		mg/kg dry	6.83	6.83	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7439-96-5	**Manganese**	**237**		mg/kg dry	0.683	0.683	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-02-0	**Nickel**	**9.45**		mg/kg dry	0.683	0.683	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-09-7	**Potassium**	**1380**		mg/kg dry	6.83	6.83	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Metals, Target Analyte

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

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7782-49-2	Selenium	ND		mg/kg dry	1.37	1.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-22-4	Silver	ND		mg/kg dry	0.683	0.683	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-23-5	**Sodium**	**533**		mg/kg dry	13.7	13.7	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-28-0	Thallium	ND		mg/kg dry	1.37	1.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-62-2	**Vanadium**	**21.2**		mg/kg dry	1.37	1.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW
7440-66-6	**Zinc**	**28.1**		mg/kg dry	1.37	1.37	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:09	MW

Metals, TCLP RCRA

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

Sample Prepared by Method: EPA 3010A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:15	05/04/2015 13:36	MW
7440-39-3	**Barium**	**0.136**		mg/L	0.010	0.010	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:15	05/04/2015 13:36	MW
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:15	05/04/2015 13:36	MW
7440-47-3	Chromium	ND		mg/L	0.005	0.005	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:15	05/04/2015 13:36	MW
7439-92-1	Lead	ND		mg/L	0.003	0.003	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:15	05/04/2015 13:36	MW
7782-49-2	**Selenium**	**0.011**	M-SeTC	mg/L	0.010	0.010	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:15	05/04/2015 13:36	MW
7440-22-4	Silver	ND		mg/L	0.005	0.005	1	EPA 6010C/1311 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:15	05/04/2015 13:36	MW

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**4.67**		mg/kg dry	0.0410	0.0410	1	EPA 7473 Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP	05/03/2015 07:58	05/03/2015 12:50	ALD

Mercury TCLP by 7473

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

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311 Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854	05/04/2015 06:51	05/04/2015 12:07	ALD

Sample Information

Client Sample ID: SB03_5-5.5 **York Sample ID:** 15E0070-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 11:50 am	05/02/2015

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**73.2**		%	0.100	0.100	1	SM 2540G	05/04/2015 10:12	05/04/2015 14:24	SCA
								Certifications: CTDOH			

TCLP Extraction for METALS EPA 1311

Log-in Notes: **Sample Notes:** EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	05/02/2015 16:29	05/04/2015 12:59	SCA
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-00-5	**1,1,2-Trichloroethane**	**5.7**		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: NELAC-NY10854,NJDEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: NELAC-NY10854,NJDEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C	05/04/2015 07:53	05/04/2015 12:58	BK
								Certifications: NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
123-91-1	1,4-Dioxane	ND		ug/kg dry	50	100	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 NELAC-NY10854,NJDEP	BK
78-93-3	2-Butanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
591-78-6	2-Hexanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
67-64-1	**Acetone**	**13**	CCV-E, SCAL-E	ug/kg dry	5.0	10	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
107-02-8	Acrolein	ND		ug/kg dry	5.0	10	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
107-13-1	Acrylonitrile	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
71-43-2	Benzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
74-97-5	Bromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 NELAC-NY10854,NJDEP	BK
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-25-2	Bromoform	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
74-83-9	Bromomethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK
75-15-0	Carbon disulfide	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP	BK
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53	05/04/2015 12:58 CTDOH,NELAC-NY10854,NJDEP,PADEP	BK

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
75-00-3	Chloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
67-66-3	Chloroform	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
74-87-3	Chloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
110-82-7	Cyclohexane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
74-95-3	Dibromomethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
79-20-9	Methyl acetate	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
75-09-2	Methylene chloride	ND		ug/kg dry	5.0	10	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:58	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
95-47-6	o-Xylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854	05/04/2015 12:58	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.0	10	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854	05/04/2015 12:58	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK
100-42-5	Styrene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications:	05/04/2015 07:53 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:58	BK

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:58	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:58	BK
127-18-4	**Tetrachloroethylene**	**230**	CCV-E, E	ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:58	BK
108-88-3	Toluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:58	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 12:58	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:58	BK
79-01-6	**Trichloroethylene**	**18**		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:58	BK
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:58	BK
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:58	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.5	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 12:58	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*97.2 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*98.6 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*109 %*	*76-130*

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	**Acenaphthene**	**86.8**	J	ug/kg dry	46.5	92.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 19:32	KH
208-96-8	Acenaphthylene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 19:32	KH
98-86-2	Acetophenone	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 19:32	KH
62-53-3	Aniline	ND		ug/kg dry	186	372	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 19:32	KH
120-12-7	**Anthracene**	**226**		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 19:32	KH
1912-24-9	Atrazine	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 19:32	KH
100-52-7	Benzaldehyde	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 19:32	KH
92-87-5	Benzidine	ND		ug/kg dry	186	372	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854	05/03/2015 13:15	05/03/2015 19:32	KH

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-55-3	**Benzo(a)anthracene**	**859**		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	**Benzo(a)pyrene**	**370**		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	**Benzo(b)fluoranthene**	**342**		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	**Benzo(g,h,i)perylene**	**122**	CCV-E	ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
65-85-0	Benzoic acid	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	NELAC-NY10854,NJDEP		
207-08-9	**Benzo(k)fluoranthene**	**350**		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-51-6	Benzyl alcohol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
92-52-4	1,1'-Biphenyl	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	NELAC-NY10854,NJDEP		
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
105-60-2	Caprolactam	ND		ug/kg dry	92.8	185	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	NELAC-NY10854,NJDEP		
86-74-8	**Carbazole**	**63.8**	J	ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-47-8	4-Chloroaniline	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
95-57-8	2-Chlorophenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	**Chrysene**	**836**		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	**Dibenzo(a,h)anthracene**	**61.6**	CCV-E, J	ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
132-64-9	Dibenzofuran	ND		ug/kg dry	46.5	92.8	2	EPA 8270D	05/03/2015 13:15	05/03/2015 19:32	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP		

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854,NJDEP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854,NJDEP	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
206-44-0	**Fluoranthene**	**1490**		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
86-73-7	**Fluorene**	**64.6**	J	ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854,NJDEP,PADEP	KH
118-74-1	Hexachlorobenzene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
67-72-1	Hexachloroethane	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**128**	CCV-E	ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-59-1	Isophorone	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP	KH
95-48-7	2-Methylphenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP	KH
91-20-3	Naphthalene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP	KH
100-01-6	4-Nitroaniline	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
88-74-4	2-Nitroaniline	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
99-09-2	3-Nitroaniline	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
98-95-3	Nitrobenzene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
88-75-5	2-Nitrophenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP	KH
87-86-5	Pentachlorophenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
85-01-8	**Phenanthrene**	**861**		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
108-95-2	Phenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
129-00-0	**Pyrene**	**1350**		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854,NJDEP	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	92.8	185	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 NELAC-NY10854,NJDEP	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	46.5	92.8	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 19:32 CTDOH,NELAC-NY10854,NJDEP	KH

Surrogate Recoveries	Result	Acceptance Range

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
367-12-4	*Surrogate: 2-Fluorophenol*	*37.3 %*			*10-95*						
4165-62-2	*Surrogate: Phenol-d5*	*45.9 %*			*10-107*						
4165-60-0	*Surrogate: Nitrobenzene-d5*	*54.7 %*			*10-95*						
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*47.8 %*			*10-97*						
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*62.3 %*			*10-103*						
1718-51-0	*Surrogate: Terphenyl-d14*	*55.1 %*			*19-99*						

Pesticides, NJDEP/TCL/Part 375 List

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

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 11:49	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 11:49	JW
57-74-9	Chlordane, total	ND		ug/kg dry	7.35	7.35	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
72-54-8	4,4'-DDD	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
72-20-8	Endrin	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
53494-70-5	Endrin ketone	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:49	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.84	1.84	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.18	9.18	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 11:49	JW
8001-35-2	Toxaphene	ND		ug/kg dry	93.0	93.0	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:49	JW

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*69.9 %*	*30-140*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*62.6 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:08	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:08	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:08	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:08	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:08	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:08	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:08	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0185	0.0185	1	EPA 8082A Certifications:	05/03/2015 13:18	05/04/2015 12:08	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*75.9 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*86.1 %*	*30-140*

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**5350**		mg/kg dry	5.57	5.57	1	EPA 6010C Certifications:	05/04/2015 08:09 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 11:14	MW

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	0.557	0.557	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-38-2	**Arsenic**	**4.83**		mg/kg dry	1.11	1.11	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-39-3	**Barium**	**62.7**		mg/kg dry	1.11	1.11	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.111	0.111	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.334	0.334	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-70-2	**Calcium**	**16400**		mg/kg dry	0.557	5.57	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-47-3	**Chromium**	**12.5**		mg/kg dry	0.557	0.557	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-48-4	**Cobalt**	**7.79**		mg/kg dry	0.557	0.557	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-50-8	**Copper**	**31.3**		mg/kg dry	0.557	0.557	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7439-89-6	**Iron**	**12300**		mg/kg dry	2.23	2.23	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7439-92-1	**Lead**	**109**		mg/kg dry	0.334	0.334	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7439-95-4	**Magnesium**	**5830**		mg/kg dry	5.57	5.57	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7439-96-5	**Manganese**	**259**		mg/kg dry	0.557	0.557	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-02-0	**Nickel**	**55.4**		mg/kg dry	0.557	0.557	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-09-7	**Potassium**	**1100**		mg/kg dry	5.57	5.57	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7782-49-2	**Selenium**	**1.48**		mg/kg dry	1.11	1.11	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-22-4	Silver	ND		mg/kg dry	0.557	0.557	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-23-5	**Sodium**	**597**		mg/kg dry	11.1	11.1	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-28-0	Thallium	ND		mg/kg dry	1.11	1.11	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-62-2	**Vanadium**	**16.9**		mg/kg dry	1.11	1.11	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW
7440-66-6	**Zinc**	**81.4**		mg/kg dry	1.11	1.11	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:14	MW

Metals, TCLP RCRA

Log-in Notes:

Sample Notes:

Sample Information

Client Sample ID: SB04_.5-1 **York Sample ID:** 15E0070-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 2:50 pm	05/02/2015

Sample Prepared by Method: EPA 3010A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:41	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**0.490**		mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:41	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:41	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:41	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	**Lead**	**0.017**		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:41	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.018**	M-SeTC	mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:41	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:41	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

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

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.310**		mg/kg dry	0.0334	0.0334	1	EPA 7473	05/03/2015 07:58	05/03/2015 13:02	ALD
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

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

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	05/04/2015 06:51	05/04/2015 12:07	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

Total Solids

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**89.8**		%	0.100	0.100	1	SM 2540G	05/04/2015 10:12	05/04/2015 14:24	SCA
								Certifications: CTDOH			

TCLP Extraction for METALS EPA 1311

Log-in Notes: **Sample Notes:** **EXT-Temp**

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	05/02/2015 16:29	05/04/2015 12:59	SCA
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
123-91-1	1,4-Dioxane	ND		ug/kg dry	5900	12000	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
78-93-3	2-Butanone	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
591-78-6	2-Hexanone	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND	SCAL-E	ug/kg dry	590	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
107-02-8	Acrolein	ND		ug/kg dry	590	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
107-13-1	Acrylonitrile	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
71-43-2	Benzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
74-97-5	Bromochloromethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-27-4	Bromodichloromethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-25-2	Bromoform	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
74-83-9	Bromomethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-15-0	Carbon disulfide	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
56-23-5	Carbon tetrachloride	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
108-90-7	Chlorobenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-00-3	Chloroethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
67-66-3	Chloroform	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
74-87-3	Chloromethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
110-82-7	Cyclohexane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
124-48-1	Dibromochloromethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
74-95-3	Dibromomethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
100-41-4	Ethyl Benzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
98-82-8	Isopropylbenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
108-87-2	Methylcyclohexane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-09-2	Methylene chloride	ND		ug/kg dry	590	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
104-51-8	n-Butylbenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
103-65-1	n-Propylbenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
95-47-6	o-Xylene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854	05/04/2015 07:53	05/04/2015 15:23	BK
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	590	1200	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854	05/04/2015 07:53	05/04/2015 15:23	BK
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
135-98-8	sec-Butylbenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
100-42-5	Styrene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
98-06-6	tert-Butylbenzene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
127-18-4	**Tetrachloroethylene**	**8600**	CCV-E	ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
108-88-3	Toluene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:53	05/04/2015 15:23	BK
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
79-01-6	**Trichloroethylene**	**430**	J	ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
75-01-4	Vinyl Chloride	ND		ug/kg dry	290	590	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK
1330-20-7	Xylenes, Total	ND		ug/kg dry	880	1800	100	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 07:53	05/04/2015 15:23	BK

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*92.8 %*	*77-125*
2037-26-5	*Surrogate: Toluene-d8*	*96.3 %*	*85-120*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*104 %*	*76-130*

Sample Information

Client Sample ID: **SB05_5-5.5** **York Sample ID:** **15E0070-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	**Acenaphthene**	**1390**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
208-96-8	**Acenaphthylene**	**74.7**	J	ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
98-86-2	Acetophenone	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP		
62-53-3	Aniline	ND		ug/kg dry	191	382	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
120-12-7	**Anthracene**	**1430**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
1912-24-9	Atrazine	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP		
100-52-7	Benzaldehyde	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP		
92-87-5	Benzidine	ND		ug/kg dry	191	382	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854		
56-55-3	**Benzo(a)anthracene**	**2690**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
50-32-8	**Benzo(a)pyrene**	**861**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
205-99-2	**Benzo(b)fluoranthene**	**874**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
191-24-2	**Benzo(g,h,i)perylene**	**477**	CCV-E	ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
65-85-0	Benzoic acid	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP		
207-08-9	**Benzo(k)fluoranthene**	**1280**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
100-51-6	Benzyl alcohol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
85-68-7	Benzyl butyl phthalate	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
92-52-4	**1,1'-Biphenyl**	**172**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP		
101-55-3	4-Bromophenyl phenyl ether	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
105-60-2	Caprolactam	ND		ug/kg dry	95.4	190	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	NELAC-NY10854,NJDEP		
86-74-8	**Carbazole**	**934**		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
59-50-7	4-Chloro-3-methylphenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
106-47-8	4-Chloroaniline	ND		ug/kg dry	47.8	95.4	2	EPA 8270D	05/03/2015 13:15	05/03/2015 20:05	KH
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
111-44-4	Bis(2-chloroethyl)ether	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
91-58-7	2-Chloronaphthalene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-57-8	2-Chlorophenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
218-01-9	**Chrysene**	**2430**		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
53-70-3	**Dibenzo(a,h)anthracene**	**176**	CCV-E	ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
132-64-9	**Dibenzofuran**	**1030**		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP	KH
84-74-2	Di-n-butyl phthalate	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 NELAC-NY10854	KH
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 NELAC-NY10854	KH
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 NELAC-NY10854	KH
91-94-1	3,3'-Dichlorobenzidine	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 NELAC-NY10854,NJDEP,PADEP	KH
120-83-2	2,4-Dichlorophenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
84-66-2	Diethyl phthalate	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
105-67-9	2,4-Dimethylphenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
131-11-3	Dimethyl phthalate	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP	KH
51-28-5	2,4-Dinitrophenol	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
121-14-2	2,4-Dinitrotoluene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
606-20-2	2,6-Dinitrotoluene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH
117-84-0	Di-n-octyl phthalate	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15	05/03/2015 20:05 CTDOH,NELAC-NY10854,NJDEP,PADEP	KH

Sample Information

Client Sample ID: **SB05_5-5.5** **York Sample ID:** **15E0070-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 20:05	KH
117-81-7	Bis(2-ethylhexyl)phthalate	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
206-44-0	**Fluoranthene**	**10200**		ug/kg dry	239	477	10	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/04/2015 10:05	KH
86-73-7	**Fluorene**	**1250**		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
118-74-1	Hexachlorobenzene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
77-47-4	Hexachlorocyclopentadiene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
67-72-1	Hexachloroethane	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
193-39-5	**Indeno(1,2,3-cd)pyrene**	**427**	CCV-E	ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
78-59-1	Isophorone	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
91-57-6	**2-Methylnaphthalene**	**528**		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 20:05	KH
95-48-7	2-Methylphenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
65794-96-9	3- & 4-Methylphenols	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 20:05	KH
91-20-3	**Naphthalene**	**1040**		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 20:05	KH
100-01-6	4-Nitroaniline	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
88-74-4	2-Nitroaniline	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
99-09-2	3-Nitroaniline	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
98-95-3	Nitrobenzene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
88-75-5	2-Nitrophenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
100-02-7	4-Nitrophenol	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
621-64-7	N-nitroso-di-n-propylamine	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 13:15	05/03/2015 20:05	KH
62-75-9	N-Nitrosodimethylamine	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 20:05	KH
86-30-6	N-Nitrosodiphenylamine	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:15	05/03/2015 20:05	KH

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-86-5	Pentachlorophenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 20:05	KH
85-01-8	**Phenanthrene**	**10900**		ug/kg dry	239	477	10	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:05	KH
108-95-2	Phenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 20:05	KH
129-00-0	**Pyrene**	**7570**		ug/kg dry	239	477	10	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 10:05	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 20:05	KH
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/kg dry	95.4	190	2	EPA 8270D Certifications:	05/03/2015 13:15 NELAC-NY10854,NJDEP	05/03/2015 20:05	KH
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 20:05	KH
88-06-2	2,4,6-Trichlorophenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/03/2015 20:05	KH
95-95-4	2,4,5-Trichlorophenol	ND		ug/kg dry	47.8	95.4	2	EPA 8270D Certifications:	05/03/2015 13:15 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 20:05	KH

	Surrogate Recoveries	Result	Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*37.8 %*	*10-95*
4165-62-2	*Surrogate: Phenol-d5*	*44.8 %*	*10-107*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*54.0 %*	*10-95*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*49.7 %*	*10-97*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*56.8 %*	*10-103*
1718-51-0	*Surrogate: Terphenyl-d14*	*66.0 %*	*19-99*

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
319-84-6	alpha-BHC	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
319-85-7	beta-BHC	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
319-86-8	delta-BHC	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
5103-74-2	gamma-Chlordane	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 12:04	JW
5103-71-9	alpha-Chlordane	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 NELAC-NY10854,NJDEP	05/04/2015 12:04	JW

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
57-74-9	Chlordane, total	ND		ug/kg dry	7.55	7.55	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
72-54-8	4,4'-DDD	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
72-55-9	4,4'-DDE	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
50-29-3	4,4'-DDT	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
60-57-1	Dieldrin	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
959-98-8	Endosulfan I	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
33213-65-9	Endosulfan II	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
1031-07-8	Endosulfan sulfate	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
72-20-8	Endrin	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
7421-93-4	Endrin aldehyde	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
53494-70-5	Endrin ketone	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:04	JW
76-44-8	Heptachlor	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
1024-57-3	Heptachlor epoxide	ND		ug/kg dry	1.89	1.89	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
72-43-5	Methoxychlor	ND		ug/kg dry	9.43	9.43	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 12:04	JW
8001-35-2	Toxaphene	ND		ug/kg dry	95.5	95.5	5	EPA 8081B Certifications:	05/03/2015 13:18 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 12:04	JW

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*91.1 %*	*30-140*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*75.4 %*	*30-140*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:26	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:26	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:26	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications:	05/03/2015 13:18 NELAC-NY10854,CTDOH,NJDEP,PADEP	05/04/2015 12:26	AMC

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 12:26	AMC
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 12:26	AMC
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP	05/03/2015 13:18	05/04/2015 12:26	AMC
1336-36-3	* Total PCBs	ND		mg/kg dry	0.0190	0.0190	1	EPA 8082A Certifications:	05/03/2015 13:18	05/04/2015 12:26	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*87.7 %*	*30-140*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*96.0 %*	*30-140*

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**4200**		mg/kg dry	5.72	5.72	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-36-0	Antimony	ND		mg/kg dry	0.572	0.572	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-38-2	**Arsenic**	**3.83**		mg/kg dry	1.14	1.14	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-39-3	**Barium**	**36.0**		mg/kg dry	1.14	1.14	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-41-7	Beryllium	ND		mg/kg dry	0.114	0.114	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-43-9	Cadmium	ND		mg/kg dry	0.343	0.343	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-70-2	**Calcium**	**56800**		mg/kg dry	0.572	5.72	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-47-3	**Chromium**	**8.13**		mg/kg dry	0.572	0.572	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-48-4	**Cobalt**	**5.33**		mg/kg dry	0.572	0.572	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW
7440-50-8	**Copper**	**15.0**		mg/kg dry	0.572	0.572	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW
7439-89-6	**Iron**	**9510**		mg/kg dry	2.29	2.29	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW
7439-92-1	**Lead**	**28.6**		mg/kg dry	0.343	0.343	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 08:09	05/04/2015 11:44	MW
7439-95-4	**Magnesium**	**2960**		mg/kg dry	5.72	5.72	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW
7439-96-5	**Manganese**	**186**		mg/kg dry	0.572	0.572	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 08:09	05/04/2015 11:44	MW

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-02-0	**Nickel**	**16.8**		mg/kg dry	0.572	0.572	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-09-7	**Potassium**	**1410**		mg/kg dry	5.72	5.72	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7782-49-2	Selenium	ND		mg/kg dry	1.14	1.14	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/kg dry	0.572	0.572	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-23-5	**Sodium**	**303**		mg/kg dry	11.4	11.4	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-28-0	Thallium	ND		mg/kg dry	1.14	1.14	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-62-2	**Vanadium**	**15.7**		mg/kg dry	1.14	1.14	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-66-6	**Zinc**	**38.4**		mg/kg dry	1.14	1.14	1	EPA 6010C	05/04/2015 08:09	05/04/2015 11:44	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Metals, TCLP RCRA

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A/1311

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:47	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-39-3	**Barium**	**0.218**		mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:47	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:47	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:47	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	Lead	ND		mg/L	0.003	0.003	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:47	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	**Selenium**	**0.011**	M-SeTC	mg/L	0.010	0.010	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:47	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.005	0.005	1	EPA 6010C/1311	05/04/2015 08:15	05/04/2015 13:47	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	**Mercury**	**0.190**		mg/kg dry	0.0343	0.0343	1	EPA 7473	05/03/2015 07:58	05/03/2015 13:11	ALD
								Certifications: CTDOH,NJDEP,NELAC-NY10854,PADEP			

Mercury TCLP by 7473

Log-in Notes:

Sample Notes:

Sample Information

Client Sample ID: SB05_5-5.5 **York Sample ID:** 15E0070-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Soil	May 2, 2015 3:00 pm	05/02/2015

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0000390	0.000200	1	EPA 7473/1311	05/04/2015 06:51	05/04/2015 12:07	ALD
								Certifications: CTDOH,NJDEP,PADEP,NELAC-NY10854			

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

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	*** % Solids**	**87.5**		%	0.100	0.100	1	SM 2540G	05/04/2015 10:12	05/04/2015 14:24	SCA
								Certifications: CTDOH			

TCLP Extraction for METALS EPA 1311 **Log-in Notes:** **Sample Notes:** EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1.00	1	EPA 1311	05/02/2015 16:29	05/04/2015 12:59	SCA
								Certifications: NELAC-NY10854,CTDOH,NJDEP,PADEP			

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-34-3	**1,1-Dichloroethane**	**0.93**		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-35-4	**1,1-Dichloroethylene**	**0.23**	J	ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:05	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
120-82-1	**1,2,4-Trichlorobenzene**	**0.24**	J, B	ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.80	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
110-82-7	**Cyclohexane**	**0.29**	J	ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
78-93-3	2-Butanone	ND		ug/L	0.80	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
67-64-1	Acetone	ND	SCAL-E	ug/L	1.0	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
107-02-8	Acrolein	ND		ug/L	0.80	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
71-43-2	**Benzene**	**0.61**		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
156-59-2	**cis-1,2-Dichloroethylene**	**100**		ug/L	2.0	5.0	10	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 15:53	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:05	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854	05/04/2015 13:05	SS
87-61-6	**1,2,3-Trichlorobenzene**	**0.28**	B, J	ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:05	SS

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		ug/L	2.0	4.0	1	EPA 8260C Certifications: NELAC-NY10854	05/04/2015 07:51	05/04/2015 13:05	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.80	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
127-18-4	**Tetrachloroethylene**	**0.34**	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
156-60-5	**trans-1,2-Dichloroethylene**	**0.37**	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
79-01-6	**Trichloroethylene**	**0.22**	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	05/04/2015 07:51	05/04/2015 13:05	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*103 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*95.9 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*104 %*	*81-117*

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:12	05/03/2015 18:36	KH
208-96-8	**Acenaphthylene**	**0.210**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:12	05/03/2015 18:36	KH
98-86-2	Acetophenone	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:12	05/03/2015 19:07	SR
62-53-3	Aniline	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications: NELAC-NY10854,NJDEP	05/03/2015 13:12	05/03/2015 19:07	SR

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-12-7	Anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
1912-24-9	Atrazine	ND		ug/L	0.500	0.500	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
100-52-7	Benzaldehyde	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
92-87-5	Benzidine	ND		ug/L	10.0	20.0	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
65-85-0	Benzoic acid	ND		ug/L	25.0	50.0	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
100-51-6	Benzyl alcohol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
85-68-7	Benzyl butyl phthalate	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
92-52-4	1,1'-Biphenyl	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
101-55-3	4-Bromophenyl phenyl ether	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
105-60-2	Caprolactam	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
86-74-8	Carbazole	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
59-50-7	4-Chloro-3-methylphenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
106-47-8	4-Chloroaniline	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
111-91-1	Bis(2-chloroethoxy)methane	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
111-44-4	Bis(2-chloroethyl)ether	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
108-60-1	Bis(2-chloroisopropyl)ether	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
91-58-7	2-Chloronaphthalene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
95-57-8	2-Chlorophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
7005-72-3	4-Chlorophenyl phenyl ether	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
218-01-9	Chrysene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
132-64-9	Dibenzofuran	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
84-74-2	Di-n-butyl phthalate	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854	05/03/2015 19:07	SR
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854	05/03/2015 19:07	SR
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854	05/03/2015 19:07	SR
91-94-1	3,3'-Dichlorobenzidine	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
120-83-2	2,4-Dichlorophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
84-66-2	Diethyl phthalate	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
105-67-9	2,4-Dimethylphenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
131-11-3	Dimethyl phthalate	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
534-52-1	4,6-Dinitro-2-methylphenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
51-28-5	2,4-Dinitrophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
121-14-2	2,4-Dinitrotoluene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
606-20-2	2,6-Dinitrotoluene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
117-84-0	Di-n-octyl phthalate	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 19:07	SR
117-81-7	**Bis(2-ethylhexyl)phthalate**	**1.13**	B	ug/L	0.500	0.500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
206-44-0	**Fluoranthene**	**0.100**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
86-73-7	**Fluorene**	**0.280**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12 NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
118-74-1	Hexachlorobenzene	ND		ug/L	0.0200	0.0200	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 18:36	KH
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	0.500	1	EPA 8270D Certifications:	05/03/2015 13:12 CTDOH,NELAC-NY10854,NJDEP	05/03/2015 19:07	SR

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

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/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
67-72-1	Hexachloroethane	ND		ug/L	0.500	0.500	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 18:36 CTDOH,NELAC-NY10854,NJDEP	KH
78-59-1	Isophorone	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
91-57-6	2-Methylnaphthalene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
95-48-7	2-Methylphenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
65794-96-9	3- & 4-Methylphenols	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
91-20-3	**Naphthalene**	**0.160**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 18:36 CTDOH,NELAC-NY10854,NJDEP	KH
99-09-2	3-Nitroaniline	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
100-01-6	4-Nitroaniline	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
88-74-4	2-Nitroaniline	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
98-95-3	Nitrobenzene	ND		ug/L	0.250	0.250	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
100-02-7	4-Nitrophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
88-75-5	2-Nitrophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
621-64-7	N-nitroso-di-n-propylamine	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
62-75-9	N-Nitrosodimethylamine	ND		ug/L	0.500	0.500	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 18:36 CTDOH,NELAC-NY10854,NJDEP	KH
86-30-6	N-Nitrosodiphenylamine	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
87-86-5	Pentachlorophenol	ND		ug/L	0.250	0.250	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 18:36 CTDOH,NELAC-NY10854,NJDEP	KH
85-01-8	**Phenanthrene**	**0.0600**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 18:36 CTDOH,NELAC-NY10854,NJDEP	KH
108-95-2	Phenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 CTDOH,NELAC-NY10854,NJDEP	SR
129-00-0	**Pyrene**	**0.150**		ug/L	0.0500	0.0500	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 18:36 CTDOH,NELAC-NY10854,NJDEP	KH
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 NELAC-NY10854,NJDEP	SR
58-90-2	2,3,4,6-Tetrachlorophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications:	05/03/2015 13:12	05/03/2015 19:07 NELAC-NY10854,NJDEP	SR

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Semi-Volatiles, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:12	05/03/2015 19:07	SR
88-06-2	2,4,6-Trichlorophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:12	05/03/2015 19:07	SR
95-95-4	2,4,5-Trichlorophenol	ND		ug/L	2.50	5.00	1	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP	05/03/2015 13:12	05/03/2015 19:07	SR

	Surrogate Recoveries	Result		Acceptance Range
367-12-4	*Surrogate: 2-Fluorophenol*	*13.4 %*		*10-65*
4165-62-2	*Surrogate: Phenol-d5*	*7.87 %*	S-08	*10-49*
4165-60-0	*Surrogate: Nitrobenzene-d5*	*35.7 %*		*10-96*
321-60-8	*Surrogate: 2-Fluorobiphenyl*	*38.0 %*		*10-93*
118-79-6	*Surrogate: 2,4,6-Tribromophenol*	*47.9 %*		*10-128*
1718-51-0	*Surrogate: Terphenyl-d14*	*61.5 %*		*10-100*

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
309-00-2	Aldrin	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
319-84-6	alpha-BHC	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
319-85-7	beta-BHC	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
319-86-8	delta-BHC	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
58-89-9	gamma-BHC (Lindane)	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
5103-74-2	gamma-Chlordane	ND		ug/L	0.0105	0.0105	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
5103-71-9	alpha-Chlordane	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
57-74-9	Chlordane, total	ND		ug/L	0.0421	0.0421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
72-54-8	4,4'-DDD	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
72-55-9	4,4'-DDE	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
50-29-3	4,4'-DDT	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
60-57-1	Dieldrin	ND		ug/L	0.00211	0.00211	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW
959-98-8	Endosulfan I	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:15	05/04/2015 13:04	JW

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Pesticides, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
33213-65-9	Endosulfan II	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
1031-07-8	Endosulfan sulfate	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
72-20-8	Endrin	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
7421-93-4	Endrin aldehyde	ND		ug/L	0.0105	0.0105	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
53494-70-5	Endrin ketone	ND		ug/L	0.0105	0.0105	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
76-44-8	Heptachlor	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
1024-57-3	Heptachlor epoxide	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
72-43-5	Methoxychlor	ND		ug/L	0.00421	0.00421	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW
8001-35-2	Toxaphene	ND		ug/L	0.105	0.105	1	EPA 8081B Certifications:	05/04/2015 07:15 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:04	JW

	Surrogate Recoveries	Result	Acceptance Range
2051-24-3	*Surrogate: Decachlorobiphenyl*	*39.2 %*	*30-120*
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*39.3 %*	*30-120*

Polychlorinated Biphenyls (PCB)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15 NELAC-NY10854,CTDOH,NJDEP	05/04/2015 11:51	AMC
11104-28-2	Aroclor 1221	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15 NELAC-NY10854,CTDOH,NJDEP	05/04/2015 11:51	AMC
11141-16-5	Aroclor 1232	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15 NELAC-NY10854,CTDOH,NJDEP	05/04/2015 11:51	AMC
53469-21-9	Aroclor 1242	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15 NELAC-NY10854,CTDOH,NJDEP	05/04/2015 11:51	AMC
12672-29-6	Aroclor 1248	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15 NELAC-NY10854,CTDOH,NJDEP	05/04/2015 11:51	AMC
11097-69-1	Aroclor 1254	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15 NELAC-NY10854,CTDOH,NJDEP	05/04/2015 11:51	AMC
11096-82-5	Aroclor 1260	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15 NELAC-NY10854,CTDOH,NJDEP	05/04/2015 11:51	AMC
1336-36-3	* Total PCBs	ND		ug/L	0.0526	0.0526	1	EPA 8082A Certifications:	05/04/2015 07:15	05/04/2015 11:51	AMC

	Surrogate Recoveries	Result	Acceptance Range
877-09-8	*Surrogate: Tetrachloro-m-xylene*	*51.7 %*	*30-120*
2051-24-3	*Surrogate: Decachlorobiphenyl*	*75.6 %*	*30-120*

Sample Information

Client Sample ID: **TMW01_050215** **York Sample ID:** **15E0070-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Metals, Target Analyte

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3010A

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7429-90-5	**Aluminum**	**0.129**		mg/L	0.050	0.050	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-36-0	Antimony	ND		mg/L	0.005	0.005	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-38-2	Arsenic	ND		mg/L	0.004	0.004	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-39-3	**Barium**	**0.133**		mg/L	0.010	0.010	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-41-7	Beryllium	ND		mg/L	0.001	0.001	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-43-9	Cadmium	ND		mg/L	0.003	0.003	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-70-2	**Calcium**	**127**		mg/L	0.050	0.050	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-47-3	Chromium	ND		mg/L	0.005	0.005	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-48-4	Cobalt	ND		mg/L	0.005	0.005	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-50-8	**Copper**	**0.004**		mg/L	0.003	0.003	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-89-6	**Iron**	**6.10**		mg/L	0.020	0.020	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-92-1	**Lead**	**0.004**		mg/L	0.003	0.003	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-95-4	**Magnesium**	**26.4**		mg/L	0.050	0.050	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7439-96-5	**Manganese**	**1.04**		mg/L	0.005	0.005	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-02-0	Nickel	ND		mg/L	0.005	0.005	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-09-7	**Potassium**	**21.4**		mg/L	0.050	0.050	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7782-49-2	**Selenium**	**0.013**		mg/L	0.010	0.010	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-22-4	Silver	ND		mg/L	0.005	0.005	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-23-5	**Sodium**	**109**		mg/L	0.100	0.100	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-28-0	Thallium	ND		mg/L	0.005	0.005	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-62-2	Vanadium	ND		mg/L	0.010	0.010	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
7440-66-6	**Zinc**	**0.012**		mg/L	0.010	0.010	1	EPA 6010C	05/04/2015 08:32	05/04/2015 12:12	MW
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: TMW01_050215 **York Sample ID:** 15E0070-06

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 2:00 pm	05/02/2015

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	05/04/2015 06:50	05/04/2015 12:06	ALD

Sample Information

Client Sample ID: Trip Blank **York Sample ID:** 15E0070-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
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,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.80	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS

Sample Information

Client Sample ID: Trip Blank

York Sample ID: 15E0070-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	80	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
78-93-3	2-Butanone	ND		ug/L	0.80	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
67-64-1	**Acetone**	**1.5**	SCAL-E, B, J	ug/L	1.0	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
107-02-8	Acrolein	ND		ug/L	0.80	2.0	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications:	05/04/2015 07:51 CTDOH,NELAC-NY10854,NJDEP	05/04/2015 13:38	SS

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **15E0070-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	**cis-1,2-Dichloroethylene**	**0.24**	J	ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854,NJDEP			
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854,NJDEP			
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854,NJDEP			
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854,NJDEP			
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854,NJDEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-09-2	**Methylene chloride**	**1.6**	J	ug/L	1.0	2.0	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854,NJDEP			
179601-23-1	p- & m- Xylenes	ND		ug/L	2.0	4.0	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.80	2.0	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: NELAC-NY10854,NJDEP			
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	05/04/2015 07:51	05/04/2015 13:38	SS
								Certifications: CTDOH,NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: **Trip Blank** **York Sample ID:** **15E0070-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0070	170362501	Water	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, NJDEP/TCL/Part 375 List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS
1330-20-7	* Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NJDEP	05/04/2015 07:51	05/04/2015 13:38	SS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	*Surrogate: 1,2-Dichloroethane-d4*	*100 %*	*69-130*
460-00-4	*Surrogate: p-Bromofluorobenzene*	*98.9 %*	*79-122*
2037-26-5	*Surrogate: Toluene-d8*	*102 %*	*81-117*

Analytical Batch Summary

Batch ID: BE50079 **Preparation Method:** EPA SW 846-1311 TCLP ext. for meta **Prepared By:** AA

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/02/15
15E0070-02	SB02_2.5-3	05/02/15
15E0070-03	SB03_5-5.5	05/02/15
15E0070-04	SB04_.5-1	05/02/15
15E0070-05	SB05_5-5.5	05/02/15
BE50079-BLK1	Blank	05/02/15

Batch ID: BE50080 **Preparation Method:** EPA 7473 soil **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/03/15
15E0070-02	SB02_2.5-3	05/03/15
15E0070-03	SB03_5-5.5	05/03/15
15E0070-04	SB04_.5-1	05/03/15
15E0070-05	SB05_5-5.5	05/03/15
BE50080-BLK1	Blank	05/03/15
BE50080-SRM1	Reference	05/03/15

Batch ID: BE50083 **Preparation Method:** EPA 3510C **Prepared By:** KAT

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-06	TMW01_050215	05/03/15
BE50083-BLK1	Blank	05/03/15
BE50083-BS1	LCS	05/03/15
BE50083-BS2	LCS	05/03/15
BE50083-BSD1	LCS Dup	05/03/15

Batch ID: BE50084 **Preparation Method:** EPA 3550C **Prepared By:** KAT

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/03/15
15E0070-02	SB02_2.5-3	05/03/15
15E0070-03	SB03_5-5.5	05/03/15
15E0070-04	SB04_.5-1	05/03/15
15E0070-05	SB05_5-5.5	05/03/15
BE50084-BLK1	Blank	05/03/15
BE50084-BS1	LCS	05/03/15
BE50084-BSD1	LCS Dup	05/03/15
BE50084-MS1	Matrix Spike	05/03/15

Batch ID: BE50085 **Preparation Method:** EPA 3550C **Prepared By:** KAT

YORK Sample ID	Client Sample ID	Preparation Date

15E0070-01	SB01_2.5-3	05/03/15
15E0070-01	SB01_2.5-3	05/03/15
15E0070-02	SB02_2.5-3	05/03/15
15E0070-02	SB02_2.5-3	05/03/15
15E0070-03	SB03_5-5.5	05/03/15
15E0070-03	SB03_5-5.5	05/03/15
15E0070-04	SB04_.5-1	05/03/15
15E0070-04	SB04_.5-1	05/03/15
15E0070-05	SB05_5-5.5	05/03/15
15E0070-05	SB05_5-5.5	05/03/15
BE50085-BLK1	Blank	05/03/15
BE50085-BLK1	Blank	05/03/15
BE50085-BS1	LCS	05/03/15
BE50085-BS2	LCS	05/03/15
BE50085-BSD1	LCS Dup	05/03/15
BE50085-MS1	Matrix Spike	05/03/15

Batch ID: BE50094 **Preparation Method:** EPA 7473 water **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-06	TMW01_050215	05/04/15
BE50094-BLK1	Blank	05/04/15
BE50094-SRM1	Reference	05/04/15

Batch ID: BE50095 **Preparation Method:** EPA 7473 water **Prepared By:** ALD

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/04/15
15E0070-02	SB02_2.5-3	05/04/15
15E0070-03	SB03_5-5.5	05/04/15
15E0070-04	SB04_.5-1	05/04/15
15E0070-05	SB05_5-5.5	05/04/15
BE50095-BLK1	Blank	05/04/15
BE50095-SRM1	Reference	05/04/15

Batch ID: BE50097 **Preparation Method:** EPA SW846-3510C Low Level **Prepared By:** KAT

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-06	TMW01_050215	05/04/15
15E0070-06	TMW01_050215	05/04/15
BE50097-BLK1	Blank	05/04/15
BE50097-BLK1	Blank	05/04/15
BE50097-BS1	LCS	05/04/15
BE50097-BS2	LCS	05/04/15
BE50097-BSD1	LCS Dup	05/04/15
BE50097-BSD2	LCS Dup	05/04/15

Batch ID: BE50101 **Preparation Method:** EPA 3050B **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/04/15
15E0070-02	SB02_2.5-3	05/04/15
15E0070-03	SB03_5-5.5	05/04/15
15E0070-04	SB04_.5-1	05/04/15
15E0070-05	SB05_5-5.5	05/04/15
BE50101-BLK1	Blank	05/04/15
BE50101-DUP1	Duplicate	05/04/15
BE50101-MS1	Matrix Spike	05/04/15
BE50101-SRM1	Reference	05/04/15

Batch ID: BE50103 **Preparation Method:** EPA 3010A/1311 **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/04/15
15E0070-02	SB02_2.5-3	05/04/15
15E0070-03	SB03_5-5.5	05/04/15
15E0070-04	SB04_.5-1	05/04/15
15E0070-05	SB05_5-5.5	05/04/15
BE50103-BLK1	Blank	05/04/15
BE50103-BLK2	Blank	05/04/15
BE50103-DUP1	Duplicate	05/04/15
BE50103-MS1	Matrix Spike	05/04/15
BE50103-SRM1	Reference	05/04/15

Batch ID: BE50108 **Preparation Method:** EPA 3010A **Prepared By:** MW

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-06	TMW01_050215	05/04/15
BE50108-BLK1	Blank	05/04/15
BE50108-DUP1	Duplicate	05/04/15
BE50108-MS1	Matrix Spike	05/04/15
BE50108-SRM1	Reference	05/04/15

Batch ID: BE50111 **Preparation Method:** EPA 5030B **Prepared By:** BGS

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-06	TMW01_050215	05/04/15
15E0070-06RE1	TMW01_050215	05/04/15
15E0070-07	Trip Blank	05/04/15
BE50111-BLK1	Blank	05/04/15
BE50111-BS1	LCS	05/04/15
BE50111-BSD1	LCS Dup	05/04/15

Batch ID: BE50113 **Preparation Method:** EPA 5035A **Prepared By:** BGS

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/04/15
15E0070-02	SB02_2.5-3	05/04/15

15E0070-03	SB03_5-5.5	05/04/15
15E0070-04	SB04_.5-1	05/04/15
15E0070-04RE1	SB04_.5-1	05/04/15
15E0070-05	SB05_5-5.5	05/04/15
BE50113-BLK1	Blank	05/04/15
BE50113-BS1	LCS	05/04/15
BE50113-BSD1	LCS Dup	05/04/15

Batch ID: BE50118 **Preparation Method:** % Solids Prep **Prepared By:** SCA

YORK Sample ID	Client Sample ID	Preparation Date
15E0070-01	SB01_2.5-3	05/04/15
15E0070-02	SB02_2.5-3	05/04/15
15E0070-03	SB03_5-5.5	05/04/15
15E0070-04	SB04_.5-1	05/04/15
15E0070-05	SB05_5-5.5	05/04/15
BE50118-DUP1	Duplicate	05/04/15

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50111 - EPA 5030B											
Blank (BE50111-BLK1)											Prepared & Analyzed: 05/04/2015
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,2,4-Trichlorobenzene	0.92	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	0.22	0.50	"								
1,4-Dichlorobenzene	0.27	0.50	"								
1,4-Dioxane	ND	80	"								
Cyclohexane	ND	0.50	"								
2-Butanone	ND	0.50	"								
2-Hexanone	ND	0.50	"								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	1.5	2.0	"								
Acrolein	ND	0.50	"								
Acrylonitrile	ND	0.50	"								
Benzene	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon disulfide	1.4	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Methylcyclohexane	ND	0.50	"								
Hexachlorobutadiene	0.63	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl acetate	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylene chloride	ND	2.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								

Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50111 - EPA 5030B											
Blank (BE50111-BLK1)								Prepared & Analyzed: 05/04/2015			
o-Xylene	ND	0.50	ug/L								
1,2,3-Trichlorobenzene	1.4	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	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
Surrogate: 1,2-Dichloroethane-d4	*9.91*		*"*	*10.0*		*99.1*	*69-130*				
Surrogate: p-Bromofluorobenzene	*9.89*		*"*	*10.0*		*98.9*	*79-122*				
Surrogate: Toluene-d8	*10.2*		*"*	*10.0*		*102*	*81-117*				
LCS (BE50111-BS1)								Prepared & Analyzed: 05/04/2015			
1,1,1,2-Tetrachloroethane	11		ug/L	10.0		109	82-126				
1,1,1-Trichloroethane	11		"	10.0		105	78-136				
1,1,2,2-Tetrachloroethane	10		"	10.0		101	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9		"	10.0		99.0	54-165				
1,1,2-Trichloroethane	9.8		"	10.0		97.5	82-123				
1,1-Dichloroethane	11		"	10.0		107	82-129				
1,1-Dichloroethylene	10		"	10.0		102	68-138				
Bromochloromethane	11		"	10.0		110	77-128				
1,2,3-Trichloropropane	11		"	10.0		105	77-128				
1,2,4-Trichlorobenzene	11		"	10.0		110	76-137				
1,2,4-Trimethylbenzene	11		"	10.0		108	82-132				
1,2-Dibromo-3-chloropropane	8.4		"	10.0		83.9	45-147				
1,2-Dibromoethane	10		"	10.0		105	83-124				
1,2-Dichlorobenzene	11		"	10.0		111	79-123				
1,2-Dichloroethane	10		"	10.0		104	73-132				
1,2-Dichloropropane	10		"	10.0		104	78-126				
1,3,5-Trimethylbenzene	11		"	10.0		111	80-131				
1,3-Dichlorobenzene	11		"	10.0		114	86-122				
1,4-Dichlorobenzene	11		"	10.0		114	85-124				
1,4-Dioxane	220		"	200		110	10-349				
Cyclohexane	21		"	10.0		209	63-149	High Bias			
2-Butanone	9.4		"	10.0		94.5	49-152				
2-Hexanone	9.6		"	10.0		96.0	51-146				
4-Methyl-2-pentanone	14		"	10.0		136	57-145				
Acetone	7.6		"	10.0		75.7	14-150				
Acrolein	8.2		"	10.0		82.0	10-153				
Acrylonitrile	9.3		"	10.0		93.3	51-150				
Benzene	10		"	10.0		104	85-126				
Bromodichloromethane	10		"	10.0		104	79-128				
Bromoform	11		"	10.0		113	78-133				
Bromomethane	8.6		"	10.0		86.4	43-168				

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 BE50111 - EPA 5030B											
LCS (BE50111-BS1)								Prepared & Analyzed: 05/04/2015			
Carbon disulfide	9.2		ug/L	10.0		92.3	68-146				
Carbon tetrachloride	11		"	10.0		105	77-141				
Chlorobenzene	10		"	10.0		104	88-120				
Chloroethane	9.6		"	10.0		95.6	65-136				
Chloroform	10		"	10.0		102	82-128				
Chloromethane	8.6		"	10.0		85.5	43-155				
cis-1,2-Dichloroethylene	11		"	10.0		112	83-129				
cis-1,3-Dichloropropylene	10		"	10.0		102	80-131				
Dibromochloromethane	11		"	10.0		107	80-130				
Dibromomethane	10		"	10.0		103	72-134				
Dichlorodifluoromethane	7.3		"	10.0		72.6	44-144				
Ethyl Benzene	10		"	10.0		105	80-131				
Methylcyclohexane	10		"	10.0		103	72-143				
Hexachlorobutadiene	12		"	10.0		118	67-146				
Isopropylbenzene	11		"	10.0		114	76-140				
Methyl acetate	9.7		"	10.0		97.3	51-139				
Methyl tert-butyl ether (MTBE)	7.8		"	10.0		78.4	76-135				
Methylene chloride	10		"	10.0		105	55-137				
n-Butylbenzene	11		"	10.0		107	79-132				
n-Propylbenzene	11		"	10.0		113	78-133				
o-Xylene	11		"	10.0		105	78-130				
1,2,3-Trichlorobenzene	11		"	10.0		108	76-136				
p- & m- Xylenes	21		"	20.0		105	77-133				
p-Isopropyltoluene	11		"	10.0		107	81-136				
sec-Butylbenzene	11		"	10.0		108	79-137				
Styrene	11		"	10.0		107	67-132				
tert-Butyl alcohol (TBA)	8.8		"	10.0		88.5	25-162				
tert-Butylbenzene	11		"	10.0		111	77-138				
Tetrachloroethylene	12		"	10.0		118	82-131				
Toluene	11		"	10.0		109	80-127				
trans-1,2-Dichloroethylene	11		"	10.0		107	80-132				
trans-1,3-Dichloropropylene	9.5		"	10.0		95.2	78-131				
Trichloroethylene	11		"	10.0		106	82-128				
Trichlorofluoromethane	10		"	10.0		104	67-139				
Vinyl Chloride	8.9		"	10.0		89.2	58-145				
Surrogate: 1,2-Dichloroethane-d4	*9.72*		*"*	*10.0*		*97.2*	*69-130*				
Surrogate: p-Bromofluorobenzene	*11.2*		*"*	*10.0*		*112*	*79-122*				
Surrogate: Toluene-d8	*10.6*		*"*	*10.0*		*106*	*81-117*				

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50111 - EPA 5030B											
LCS Dup (BE50111-BSD1)								Prepared & Analyzed: 05/04/2015			
1,1,1,2-Tetrachloroethane	11		ug/L	10.0		114	82-126		4.85	30	
1,1,1-Trichloroethane	11		"	10.0		108	78-136		2.35	30	
1,1,2,2-Tetrachloroethane	10		"	10.0		105	76-129		3.40	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10		"	10.0		102	54-165		3.08	30	
1,1,2-Trichloroethane	9.7		"	10.0		96.9	82-123		0.617	30	
1,1-Dichloroethane	11		"	10.0		109	82-129		1.48	30	
1,1-Dichloroethylene	11		"	10.0		108	68-138		5.64	30	
Bromochloromethane	11		"	10.0		113	77-128		2.06	30	
1,2,3-Trichloropropane	11		"	10.0		110	77-128		4.46	30	
1,2,4-Trichlorobenzene	11		"	10.0		113	76-137		2.60	30	
1,2,4-Trimethylbenzene	11		"	10.0		106	82-132		1.77	30	
1,2-Dibromo-3-chloropropane	8.6		"	10.0		86.4	45-147		2.94	30	
1,2-Dibromoethane	11		"	10.0		107	83-124		1.98	30	
1,2-Dichlorobenzene	11		"	10.0		115	79-123		3.64	30	
1,2-Dichloroethane	11		"	10.0		107	73-132		2.56	30	
1,2-Dichloropropane	10		"	10.0		105	78-126		1.05	30	
1,3,5-Trimethylbenzene	11		"	10.0		107	80-131		3.39	30	
1,3-Dichlorobenzene	12		"	10.0		116	86-122		2.18	30	
1,4-Dichlorobenzene	11		"	10.0		114	85-124		0.175	30	
1,4-Dioxane	190		"	200		96.7	10-349		12.9	30	
Cyclohexane	22		"	10.0		224	63-149	High Bias	7.11	30	
2-Butanone	8.6		"	10.0		85.6	49-152		9.88	30	
2-Hexanone	9.8		"	10.0		98.3	51-146		2.37	30	
4-Methyl-2-pentanone	15		"	10.0		147	57-145	High Bias	7.55	30	
Acetone	6.8		"	10.0		67.9	14-150		10.9	30	
Acrolein	7.7		"	10.0		77.3	10-153		5.90	30	
Acrylonitrile	10		"	10.0		100	51-150		7.33	30	
Benzene	10		"	10.0		104	85-126		0.480	30	
Bromodichloromethane	11		"	10.0		105	79-128		1.24	30	
Bromoform	12		"	10.0		121	78-133		6.57	30	
Bromomethane	9.6		"	10.0		96.0	43-168		10.5	30	
Carbon disulfide	9.7		"	10.0		97.0	68-146		4.97	30	
Carbon tetrachloride	11		"	10.0		108	77-141		2.16	30	
Chlorobenzene	11		"	10.0		109	88-120		4.03	30	
Chloroethane	10		"	10.0		101	65-136		5.49	30	
Chloroform	10		"	10.0		102	82-128		0.0979	30	
Chloromethane	8.9		"	10.0		88.8	43-155		3.79	30	
cis-1,2-Dichloroethylene	11		"	10.0		111	83-129		0.537	30	
cis-1,3-Dichloropropylene	10		"	10.0		102	80-131		0.195	30	
Dibromochloromethane	11		"	10.0		107	80-130		0.281	30	
Dibromomethane	11		"	10.0		110	72-134		6.56	30	
Dichlorodifluoromethane	7.6		"	10.0		76.0	44-144		4.58	30	
Ethyl Benzene	11		"	10.0		106	80-131		0.948	30	
Methylcyclohexane	10		"	10.0		105	72-143		1.93	30	
Hexachlorobutadiene	12		"	10.0		116	67-146		0.940	30	
Isopropylbenzene	11		"	10.0		114	76-140		0.263	30	
Methyl acetate	9.9		"	10.0		99.1	51-139		1.83	30	
Methyl tert-butyl ether (MTBE)	8.0		"	10.0		80.3	76-135		2.39	30	
Methylene chloride	11		"	10.0		107	55-137		1.51	30	
n-Butylbenzene	11		"	10.0		106	79-132		0.470	30	
n-Propylbenzene	11		"	10.0		112	78-133		1.42	30	

Volatile Organic Compounds by GC/MS - Quality Control Data

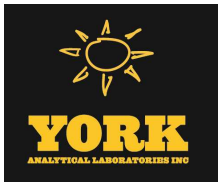
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50111 - EPA 5030B											
LCS Dup (BE50111-BSD1)									Prepared & Analyzed: 05/04/2015		
o-Xylene	10		ug/L	10.0		105	78-130		0.285	30	
1,2,3-Trichlorobenzene	11		"	10.0		113	76-136		4.88	30	
p- & m- Xylenes	21		"	20.0		105	77-133		0.0476	30	
p-Isopropyltoluene	11		"	10.0		110	81-136		2.21	30	
sec-Butylbenzene	11		"	10.0		110	79-137		1.93	30	
Styrene	10		"	10.0		103	67-132		3.53	30	
tert-Butyl alcohol (TBA)	9.2		"	10.0		91.9	25-162		3.77	30	
tert-Butylbenzene	11		"	10.0		108	77-138		3.19	30	
Tetrachloroethylene	11		"	10.0		114	82-131		3.43	30	
Toluene	11		"	10.0		110	80-127		0.824	30	
trans-1,2-Dichloroethylene	11		"	10.0		109	80-132		1.66	30	
trans-1,3-Dichloropropylene	10		"	10.0		99.5	78-131		4.42	30	
Trichloroethylene	11		"	10.0		107	82-128		1.03	30	
Trichlorofluoromethane	11		"	10.0		106	67-139		1.90	30	
Vinyl Chloride	9.1		"	10.0		91.2	58-145		2.22	30	
Surrogate: 1,2-Dichloroethane-d4	*9.50*		*"*	*10.0*		*95.0*	*69-130*				
Surrogate: p-Bromofluorobenzene	*11.0*		*"*	*10.0*		*110*	*79-122*				
Surrogate: Toluene-d8	*10.1*		*"*	*10.0*		*101*	*81-117*				
Batch BE50113 - EPA 5035A											
Blank (BE50113-BLK1)									Prepared & Analyzed: 05/04/2015		
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	"								

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 BE50113 - EPA 5035A											
Blank (BE50113-BLK1)											
Prepared & Analyzed: 05/04/2015											
Bromomethane	ND	5.0	ug/kg wet								
Carbon disulfide	ND	5.0	"								
Carbon tetrachloride	ND	5.0	"								
Chlorobenzene	ND	5.0	"								
Chloroethane	ND	5.0	"								
Chloroform	ND	5.0	"								
Chloromethane	ND	5.0	"								
cis-1,2-Dichloroethylene	ND	5.0	"								
cis-1,3-Dichloropropylene	ND	5.0	"								
Cyclohexane	ND	5.0	"								
Dibromochloromethane	ND	5.0	"								
Dibromomethane	ND	5.0	"								
Dichlorodifluoromethane	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Hexachlorobutadiene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl acetate	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Methylcyclohexane	ND	5.0	"								
Methylene chloride	ND	10	"								
n-Butylbenzene	ND	5.0	"								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
Styrene	ND	5.0	"								
tert-Butyl alcohol (TBA)	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	*48.0*		*ug/L*	*50.0*		*96.1*	*77-125*				
Surrogate: Toluene-d8	*49.1*		*"*	*50.0*		*98.2*	*85-120*				
Surrogate: p-Bromofluorobenzene	*51.4*		*"*	*50.0*		*103*	*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 BE50113 - EPA 5035A											
LCS (BE50113-BS1)								Prepared & Analyzed: 05/04/2015			
1,1,1,2-Tetrachloroethane	52		ug/L	50.0		103	75-129				
1,1,1-Trichloroethane	54		"	50.0		108	71-137				
1,1,2,2-Tetrachloroethane	36		"	50.0		71.3	79-129	Low Bias			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	52		"	50.0		104	58-146				
1,1,2-Trichloroethane	50		"	50.0		99.6	83-123				
1,1-Dichloroethane	51		"	50.0		102	75-130				
1,1-Dichloroethylene	48		"	50.0		95.9	64-137				
1,2,3-Trichlorobenzene	67		"	50.0		134	81-140				
1,2,3-Trichloropropane	48		"	50.0		96.3	81-126				
1,2,4-Trichlorobenzene	68		"	50.0		136	80-141				
1,2,4-Trimethylbenzene	48		"	50.0		96.8	84-125				
1,2-Dibromo-3-chloropropane	46		"	50.0		91.6	74-142				
1,2-Dibromoethane	52		"	50.0		103	86-123				
1,2-Dichlorobenzene	52		"	50.0		103	85-122				
1,2-Dichloroethane	49		"	50.0		97.3	71-133				
1,2-Dichloropropane	45		"	50.0		89.5	81-122				
1,3,5-Trimethylbenzene	48		"	50.0		96.1	82-126				
1,3-Dichlorobenzene	52		"	50.0		103	84-124				
1,4-Dichlorobenzene	53		"	50.0		106	84-124				
1,4-Dioxane	1100		"	1000		114	10-228				
2-Butanone	49		"	50.0		97.7	58-147				
2-Hexanone	44		"	50.0		87.4	70-139				
4-Methyl-2-pentanone	42		"	50.0		83.6	72-132				
Acetone	52		"	50.0		104	36-155				
Acrolein	28		"	50.0		55.1	10-238				
Acrylonitrile	52		"	50.0		105	66-141				
Benzene	55		"	50.0		109	77-127				
Bromochloromethane	48		"	50.0		95.9	74-129				
Bromodichloromethane	48		"	50.0		96.8	81-124				
Bromoform	56		"	50.0		111	80-136				
Bromomethane	44		"	50.0		88.2	32-177				
Carbon disulfide	48		"	50.0		95.0	10-136				
Carbon tetrachloride	55		"	50.0		111	66-143				
Chlorobenzene	52		"	50.0		103	86-120				
Chloroethane	46		"	50.0		92.8	51-142				
Chloroform	56		"	50.0		112	76-131				
Chloromethane	38		"	50.0		76.7	49-132				
cis-1,2-Dichloroethylene	59		"	50.0		117	74-132				
cis-1,3-Dichloropropylene	49		"	50.0		98.9	81-129				
Cyclohexane	47		"	50.0		93.9	70-130				
Dibromochloromethane	52		"	50.0		105	10-200				
Dibromomethane	50		"	50.0		99.9	83-124				
Dichlorodifluoromethane	39		"	50.0		78.4	28-158				
Ethyl Benzene	49		"	50.0		98.9	84-125				
Hexachlorobutadiene	57		"	50.0		114	83-133				
Isopropylbenzene	48		"	50.0		96.4	81-127				
Methyl acetate	47		"	50.0		94.8	41-143				
Methyl tert-butyl ether (MTBE)	56		"	50.0		112	74-131				
Methylcyclohexane	49		"	50.0		97.3	70-130				
Methylene chloride	48		"	50.0		96.6	57-141				
n-Butylbenzene	49		"	50.0		98.2	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 BE50113 - EPA 5035A											
LCS (BE50113-BS1)								Prepared & Analyzed: 05/04/2015			
n-Propylbenzene	47		ug/L	50.0		94.8	74-136				
o-Xylene	49		"	50.0		97.5	83-123				
p- & m- Xylenes	98		"	100		97.8	82-128				
p-Isopropyltoluene	49		"	50.0		97.7	85-125				
sec-Butylbenzene	48		"	50.0		96.5	83-125				
Styrene	52		"	50.0		103	86-126				
tert-Butyl alcohol (TBA)	60		"	50.0		120	70-130				
tert-Butylbenzene	49		"	50.0		97.1	80-127				
Tetrachloroethylene	80		"	50.0		159	80-129	High Bias			
Toluene	49		"	50.0		98.7	85-121				
trans-1,2-Dichloroethylene	49		"	50.0		98.6	72-132				
trans-1,3-Dichloropropylene	48		"	50.0		95.6	78-132				
Trichloroethylene	57		"	50.0		113	84-123				
Trichlorofluoromethane	52		"	50.0		105	62-140				
Vinyl Chloride	47		"	50.0		94.5	52-130				
Surrogate: 1,2-Dichloroethane-d4	*47.2*		*"*	*50.0*		*94.3*	*77-125*				
Surrogate: Toluene-d8	*48.6*		*"*	*50.0*		*97.2*	*85-120*				
Surrogate: p-Bromofluorobenzene	*54.0*		*"*	*50.0*		*108*	*76-130*				
LCS Dup (BE50113-BSD1)								Prepared & Analyzed: 05/04/2015			
1,1,1,2-Tetrachloroethane	51		ug/L	50.0		103	75-129		0.486	30	
1,1,1-Trichloroethane	55		"	50.0		110	71-137		1.32	30	
1,1,2,2-Tetrachloroethane	34		"	50.0		67.7	79-129	Low Bias	5.15	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50		"	50.0		101	58-146		2.64	30	
1,1,2-Trichloroethane	48		"	50.0		96.0	83-123		3.62	30	
1,1-Dichloroethane	50		"	50.0		101	75-130		1.01	30	
1,1-Dichloroethylene	47		"	50.0		93.1	64-137		2.98	30	
1,2,3-Trichlorobenzene	66		"	50.0		131	81-140		2.51	30	
1,2,3-Trichloropropane	45		"	50.0		89.4	81-126		7.52	30	
1,2,4-Trichlorobenzene	65		"	50.0		131	80-141		3.89	30	
1,2,4-Trimethylbenzene	47		"	50.0		94.0	84-125		2.98	30	
1,2-Dibromo-3-chloropropane	42		"	50.0		83.4	74-142		9.42	30	
1,2-Dibromoethane	51		"	50.0		102	86-123		1.58	30	
1,2-Dichlorobenzene	50		"	50.0		101	85-122		2.00	30	
1,2-Dichloroethane	48		"	50.0		95.4	71-133		1.97	30	
1,2-Dichloropropane	45		"	50.0		90.8	81-122		1.44	30	
1,3,5-Trimethylbenzene	47		"	50.0		94.0	82-126		2.21	30	
1,3-Dichlorobenzene	50		"	50.0		99.9	84-124		3.17	30	
1,4-Dichlorobenzene	51		"	50.0		102	84-124		3.49	30	
1,4-Dioxane	990		"	1000		99.1	10-228		14.1	30	
2-Butanone	38		"	50.0		76.1	58-147		24.8	30	
2-Hexanone	38		"	50.0		76.5	70-139		13.3	30	
4-Methyl-2-pentanone	39		"	50.0		77.1	72-132		7.99	30	
Acetone	36		"	50.0		71.3	36-155		37.1	30	Non-dir.
Acrolein	29		"	50.0		58.5	10-238		5.88	30	
Acrylonitrile	48		"	50.0		95.3	66-141		9.36	30	
Benzene	54		"	50.0		108	77-127		1.09	30	
Bromochloromethane	47		"	50.0		94.8	74-129		1.15	30	
Bromodichloromethane	49		"	50.0		97.5	81-124		0.700	30	
Bromoform	53		"	50.0		106	80-136		5.07	30	
Bromomethane	46		"	50.0		92.5	32-177		4.76	30	
Carbon disulfide	47		"	50.0		93.1	10-136		1.98	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 BE50113 - EPA 5035A											
LCS Dup (BE50113-BSD1)								Prepared & Analyzed: 05/04/2015			
Carbon tetrachloride	54		ug/L	50.0		108	66-143		2.27	30	
Chlorobenzene	51		"	50.0		102	86-120		1.05	30	
Chloroethane	48		"	50.0		96.3	51-142		3.66	30	
Chloroform	55		"	50.0		109	76-131		2.04	30	
Chloromethane	38		"	50.0		76.0	49-132		0.891	30	
cis-1,2-Dichloroethylene	58		"	50.0		117	74-132		0.445	30	
cis-1,3-Dichloropropylene	48		"	50.0		96.7	81-129		2.27	30	
Cyclohexane	47		"	50.0		94.9	70-130		1.06	30	
Dibromochloromethane	52		"	50.0		103	10-200		1.38	30	
Dibromomethane	49		"	50.0		97.9	83-124		2.06	30	
Dichlorodifluoromethane	37		"	50.0		74.5	28-158		5.21	30	
Ethyl Benzene	49		"	50.0		98.7	84-125		0.243	30	
Hexachlorobutadiene	57		"	50.0		114	83-133		0.667	30	
Isopropylbenzene	48		"	50.0		95.6	81-127		0.812	30	
Methyl acetate	50		"	50.0		100	41-143		5.66	30	
Methyl tert-butyl ether (MTBE)	54		"	50.0		107	74-131		4.63	30	
Methylcyclohexane	49		"	50.0		97.6	70-130		0.246	30	
Methylene chloride	49		"	50.0		97.2	57-141		0.619	30	
n-Butylbenzene	49		"	50.0		98.1	80-130		0.102	30	
n-Propylbenzene	47		"	50.0		94.1	74-136		0.699	30	
o-Xylene	49		"	50.0		97.8	83-123		0.287	30	
p- & m- Xylenes	98		"	100		98.0	82-128		0.266	30	
p-Isopropyltoluene	48		"	50.0		96.2	85-125		1.57	30	
sec-Butylbenzene	48		"	50.0		95.5	83-125		1.00	30	
Styrene	51		"	50.0		102	86-126		1.03	30	
tert-Butyl alcohol (TBA)	53		"	50.0		105	70-130		12.9	30	
tert-Butylbenzene	48		"	50.0		95.9	80-127		1.26	30	
Tetrachloroethylene	77		"	50.0		154	80-129	High Bias	3.68	30	
Toluene	49		"	50.0		98.6	85-121		0.0811	30	
trans-1,2-Dichloroethylene	49		"	50.0		97.5	72-132		1.12	30	
trans-1,3-Dichloropropylene	47		"	50.0		93.3	78-132		2.37	30	
Trichloroethylene	56		"	50.0		112	84-123		0.957	30	
Trichlorofluoromethane	52		"	50.0		104	62-140		0.268	30	
Vinyl Chloride	46		"	50.0		93.0	52-130		1.60	30	
Surrogate: 1,2-Dichloroethane-d4	*47.3*		*"*	*50.0*		*94.6*	*77-125*				
Surrogate: Toluene-d8	*49.2*		*"*	*50.0*		*98.5*	*85-120*				
Surrogate: p-Bromofluorobenzene	*53.3*		*"*	*50.0*		*107*	*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 BE50083 - EPA 3510C											
Blank (BE50083-BLK1)											Prepared & Analyzed: 05/03/2015
Acenaphthene	ND	0.0500	ug/L								
Acenaphthylene	ND	0.0500	"								
Acetophenone	ND	5.00	"								
Aniline	ND	5.00	"								
Anthracene	ND	0.0500	"								
Atrazine	ND	0.500	"								
Benzaldehyde	ND	5.00	"								
Benzidine	ND	20.0	"								
Benzo(a)anthracene	ND	0.0500	"								
Benzo(a)pyrene	ND	0.0500	"								
Benzo(b)fluoranthene	ND	0.0500	"								
Benzo(g,h,i)perylene	ND	0.0500	"								
Benzoic acid	ND	50.0	"								
Benzo(k)fluoranthene	ND	0.0500	"								
Benzyl alcohol	ND	5.00	"								
Benzyl butyl phthalate	ND	5.00	"								
1,1'-Biphenyl	ND	5.00	"								
4-Bromophenyl phenyl ether	ND	5.00	"								
Caprolactam	ND	5.00	"								
Carbazole	ND	5.00	"								
4-Chloro-3-methylphenol	ND	5.00	"								
4-Chloroaniline	ND	5.00	"								
Bis(2-chloroethoxy)methane	ND	5.00	"								
Bis(2-chloroethyl)ether	ND	5.00	"								
Bis(2-chloroisopropyl)ether	ND	5.00	"								
2-Chloronaphthalene	ND	5.00	"								
2-Chlorophenol	ND	5.00	"								
4-Chlorophenyl phenyl ether	ND	5.00	"								
Chrysene	ND	0.0500	"								
Dibenzo(a,h)anthracene	ND	0.0500	"								
Dibenzofuran	ND	5.00	"								
Di-n-butyl phthalate	ND	5.00	"								
1,4-Dichlorobenzene	ND	5.00	"								
1,2-Dichlorobenzene	ND	5.00	"								
1,3-Dichlorobenzene	ND	5.00	"								
3,3'-Dichlorobenzidine	ND	5.00	"								
2,4-Dichlorophenol	ND	5.00	"								
Diethyl phthalate	ND	5.00	"								
2,4-Dimethylphenol	ND	5.00	"								
Dimethyl phthalate	ND	5.00	"								
4,6-Dinitro-2-methylphenol	ND	5.00	"								
2,4-Dinitrophenol	ND	5.00	"								
2,4-Dinitrotoluene	ND	5.00	"								
2,6-Dinitrotoluene	ND	5.00	"								
Di-n-octyl phthalate	ND	5.00	"								
1,2-Diphenylhydrazine (as Azobenzene)	ND	5.00	"								
Bis(2-ethylhexyl)phthalate	1.67	0.500	"								
Fluoranthene	ND	0.0500	"								
Fluorene	ND	0.0500	"								
Hexachlorobenzene	ND	0.0200	"								
Hexachlorobutadiene	ND	0.500	"								

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 BE50083 - EPA 3510C											
Blank (BE50083-BLK1)											
Prepared & Analyzed: 05/03/2015											
Hexachlorocyclopentadiene	ND	5.00	ug/L								
Hexachloroethane	ND	0.500	"								
Indeno(1,2,3-cd)pyrene	ND	0.0500	"								
Isophorone	ND	5.00	"								
2-Methylnaphthalene	ND	5.00	"								
2-Methylphenol	ND	5.00	"								
3- & 4-Methylphenols	ND	5.00	"								
Naphthalene	ND	0.0500	"								
3-Nitroaniline	ND	5.00	"								
4-Nitroaniline	ND	5.00	"								
2-Nitroaniline	ND	5.00	"								
Nitrobenzene	ND	0.250	"								
4-Nitrophenol	ND	5.00	"								
2-Nitrophenol	ND	5.00	"								
N-nitroso-di-n-propylamine	ND	5.00	"								
N-Nitrosodimethylamine	ND	0.500	"								
N-Nitrosodiphenylamine	ND	5.00	"								
Pentachlorophenol	ND	0.250	"								
Phenanthrene	ND	0.0500	"								
Phenol	ND	5.00	"								
Pyrene	ND	0.0500	"								
1,2,4,5-Tetrachlorobenzene	ND	5.00	"								
2,3,4,6-Tetrachlorophenol	ND	5.00	"								
1,2,4-Trichlorobenzene	ND	5.00	"								
2,4,6-Trichlorophenol	ND	5.00	"								
2,4,5-Trichlorophenol	ND	5.00	"								
Surrogate: 2-Fluorophenol	*13.9*		"	*75.1*		*18.5*	*10-65*				
Surrogate: Phenol-d5	*9.05*		"	*75.0*		*12.1*	*10-49*				
Surrogate: Nitrobenzene-d5	*23.4*		"	*50.2*		*46.7*	*10-96*				
Surrogate: 2-Fluorobiphenyl	*25.3*		"	*50.0*		*50.6*	*10-93*				
Surrogate: 2,4,6-Tribromophenol	*39.2*		"	*75.2*		*52.2*	*10-128*				
Surrogate: Terphenyl-d14	*38.6*		"	*50.1*		*77.1*	*10-100*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50083 - EPA 3510C											
LCS (BE50083-BS1)							Prepared & Analyzed: 05/03/2015				
Acenaphthene	31.7	0.0500	ug/L	50.0		63.3	24-114				
Acenaphthylene	29.7	0.0500	"	50.0		59.5	26-112				
Acetophenone	23.7	5.00	"	50.0		47.3	47-92				
Aniline	18.6	5.00	"	50.0		37.2	10-107				
Anthracene	32.5	0.0500	"	50.0		65.1	35-114				
Atrazine	28.8	0.500	"	50.0		57.7	43-101				
Benzaldehyde	20.6	5.00	"	50.0		41.2	17-117				
Benzo(a)anthracene	32.0	0.0500	"	50.0		64.0	38-127				
Benzo(a)pyrene	33.2	0.0500	"	50.0		66.5	30-146				
Benzo(b)fluoranthene	34.2	0.0500	"	50.0		68.5	36-145				
Benzo(g,h,i)perylene	34.7	0.0500	"	50.0		69.4	10-163				
Benzoic acid	ND	50.0	"	50.0			30-130	Low Bias			
Benzo(k)fluoranthene	28.3	0.0500	"	50.0		56.5	16-149				
Benzyl alcohol	15.1	5.00	"	50.0		30.2	18-75				
Benzyl butyl phthalate	24.5	5.00	"	50.0		49.1	28-129				
1,1'-Biphenyl	25.2	5.00	"				21-102				
4-Bromophenyl phenyl ether	31.2	5.00	"	50.0		62.4	38-116				
Caprolactam	4.50	5.00	"	50.0		9.00	10-29	Low Bias			
Carbazole	37.6	5.00	"	50.0		75.1	49-116				
4-Chloro-3-methylphenol	24.9	5.00	"	50.0		49.7	28-101				
4-Chloroaniline	37.2	5.00	"	50.0		74.4	10-154				
Bis(2-chloroethoxy)methane	27.6	5.00	"	50.0		55.2	27-112				
Bis(2-chloroethyl)ether	20.9	5.00	"	50.0		41.8	24-114				
Bis(2-chloroisopropyl)ether	24.3	5.00	"	50.0		48.5	21-124				
2-Chloronaphthalene	27.9	5.00	"	50.0		55.8	40-96				
2-Chlorophenol	17.5	5.00	"	50.0		35.0	35-84				
4-Chlorophenyl phenyl ether	29.2	5.00	"	50.0		58.3	34-112				
Chrysene	30.9	0.0500	"	50.0		61.8	33-120				
Dibenzo(a,h)anthracene	36.0	0.0500	"	50.0		72.0	10-149				
Dibenzofuran	31.0	5.00	"	50.0		61.9	42-105				
Di-n-butyl phthalate	28.1	5.00	"	50.0		56.2	36-110				
1,4-Dichlorobenzene	17.8	5.00	"	50.0		35.6	42-82	Low Bias			
1,2-Dichlorobenzene	19.3	5.00	"	50.0		38.7	42-85	Low Bias			
1,3-Dichlorobenzene	20.1	5.00	"	50.0		40.1	45-80	Low Bias			
3,3'-Dichlorobenzidine	43.4	5.00	"	50.0		86.7	25-155				
2,4-Dichlorophenol	27.2	5.00	"	50.0		54.5	43-92				
Diethyl phthalate	26.8	5.00	"	50.0		53.6	38-112				
2,4-Dimethylphenol	24.3	5.00	"	50.0		48.6	25-92				
Dimethyl phthalate	27.7	5.00	"	50.0		55.4	49-106				
4,6-Dinitro-2-methylphenol	39.8	5.00	"	50.0		79.6	10-135				
2,4-Dinitrophenol	21.6	5.00	"	50.0		43.3	10-149				
2,4-Dinitrotoluene	35.1	5.00	"	50.0		70.1	41-114				
2,6-Dinitrotoluene	31.4	5.00	"	50.0		62.9	49-106				
Di-n-octyl phthalate	27.3	5.00	"	50.0		54.7	12-149				
1,2-Diphenylhydrazine (as Azobenzene)	27.0	5.00	"	50.0		53.9	16-137				
Bis(2-ethylhexyl)phthalate	29.0	0.500	"	50.0		58.1	10-171				
Fluoranthene	31.2	0.0500	"	50.0		62.3	33-126				
Fluorene	31.8	0.0500	"	50.0		63.6	28-117				
Hexachlorobenzene	24.8	0.0200	"	50.0		49.5	27-120				
Hexachlorobutadiene	21.2	0.500	"	50.0		42.4	25-106				
Hexachlorocyclopentadiene	6.89	5.00	"	50.0		13.8	10-99				

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 BE50083 - EPA 3510C											
LCS (BE50083-BS1)								Prepared & Analyzed: 05/03/2015			
Hexachloroethane	15.9	0.500	ug/L	50.0		31.8	33-84	Low Bias			
Indeno(1,2,3-cd)pyrene	33.8	0.0500	"	50.0		67.5	10-150				
Isophorone	24.9	5.00	"	50.0		49.8	29-115				
2-Methylnaphthalene	24.8	5.00	"	50.0		49.5	33-101				
2-Methylphenol	14.7	5.00	"	50.0		29.4	10-90				
3- & 4-Methylphenols	12.8	5.00	"	50.0		25.6	10-101				
Naphthalene	25.0	0.0500	"	50.0		50.0	30-99				
3-Nitroaniline	38.4	5.00	"	50.0		76.9	29-128				
4-Nitroaniline	47.3	5.00	"	50.0		94.6	15-143				
2-Nitroaniline	35.1	5.00	"	50.0		70.1	31-122				
Nitrobenzene	22.6	0.250	"	50.0		45.1	32-113				
4-Nitrophenol	20.3	5.00	"	50.0		40.5	10-112				
2-Nitrophenol	26.4	5.00	"	50.0		52.8	37-97				
N-nitroso-di-n-propylamine	21.0	5.00	"	50.0		42.1	36-118				
N-Nitrosodimethylamine	7.70	0.500	"	50.0		15.4	10-63				
N-Nitrosodiphenylamine	41.0	5.00	"	50.0		82.0	27-145				
Pentachlorophenol	26.9	0.250	"	50.0		53.8	19-127				
Phenanthrene	34.6	0.0500	"	50.0		69.3	31-112				
Phenol	7.63	5.00	"	50.0		15.3	10-37				
Pyrene	27.8	0.0500	"	50.0		55.5	42-125				
1,2,4,5-Tetrachlorobenzene	23.9	5.00	"	50.0		47.8	28-105				
2,3,4,6-Tetrachlorophenol	49.1	5.00	"	50.0		98.3	30-130				
1,2,4-Trichlorobenzene	23.5	5.00	"	50.0		47.0	35-91				
2,4,6-Trichlorophenol	29.2	5.00	"	50.0		58.3	41-107				
2,4,5-Trichlorophenol	27.8	5.00	"	50.0		55.5	36-112				
Surrogate: 2-Fluorophenol	*14.9*		"	*75.1*		*19.8*	*10-65*				
Surrogate: Phenol-d5	*10.1*		"	*75.0*		*13.5*	*10-49*				
Surrogate: Nitrobenzene-d5	*23.0*		"	*50.2*		*45.8*	*10-96*				
Surrogate: 2-Fluorobiphenyl	*28.4*		"	*50.0*		*56.8*	*10-93*				
Surrogate: 2,4,6-Tribromophenol	*48.3*		"	*75.2*		*64.2*	*10-128*				
Surrogate: Terphenyl-d14	*32.5*		"	*50.1*		*64.9*	*10-100*				

Batch BE50083 - EPA 3510C

LCS (BE50083-BS2) Prepared & Analyzed: 05/03/2015

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Acenaphthene	0.450	0.0500	ug/L	1.00		45.0	24-114				
Acenaphthylene	0.470	0.0500	"	1.00		47.0	26-112				
Acetophenone	ND	5.00	"				47-92				
Aniline	ND	5.00	"				10-107				
Anthracene	0.540	0.0500	"	1.00		54.0	35-114				
Atrazine	ND	0.500	"				43-101				
Benzaldehyde	ND	5.00	"				17-117				
Benzo(a)anthracene	0.510	0.0500	"	1.00		51.0	38-127				
Benzo(a)pyrene	0.570	0.0500	"	1.00		57.0	30-146				
Benzo(b)fluoranthene	0.440	0.0500	"	1.00		44.0	36-145				
Benzo(g,h,i)perylene	0.540	0.0500	"	1.00		54.0	10-163				
Benzoic acid	ND	50.0	"				30-130				
Benzo(k)fluoranthene	0.740	0.0500	"	1.00		74.0	16-149				
Benzyl alcohol	ND	5.00	"				18-75				
Benzyl butyl phthalate	ND	5.00	"				28-129				
1,1'-Biphenyl	ND	5.00	"				21-102				
4-Bromophenyl phenyl ether	ND	5.00	"				38-116				
Caprolactam	ND	5.00	"				10-29				
Carbazole	ND	5.00	"				49-116				
4-Chloro-3-methylphenol	ND	5.00	"				28-101				
4-Chloroaniline	ND	5.00	"				10-154				
Bis(2-chloroethoxy)methane	ND	5.00	"				27-112				
Bis(2-chloroethyl)ether	ND	5.00	"				24-114				
Bis(2-chloroisopropyl)ether	ND	5.00	"				21-124				
2-Chloronaphthalene	ND	5.00	"				40-96				
2-Chlorophenol	ND	5.00	"				35-84				
4-Chlorophenyl phenyl ether	ND	5.00	"				34-112				
Chrysene	0.620	0.0500	"	1.00		62.0	33-120				
Dibenzo(a,h)anthracene	0.570	0.0500	"	1.00		57.0	10-149				
Dibenzofuran	ND	5.00	"				42-105				
Di-n-butyl phthalate	ND	5.00	"				36-110				
1,4-Dichlorobenzene	ND	5.00	"				42-82				
1,2-Dichlorobenzene	ND	5.00	"				42-85				
1,3-Dichlorobenzene	ND	5.00	"				45-80				
3,3'-Dichlorobenzidine	ND	5.00	"				25-155				
2,4-Dichlorophenol	ND	5.00	"				43-92				
Diethyl phthalate	ND	5.00	"				38-112				
2,4-Dimethylphenol	ND	5.00	"				25-92				
Dimethyl phthalate	ND	5.00	"				49-106				
4,6-Dinitro-2-methylphenol	ND	5.00	"				10-135				
2,4-Dinitrophenol	ND	5.00	"				10-149				
2,4-Dinitrotoluene	ND	5.00	"				41-114				
2,6-Dinitrotoluene	ND	5.00	"				49-106				
Di-n-octyl phthalate	ND	5.00	"				12-149				
1,2-Diphenylhydrazine (as Azobenzene)	ND	5.00	"				16-137				
Bis(2-ethylhexyl)phthalate	1.19	0.500	"				10-171				
Fluoranthene	0.570	0.0500	"	1.00		57.0	33-126				
Fluorene	0.460	0.0500	"	1.00		46.0	28-117				
Hexachlorobenzene	ND	0.0200	"				27-120				
Hexachlorobutadiene	ND	0.500	"				25-106				
Hexachlorocyclopentadiene	ND	5.00	"				10-99				

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 BE50083 - EPA 3510C											
LCS (BE50083-BS2)							Prepared & Analyzed: 05/03/2015				
Hexachloroethane	ND	0.500	ug/L				33-84				
Indeno(1,2,3-cd)pyrene	0.570	0.0500	"	1.00		57.0	10-150				
Isophorone	ND	5.00	"				29-115				
2-Methylnaphthalene	ND	5.00	"				33-101				
2-Methylphenol	ND	5.00	"				10-90				
3- & 4-Methylphenols	ND	5.00	"				10-101				
Naphthalene	0.450	0.0500	"	1.00		45.0	30-99				
3-Nitroaniline	ND	5.00	"				29-128				
4-Nitroaniline	ND	5.00	"				15-143				
2-Nitroaniline	ND	5.00	"				31-122				
Nitrobenzene	ND	0.250	"				32-113				
4-Nitrophenol	ND	5.00	"				10-112				
2-Nitrophenol	ND	5.00	"				37-97				
N-nitroso-di-n-propylamine	ND	5.00	"				36-118				
N-Nitrosodimethylamine	ND	0.500	"				10-63				
N-Nitrosodiphenylamine	ND	5.00	"				27-145				
Pentachlorophenol	ND	0.250	"				19-127				
Phenanthrene	0.410	0.0500	"	1.00		41.0	31-112				
Phenol	ND	5.00	"				10-37				
Pyrene	0.580	0.0500	"	1.00		58.0	42-125				
1,2,4,5-Tetrachlorobenzene	ND	5.00	"				28-105				
2,3,4,6-Tetrachlorophenol	ND	5.00	"				30-130				
1,2,4-Trichlorobenzene	ND	5.00	"				35-91				
2,4,6-Trichlorophenol	ND	5.00	"				41-107				
2,4,5-Trichlorophenol	ND	5.00	"				36-112				
Surrogate: 2-Fluorophenol	*0.00*		"	*75.1*			*10-65*				
Surrogate: Phenol-d5	*0.00*		"	*75.0*			*10-49*				
Surrogate: Nitrobenzene-d5	*0.00*		"	*50.2*			*10-96*				
Surrogate: 2-Fluorobiphenyl	*0.00*		"	*50.0*			*10-93*				
Surrogate: 2,4,6-Tribromophenol	*0.00*		"	*75.2*			*10-128*				
Surrogate: Terphenyl-d14	*0.00*		"	*50.1*			*10-100*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50083 - EPA 3510C											
LCS Dup (BE50083-BSD1)								Prepared & Analyzed: 05/03/2015			
Acenaphthene	34.7	0.0500	ug/L	50.0		69.3	24-114		9.02	20	
Acenaphthylene	32.1	0.0500	"	50.0		64.1	26-112		7.54	20	
Acetophenone	26.7	5.00	"	50.0		53.4	47-92		12.0	20	
Aniline	20.3	5.00	"	50.0		40.6	10-107		8.68	20	
Anthracene	34.3	0.0500	"	50.0		68.7	35-114		5.38	20	
Atrazine	30.5	0.500	"	50.0		61.0	43-101		5.59	20	
Benzaldehyde	23.5	5.00	"	50.0		47.0	17-117		13.3	20	
Benzo(a)anthracene	32.0	0.0500	"	50.0		64.1	38-127		0.0937	20	
Benzo(a)pyrene	34.3	0.0500	"	50.0		68.7	30-146		3.26	20	
Benzo(b)fluoranthene	33.8	0.0500	"	50.0		67.6	36-145		1.29	20	
Benzo(g,h,i)perylene	37.3	0.0500	"	50.0		74.5	10-163		7.17	20	
Benzoic acid	ND	50.0	"	50.0			30-130	Low Bias		20	
Benzo(k)fluoranthene	27.6	0.0500	"	50.0		55.2	16-149		2.36	20	
Benzyl alcohol	17.0	5.00	"	50.0		34.0	18-75		11.9	20	
Benzyl butyl phthalate	24.5	5.00	"	50.0		49.0	28-129		0.163	20	
1,1'-Biphenyl	27.6	5.00	"				21-102		9.13	20	
4-Bromophenyl phenyl ether	33.4	5.00	"	50.0		66.9	38-116		6.99	20	
Caprolactam	4.94	5.00	"	50.0		9.88	10-29	Low Bias	9.32	20	
Carbazole	39.4	5.00	"	50.0		78.8	49-116		4.81	20	
4-Chloro-3-methylphenol	27.2	5.00	"	50.0		54.3	28-101		8.81	20	
4-Chloroaniline	40.9	5.00	"	50.0		81.8	10-154		9.40	20	
Bis(2-chloroethoxy)methane	31.7	5.00	"	50.0		63.3	27-112		13.7	20	
Bis(2-chloroethyl)ether	24.3	5.00	"	50.0		48.5	24-114		15.0	20	
Bis(2-chloroisopropyl)ether	27.8	5.00	"	50.0		55.7	21-124		13.7	20	
2-Chloronaphthalene	29.9	5.00	"	50.0		59.8	40-96		6.96	20	
2-Chlorophenol	20.2	5.00	"	50.0		40.4	35-84		14.2	20	
4-Chlorophenyl phenyl ether	32.7	5.00	"	50.0		65.3	34-112		11.4	20	
Chrysene	31.6	0.0500	"	50.0		63.1	33-120		2.08	20	
Dibenzo(a,h)anthracene	40.6	0.0500	"	50.0		81.1	10-149		12.0	20	
Dibenzofuran	33.3	5.00	"	50.0		66.6	42-105		7.34	20	
Di-n-butyl phthalate	29.8	5.00	"	50.0		59.6	36-110		5.87	20	
1,4-Dichlorobenzene	21.1	5.00	"	50.0		42.2	42-82		16.8	20	
1,2-Dichlorobenzene	22.4	5.00	"	50.0		44.8	42-85		14.6	20	
1,3-Dichlorobenzene	22.6	5.00	"	50.0		45.2	45-80		12.0	20	
3,3'-Dichlorobenzidine	44.6	5.00	"	50.0		89.3	25-155		2.91	20	
2,4-Dichlorophenol	30.8	5.00	"	50.0		61.5	43-92		12.1	20	
Diethyl phthalate	29.0	5.00	"	50.0		58.0	38-112		7.81	20	
2,4-Dimethylphenol	27.0	5.00	"	50.0		54.0	25-92		10.6	20	
Dimethyl phthalate	29.2	5.00	"	50.0		58.4	49-106		5.41	20	
4,6-Dinitro-2-methylphenol	44.8	5.00	"	50.0		89.5	10-135		11.8	20	
2,4-Dinitrophenol	24.1	5.00	"	50.0		48.3	10-149		11.0	20	
2,4-Dinitrotoluene	37.7	5.00	"	50.0		75.5	41-114		7.34	20	
2,6-Dinitrotoluene	33.7	5.00	"	50.0		67.3	49-106		6.85	20	
Di-n-octyl phthalate	27.5	5.00	"	50.0		54.9	12-149		0.438	20	
1,2-Diphenylhydrazine (as Azobenzene)	28.7	5.00	"	50.0		57.3	16-137		6.08	20	
Bis(2-ethylhexyl)phthalate	58.4	0.500	"	50.0		117	10-171		67.2	20	Non-dir.
Fluoranthene	34.3	0.0500	"	50.0		68.5	33-126		9.51	20	
Fluorene	34.7	0.0500	"	50.0		69.3	28-117		8.57	20	
Hexachlorobenzene	25.9	0.0200	"	50.0		51.8	27-120		4.42	20	
Hexachlorobutadiene	23.3	0.500	"	50.0		46.5	25-106		9.31	20	
Hexachlorocyclopentadiene	9.91	5.00	"	50.0		19.8	10-99		36.0	20	Non-dir.

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 BE50083 - EPA 3510C											
LCS Dup (BE50083-BSD1)								Prepared & Analyzed: 05/03/2015			
Hexachloroethane	18.4	0.500	ug/L	50.0		36.8	33-84		14.7	20	
Indeno(1,2,3-cd)pyrene	37.3	0.0500	"	50.0		74.6	10-150		9.88	20	
Isophorone	27.5	5.00	"	50.0		55.0	29-115		9.85	20	
2-Methylnaphthalene	27.5	5.00	"	50.0		54.9	33-101		10.3	20	
2-Methylphenol	17.1	5.00	"	50.0		34.1	10-90		15.0	20	
3- & 4-Methylphenols	14.9	5.00	"	50.0		29.7	10-101		14.8	20	
Naphthalene	27.6	0.0500	"	50.0		55.3	30-99		10.1	20	
3-Nitroaniline	40.6	5.00	"	50.0		81.2	29-128		5.54	20	
4-Nitroaniline	49.4	5.00	"	50.0		98.8	15-143		4.39	20	
2-Nitroaniline	38.4	5.00	"	50.0		76.9	31-122		9.19	20	
Nitrobenzene	25.6	0.250	"	50.0		51.3	32-113		12.7	20	
4-Nitrophenol	ND	5.00	"	50.0			10-112	Low Bias		20	
2-Nitrophenol	29.0	5.00	"	50.0		57.9	37-97		9.21	20	
N-nitroso-di-n-propylamine	23.8	5.00	"	50.0		47.7	36-118		12.5	20	
N-Nitrosodimethylamine	8.44	0.500	"	50.0		16.9	10-63		9.17	20	
N-Nitrosodiphenylamine	44.5	5.00	"	50.0		89.0	27-145		8.19	20	
Pentachlorophenol	27.8	0.250	"	50.0		55.7	19-127		3.32	20	
Phenanthrene	36.8	0.0500	"	50.0		73.6	31-112		6.07	20	
Phenol	8.89	5.00	"	50.0		17.8	10-37		15.3	20	
Pyrene	28.8	0.0500	"	50.0		57.5	42-125		3.47	20	
1,2,4,5-Tetrachlorobenzene	25.9	5.00	"	50.0		51.8	28-105		8.07	20	
2,3,4,6-Tetrachlorophenol	52.9	5.00	"	50.0		106	30-130		7.31	20	
1,2,4-Trichlorobenzene	25.8	5.00	"	50.0		51.6	35-91		9.33	20	
2,4,6-Trichlorophenol	32.2	5.00	"	50.0		64.4	41-107		9.88	20	
2,4,5-Trichlorophenol	30.6	5.00	"	50.0		61.3	36-112		9.90	20	
Surrogate: 2-Fluorophenol	*19.6*		"	*75.1*		*26.2*	*10-65*				
Surrogate: Phenol-d5	*11.2*		"	*75.0*		*14.9*	*10-49*				
Surrogate: Nitrobenzene-d5	*24.3*		"	*50.2*		*48.4*	*10-96*				
Surrogate: 2-Fluorobiphenyl	*30.5*		"	*50.0*		*61.0*	*10-93*				
Surrogate: 2,4,6-Tribromophenol	*48.1*		"	*75.2*		*64.0*	*10-128*				
Surrogate: Terphenyl-d14	*31.0*		"	*50.1*		*61.8*	*10-100*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

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

Batch BE50084 - EPA 3550C

Blank (BE50084-BLK1) Prepared & Analyzed: 05/03/2015

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Acenaphthene	ND	41.7	ug/kg wet								
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	"								
Benzoic acid	ND	41.7	"								
Benzo(k)fluoranthene	ND	41.7	"								
Benzyl alcohol	ND	41.7	"								
Benzyl butyl phthalate	ND	41.7	"								
1,1'-Biphenyl	ND	41.7	"								
4-Bromophenyl phenyl ether	ND	41.7	"								
Caprolactam	ND	83.3	"								
Carbazole	ND	41.7	"								
4-Chloro-3-methylphenol	ND	41.7	"								
4-Chloroaniline	ND	41.7	"								
Bis(2-chloroethoxy)methane	ND	41.7	"								
Bis(2-chloroethyl)ether	ND	41.7	"								
Bis(2-chloroisopropyl)ether	ND	41.7	"								
2-Chloronaphthalene	ND	41.7	"								
2-Chlorophenol	ND	41.7	"								
4-Chlorophenyl phenyl ether	ND	41.7	"								
Chrysene	ND	41.7	"								
Dibenzo(a,h)anthracene	ND	41.7	"								
Dibenzofuran	ND	41.7	"								
Di-n-butyl phthalate	ND	41.7	"								
1,2-Dichlorobenzene	ND	41.7	"								
1,3-Dichlorobenzene	ND	41.7	"								
1,4-Dichlorobenzene	ND	41.7	"								
3,3'-Dichlorobenzidine	ND	41.7	"								
2,4-Dichlorophenol	ND	41.7	"								
Diethyl phthalate	ND	41.7	"								
2,4-Dimethylphenol	ND	41.7	"								
Dimethyl phthalate	ND	41.7	"								
4,6-Dinitro-2-methylphenol	ND	83.3	"								
2,4-Dinitrophenol	ND	83.3	"								
2,4-Dinitrotoluene	ND	41.7	"								
2,6-Dinitrotoluene	ND	41.7	"								
Di-n-octyl phthalate	ND	41.7	"								
1,2-Diphenylhydrazine (as Azobenzene)	ND	41.7	"								
Bis(2-ethylhexyl)phthalate	ND	41.7	"								
Fluoranthene	ND	41.7	"								
Fluorene	ND	41.7	"								
Hexachlorobenzene	ND	41.7	"								
Hexachlorobutadiene	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 BE50084 - EPA 3550C											
Blank (BE50084-BLK1)											Prepared & Analyzed: 05/03/2015
Hexachlorocyclopentadiene	ND	41.7	ug/kg wet								
Hexachloroethane	ND	41.7	"								
Indeno(1,2,3-cd)pyrene	ND	41.7	"								
Isophorone	ND	41.7	"								
2-Methylnaphthalene	ND	41.7	"								
2-Methylphenol	ND	41.7	"								
3- & 4-Methylphenols	ND	41.7	"								
Naphthalene	ND	41.7	"								
4-Nitroaniline	ND	83.3	"								
2-Nitroaniline	ND	83.3	"								
3-Nitroaniline	ND	83.3	"								
Nitrobenzene	ND	41.7	"								
2-Nitrophenol	ND	41.7	"								
4-Nitrophenol	ND	83.3	"								
N-nitroso-di-n-propylamine	ND	41.7	"								
N-Nitrosodimethylamine	ND	41.7	"								
N-Nitrosodiphenylamine	ND	41.7	"								
Pentachlorophenol	ND	41.7	"								
Phenanthrene	ND	41.7	"								
Phenol	ND	41.7	"								
Pyrene	ND	41.7	"								
1,2,4,5-Tetrachlorobenzene	ND	83.3	"								
2,3,4,6-Tetrachlorophenol	ND	83.3	"								
1,2,4-Trichlorobenzene	ND	41.7	"								
2,4,6-Trichlorophenol	ND	41.7	"								
2,4,5-Trichlorophenol	ND	41.7	"								
Surrogate: 2-Fluorophenol	*1260*		*"*	*2500*		*50.5*	*10-95*				
Surrogate: Phenol-d5	*1300*		*"*	*2500*		*52.1*	*10-107*				
Surrogate: Nitrobenzene-d5	*961*		*"*	*1670*		*57.5*	*10-95*				
Surrogate: 2-Fluorobiphenyl	*765*		*"*	*1670*		*45.9*	*10-97*				
Surrogate: 2,4,6-Tribromophenol	*1770*		*"*	*2510*		*70.5*	*10-103*				
Surrogate: Terphenyl-d14	*842*		*"*	*1670*		*50.4*	*19-99*				

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 BE50084 - EPA 3550C											
LCS (BE50084-BS1)								Prepared & Analyzed: 05/03/2015			
Acenaphthene	1130	41.7	ug/kg wet	1670		67.7	17-124				
Acenaphthylene	1110	41.7	"	1670		66.6	16-124				
Acetophenone	1410	41.7	"	1670		84.6	28-105				
Aniline	1440	167	"	1670		86.6	10-111				
Anthracene	1010	41.7	"	1670		60.7	24-124				
Atrazine	1200	41.7	"	1670		72.2	22-120				
Benzaldehyde	1310	41.7	"	1670		78.4	21-100				
Benzo(a)anthracene	1340	41.7	"	1670		80.2	25-134				
Benzo(a)pyrene	1740	41.7	"	1670		104	29-144				
Benzo(b)fluoranthene	1400	41.7	"	1670		84.2	20-151				
Benzo(g,h,i)perylene	359	41.7	"	1670		21.6	10-153				
Benzoic acid	68.7	41.7	"	1670		4.12	10-116	Low Bias			
Benzo(k)fluoranthene	1230	41.7	"	1670		73.6	10-148				
Benzyl alcohol	1300	41.7	"	1670		77.8	17-128				
Benzyl butyl phthalate	1540	41.7	"	1670		92.4	10-132				
1,1'-Biphenyl	1060	41.7	"				22-103				
4-Bromophenyl phenyl ether	1180	41.7	"	1670		70.9	30-138				
Caprolactam	1380	83.3	"	1670		82.6	10-123				
Carbazole	1190	41.7	"	1670		71.4	31-120				
4-Chloro-3-methylphenol	1340	41.7	"	1670		80.2	16-138				
4-Chloroaniline	1490	41.7	"	1670		89.2	10-117				
Bis(2-chloroethoxy)methane	1410	41.7	"	1670		84.5	10-129				
Bis(2-chloroethyl)ether	1420	41.7	"	1670		85.4	14-125				
Bis(2-chloroisopropyl)ether	1470	41.7	"	1670		88.4	14-122				
2-Chloronaphthalene	1090	41.7	"	1670		65.3	22-115				
2-Chlorophenol	1240	41.7	"	1670		74.5	25-121				
4-Chlorophenyl phenyl ether	1020	41.7	"	1670		61.0	18-132				
Chrysene	1480	41.7	"	1670		88.6	24-116				
Dibenzo(a,h)anthracene	491	41.7	"	1670		29.5	17-147				
Dibenzofuran	1030	41.7	"	1670		61.9	23-123				
Di-n-butyl phthalate	1100	41.7	"	1670		66.2	19-123				
1,2-Dichlorobenzene	1180	41.7	"	1670		70.5	26-113				
1,3-Dichlorobenzene	1200	41.7	"	1670		72.0	32-113				
1,4-Dichlorobenzene	1200	41.7	"	1670		72.2	28-111				
3,3'-Dichlorobenzidine	1740	41.7	"	1670		105	10-147				
2,4-Dichlorophenol	1030	41.7	"	1670		61.7	23-133				
Diethyl phthalate	1260	41.7	"	1670		75.3	23-122				
2,4-Dimethylphenol	1090	41.7	"	1670		65.5	15-131				
Dimethyl phthalate	1370	41.7	"	1670		82.2	28-127				
4,6-Dinitro-2-methylphenol	1400	83.3	"	1670		83.8	10-149				
2,4-Dinitrophenol	2500	83.3	"	1670		150	10-149	High Bias			
2,4-Dinitrotoluene	1560	41.7	"	1670		93.5	30-123				
2,6-Dinitrotoluene	1420	41.7	"	1670		85.4	30-125				
Di-n-octyl phthalate	1180	41.7	"	1670		70.6	10-132				
1,2-Diphenylhydrazine (as Azobenzene)	1350	41.7	"	1670		80.9	10-140				
Bis(2-ethylhexyl)phthalate	1340	41.7	"	1670		80.5	10-141				
Fluoranthene	1130	41.7	"	1670		67.8	36-125				
Fluorene	1060	41.7	"	1670		63.3	16-130				
Hexachlorobenzene	1150	41.7	"	1670		69.3	10-129				
Hexachlorobutadiene	1090	41.7	"	1670		65.1	22-153				
Hexachlorocyclopentadiene	896	41.7	"	1670		53.8	10-134				

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 BE50084 - EPA 3550C											
LCS (BE50084-BS1)								Prepared & Analyzed: 05/03/2015			
Hexachloroethane	1260	41.7	ug/kg wet	1670		75.7	20-112				
Indeno(1,2,3-cd)pyrene	465	41.7	"	1670		27.9	10-155				
Isophorone	1420	41.7	"	1670		85.0	14-131				
2-Methylnaphthalene	1000	41.7	"	1670		60.3	16-127				
2-Methylphenol	1140	41.7	"	1670		68.2	10-146				
3- & 4-Methylphenols	1160	41.7	"	1670		69.6	20-109				
Naphthalene	1080	41.7	"	1670		65.0	20-121				
4-Nitroaniline	63.0	83.3	"	1670		3.78	14-125	Low Bias			
2-Nitroaniline	1380	83.3	"	1670		83.1	24-126				
3-Nitroaniline	1410	83.3	"	1670		84.9	23-123				
Nitrobenzene	1340	41.7	"	1670		80.5	20-121				
2-Nitrophenol	1130	41.7	"	1670		68.0	17-129				
4-Nitrophenol	1520	83.3	"	1670		91.0	10-136				
N-nitroso-di-n-propylamine	1520	41.7	"	1670		91.3	21-119				
N-Nitrosodimethylamine	985	41.7	"	1670		59.1	10-124				
N-Nitrosodiphenylamine	1070	41.7	"	1670		64.5	10-163				
Pentachlorophenol	1540	41.7	"	1670		92.3	10-143				
Phenanthrene	1120	41.7	"	1670		67.4	24-123				
Phenol	1220	41.7	"	1670		73.2	15-123				
Pyrene	1460	41.7	"	1670		87.8	24-132				
1,2,4,5-Tetrachlorobenzene	1120	83.3	"	1670		67.1	10-144				
2,3,4,6-Tetrachlorophenol	1310	83.3	"	1670		78.7	30-130				
1,2,4-Trichlorobenzene	1050	41.7	"	1670		62.9	23-130				
2,4,6-Trichlorophenol	1140	41.7	"	1670		68.5	27-122				
2,4,5-Trichlorophenol	1180	41.7	"	1670		70.9	14-138				
Surrogate: 2-Fluorophenol	*1650*		"	*2500*		*65.8*	*10-95*				
Surrogate: Phenol-d5	*1540*		"	*2500*		*61.8*	*10-107*				
Surrogate: Nitrobenzene-d5	*1210*		"	*1670*		*72.2*	*10-95*				
Surrogate: 2-Fluorobiphenyl	*860*		"	*1670*		*51.6*	*10-97*				
Surrogate: 2,4,6-Tribromophenol	*2060*		"	*2510*		*82.4*	*30-130*				
Surrogate: Terphenyl-d14	*1340*		"	*1670*		*80.3*	*19-99*				

Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Batch BE50084 - EPA 3550C

LCS Dup (BE50084-BSD1) Prepared & Analyzed: 05/03/2015

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Acenaphthene	881	41.7	ug/kg wet	1670		52.8	17-124		24.6	30	
Acenaphthylene	855	41.7	"	1670		51.3	16-124		25.9	30	
Acetophenone	998	41.7	"	1670		59.9	28-105		34.2	30	Non-dir.
Aniline	1020	167	"	1670		61.2	10-111		34.3	30	Non-dir.
Anthracene	883	41.7	"	1670		53.0	24-124		13.6	30	
Atrazine	1070	41.7	"	1670		64.0	22-120		12.0	30	
Benzaldehyde	926	41.7	"	1670		55.6	21-100		34.1	30	Non-dir.
Benzo(a)anthracene	1140	41.7	"	1670		68.4	25-134		15.8	30	
Benzo(a)pyrene	1100	41.7	"	1670		66.1	29-144		44.9	30	Non-dir.
Benzo(b)fluoranthene	1100	41.7	"	1670		66.0	20-151		24.2	30	
Benzo(g,h,i)perylene	332	41.7	"	1670		19.9	10-153		8.01	30	
Benzoic acid	55.7	41.7	"	1670		3.34	10-116	Low Bias	20.9	30	
Benzo(k)fluoranthene	1210	41.7	"	1670		72.5	10-148		1.45	30	
Benzyl alcohol	935	41.7	"	1670		56.1	17-128		32.4	30	Non-dir.
Benzyl butyl phthalate	1270	41.7	"	1670		76.2	10-132		19.1	30	
1,1'-Biphenyl	827	41.7	"				22-103		25.2	30	
4-Bromophenyl phenyl ether	971	41.7	"	1670		58.3	30-138		19.5	30	
Caprolactam	1150	83.3	"	1670		68.9	10-123		18.0	30	
Carbazole	1030	41.7	"	1670		61.7	31-120		14.5	30	
4-Chloro-3-methylphenol	994	41.7	"	1670		59.7	16-138		29.4	30	
4-Chloroaniline	1240	41.7	"	1670		74.2	10-117		18.3	30	
Bis(2-chloroethoxy)methane	1010	41.7	"	1670		60.4	10-129		33.2	30	Non-dir.
Bis(2-chloroethyl)ether	1000	41.7	"	1670		60.2	14-125		34.7	30	Non-dir.
Bis(2-chloroisopropyl)ether	1030	41.7	"	1670		61.5	14-122		35.8	30	Non-dir.
2-Chloronaphthalene	857	41.7	"	1670		51.4	22-115		23.8	30	
2-Chlorophenol	875	41.7	"	1670		52.5	25-121		34.7	30	Non-dir.
4-Chlorophenyl phenyl ether	867	41.7	"	1670		52.0	18-132		15.9	30	
Chrysene	1280	41.7	"	1670		76.8	24-116		14.3	30	
Dibenzo(a,h)anthracene	432	41.7	"	1670		25.9	17-147		12.9	30	
Dibenzofuran	827	41.7	"	1670		49.6	23-123		22.1	30	
Di-n-butyl phthalate	974	41.7	"	1670		58.4	19-123		12.5	30	
1,2-Dichlorobenzene	859	41.7	"	1670		51.5	26-113		31.1	30	Non-dir.
1,3-Dichlorobenzene	852	41.7	"	1670		51.1	32-113		33.9	30	Non-dir.
1,4-Dichlorobenzene	828	41.7	"	1670		49.7	28-111		36.9	30	Non-dir.
3,3'-Dichlorobenzidine	1550	41.7	"	1670		92.9	10-147		11.9	30	
2,4-Dichlorophenol	810	41.7	"	1670		48.6	23-133		23.8	30	
Diethyl phthalate	1080	41.7	"	1670		64.8	23-122		15.0	30	
2,4-Dimethylphenol	816	41.7	"	1670		48.9	15-131		29.0	30	
Dimethyl phthalate	1120	41.7	"	1670		67.0	28-127		20.3	30	
4,6-Dinitro-2-methylphenol	1250	83.3	"	1670		75.2	10-149		10.8	30	
2,4-Dinitrophenol	2120	83.3	"	1670		127	10-149		16.6	30	
2,4-Dinitrotoluene	1320	41.7	"	1670		79.0	30-123		16.8	30	
2,6-Dinitrotoluene	1140	41.7	"	1670		68.6	30-125		21.8	30	
Di-n-octyl phthalate	1000	41.7	"	1670		60.1	10-132		16.0	30	
1,2-Diphenylhydrazine (as Azobenzene)	1060	41.7	"	1670		63.5	10-140		24.2	30	
Bis(2-ethylhexyl)phthalate	1140	41.7	"	1670		68.4	10-141		16.2	30	
Fluoranthene	984	41.7	"	1670		59.1	36-125		13.7	30	
Fluorene	889	41.7	"	1670		53.3	16-130		17.1	30	
Hexachlorobenzene	988	41.7	"	1670		59.3	10-129		15.6	30	
Hexachlorobutadiene	834	41.7	"	1670		50.0	22-153		26.3	30	
Hexachlorocyclopentadiene	654	41.7	"	1670		39.3	10-134		31.2	30	Non-dir.

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 BE50084 - EPA 3550C											
LCS Dup (BE50084-BSD1)								Prepared & Analyzed: 05/03/2015			
Hexachloroethane	914	41.7	ug/kg wet	1670		54.9	20-112		31.9	30	Non-dir.
Indeno(1,2,3-cd)pyrene	433	41.7	"	1670		26.0	10-155		7.05	30	
Isophorone	1010	41.7	"	1670		60.7	14-131		33.3	30	Non-dir.
2-Methylnaphthalene	795	41.7	"	1670		47.7	16-127		23.3	30	
2-Methylphenol	796	41.7	"	1670		47.8	10-146		35.3	30	Non-dir.
3- & 4-Methylphenols	824	41.7	"	1670		49.5	20-109		33.9	30	Non-dir.
Naphthalene	792	41.7	"	1670		47.5	20-121		31.1	30	Non-dir.
4-Nitroaniline	1070	83.3	"	1670		64.4	14-125		178	30	Non-dir.
2-Nitroaniline	1070	83.3	"	1670		64.1	24-126		25.8	30	
3-Nitroaniline	1180	83.3	"	1670		71.0	23-123		17.8	30	
Nitrobenzene	984	41.7	"	1670		59.1	20-121		30.8	30	Non-dir.
2-Nitrophenol	847	41.7	"	1670		50.8	17-129		28.9	30	
4-Nitrophenol	1340	83.3	"	1670		80.3	10-136		12.5	30	
N-nitroso-di-n-propylamine	1080	41.7	"	1670		64.7	21-119		34.0	30	Non-dir.
N-Nitrosodimethylamine	617	41.7	"	1670		37.0	10-124		45.9	30	Non-dir.
N-Nitrosodiphenylamine	887	41.7	"	1670		53.2	10-163		19.2	30	
Pentachlorophenol	1270	41.7	"	1670		76.4	10-143		18.8	30	
Phenanthrene	928	41.7	"	1670		55.7	24-123		19.1	30	
Phenol	869	41.7	"	1670		52.2	15-123		33.5	30	Non-dir.
Pyrene	1230	41.7	"	1670		73.8	24-132		17.3	30	
1,2,4,5-Tetrachlorobenzene	883	83.3	"	1670		53.0	10-144		23.6	30	
2,3,4,6-Tetrachlorophenol	1980	83.3	"	1670		119	30-130		40.5	30	Non-dir.
1,2,4-Trichlorobenzene	777	41.7	"	1670		46.6	23-130		29.6	30	
2,4,6-Trichlorophenol	914	41.7	"	1670		54.8	27-122		22.1	30	
2,4,5-Trichlorophenol	945	41.7	"	1670		56.7	14-138		22.2	30	
Surrogate: 2-Fluorophenol	*1160*		"	*2500*		*46.3*	*10-95*				
Surrogate: Phenol-d5	*1140*		"	*2500*		*45.8*	*10-107*				
Surrogate: Nitrobenzene-d5	*901*		"	*1670*		*53.9*	*10-95*				
Surrogate: 2-Fluorobiphenyl	*673*		"	*1670*		*40.4*	*10-97*				
Surrogate: 2,4,6-Tribromophenol	*1680*		"	*2510*		*66.9*	*30-130*				
Surrogate: Terphenyl-d14	*1110*		"	*1670*		*66.6*	*19-99*				

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 BE50084 - EPA 3550C

Matrix Spike (BE50084-MS1) *Source sample: 15E0070-04 (SB04_.5-1) Prepared & Analyzed: 05/03/2015

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Acenaphthene	1180	92.8	ug/kg dry	1860	86.8	58.9	13-133				
Acenaphthylene	1120	92.8	"	1860	ND	60.2	25-125				
Acetophenone	1170	92.8	"	1860	ND	63.0	25-105				
Aniline	1070	372	"	1860	ND	57.7	10-112				
Anthracene	1110	92.8	"	1860	226	47.6	27-128				
Atrazine	1140	92.8	"	1860	ND	61.6	10-139				
Benzaldehyde	1030	92.8	"	1860	ND	55.4	24-96				
Benzo(a)anthracene	1660	92.8	"	1860	859	43.1	20-147				
Benzo(a)pyrene	746	92.8	"	1860	370	20.3	18-153				
Benzo(b)fluoranthene	858	92.8	"	1860	342	27.8	10-163				
Benzo(g,h,i)perylene	404	92.8	"	1860	122	15.2	10-157				
Benzoic acid	ND	92.8	"	1860	ND		10-130	Low Bias			
Benzo(k)fluoranthene	923	92.8	"	1860	350	30.9	10-157				
Benzyl alcohol	1070	92.8	"	1860	ND	57.4	20-122				
Benzyl butyl phthalate	1200	92.8	"	1860	ND	64.8	10-129				
1,1'-Biphenyl	1110	92.8	"		ND		24-112				
4-Bromophenyl phenyl ether	1190	92.8	"	1860	ND	64.1	32-148				
Caprolactam	ND	185	"	1860	ND		10-100	Low Bias			
Carbazole	1160	92.8	"	1860	63.8	58.9	24-139				
4-Chloro-3-methylphenol	1260	92.8	"	1860	ND	68.0	14-138				
4-Chloroaniline	1690	92.8	"	1860	ND	91.2	10-124				
Bis(2-chloroethoxy)methane	1260	92.8	"	1860	ND	67.7	12-128				
Bis(2-chloroethyl)ether	1110	92.8	"	1860	ND	59.8	18-113				
Bis(2-chloroisopropyl)ether	1330	92.8	"	1860	ND	71.5	10-130				
2-Chloronaphthalene	1110	92.8	"	1860	ND	59.6	31-116				
2-Chlorophenol	997	92.8	"	1860	ND	53.7	28-114				
4-Chlorophenyl phenyl ether	1190	92.8	"	1860	ND	64.2	10-153				
Chrysene	1620	92.8	"	1860	836	42.4	18-133				
Dibenzo(a,h)anthracene	406	92.8	"	1860	61.6	18.6	10-146				
Dibenzofuran	1160	92.8	"	1860	ND	62.3	26-134				
Di-n-butyl phthalate	1050	92.8	"	1860	ND	56.6	20-128				
1,2-Dichlorobenzene	1040	92.8	"	1860	ND	55.9	29-106				
1,3-Dichlorobenzene	974	92.8	"	1860	ND	52.5	34-100				
1,4-Dichlorobenzene	957	92.8	"	1860	ND	51.6	26-107				
3,3'-Dichlorobenzidine	1090	92.8	"	1860	ND	59.0	10-134				
2,4-Dichlorophenol	1100	92.8	"	1860	ND	59.0	16-144				
Diethyl phthalate	1220	92.8	"	1860	ND	65.6	30-119				
2,4-Dimethylphenol	1020	92.8	"	1860	ND	54.9	11-133				
Dimethyl phthalate	1230	92.8	"	1860	ND	66.0	34-120				
4,6-Dinitro-2-methylphenol	1370	185	"	1860	ND	73.7	10-149				
2,4-Dinitrophenol	873	185	"	1860	ND	47.0	10-132				
2,4-Dinitrotoluene	1360	92.8	"	1860	ND	73.5	42-113				
2,6-Dinitrotoluene	1260	92.8	"	1860	ND	67.8	36-124				
Di-n-octyl phthalate	852	92.8	"	1860	ND	45.9	10-133				
1,2-Diphenylhydrazine (as Azobenzene)	1220	92.8	"	1860	ND	65.6	10-135				
Bis(2-ethylhexyl)phthalate	1110	92.8	"	1860	ND	59.9	10-138				
Fluoranthene	1890	92.8	"	1860	1490	22.0	10-155				
Fluorene	1170	92.8	"	1860	64.6	59.5	12-150				
Hexachlorobenzene	1180	92.8	"	1860	ND	63.4	16-142				
Hexachlorobutadiene	1150	92.8	"	1860	ND	62.0	11-150				
Hexachlorocyclopentadiene	305	92.8	"	1860	ND	16.4	10-115				

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 BE50084 - EPA 3550C											
Matrix Spike (BE50084-MS1)	*Source sample: 15E0070-04 (SB04_.5-1)						Prepared & Analyzed: 05/03/2015				
Hexachloroethane	1080	92.8	ug/kg dry	1860	ND	58.4	14-106				
Indeno(1,2,3-cd)pyrene	469	92.8	"	1860	128	18.4	10-155				
Isophorone	1160	92.8	"	1860	ND	62.6	14-127				
2-Methylnaphthalene	1100	92.8	"	1860	ND	59.4	10-143				
2-Methylphenol	977	92.8	"	1860	ND	52.6	10-160				
3- & 4-Methylphenols	970	92.8	"	1860	ND	52.3	16-115				
Naphthalene	1030	92.8	"	1860	ND	55.6	15-132				
4-Nitroaniline	1090	185	"	1860	ND	59.0	10-151				
2-Nitroaniline	1130	185	"	1860	ND	61.1	33-122				
3-Nitroaniline	986	185	"	1860	ND	53.2	24-128				
Nitrobenzene	1120	92.8	"	1860	ND	60.6	18-125				
2-Nitrophenol	1040	92.8	"	1860	ND	56.1	12-127				
4-Nitrophenol	1270	185	"	1860	ND	68.6	10-141				
N-nitroso-di-n-propylamine	1250	92.8	"	1860	ND	67.2	23-115				
N-Nitrosodimethylamine	650	92.8	"	1860	ND	35.0	10-123				
N-Nitrosodiphenylamine	1160	92.8	"	1860	ND	62.4	16-166				
Pentachlorophenol	1130	92.8	"	1860	ND	60.7	10-160				
Phenanthrene	1630	92.8	"	1860	861	41.6	10-151				
Phenol	1010	92.8	"	1860	ND	54.4	11-124				
Pyrene	2200	92.8	"	1860	1350	46.2	13-148				
1,2,4,5-Tetrachlorobenzene	1250	185	"	1860	ND	67.2	18-152				
2,3,4,6-Tetrachlorophenol	2280	185	"	1860	ND	123	30-130				
1,2,4-Trichlorobenzene	1070	92.8	"	1860	ND	57.6	15-139				
2,4,6-Trichlorophenol	1140	92.8	"	1860	ND	61.2	12-138				
2,4,5-Trichlorophenol	1180	92.8	"	1860	ND	63.6	10-148				
Surrogate: 2-Fluorophenol	*1230*		*"*	*2790*		*44.1*	*10-95*				
Surrogate: Phenol-d5	*1300*		*"*	*2780*		*46.6*	*10-107*				
Surrogate: Nitrobenzene-d5	*1040*		*"*	*1860*		*55.9*	*10-95*				
Surrogate: 2-Fluorobiphenyl	*930*		*"*	*1860*		*50.1*	*10-97*				
Surrogate: 2,4,6-Tribromophenol	*1790*		*"*	*2790*		*64.1*	*30-130*				
Surrogate: Terphenyl-d14	*1230*		*"*	*1860*		*66.0*	*19-99*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50085 - EPA 3550C											
Blank (BE50085-BLK1)											Prepared: 05/03/2015 Analyzed: 05/04/2015
Aldrin	ND	0.330	ug/kg wet								
alpha-BHC	ND	0.330	"								
beta-BHC	ND	0.330	"								
delta-BHC	ND	0.330	"								
gamma-BHC (Lindane)	ND	0.330	"								
gamma-Chlordane	ND	0.330	"								
alpha-Chlordane	ND	0.330	"								
Chlordane, total	ND	1.32	"								
4,4'-DDD	ND	0.330	"								
4,4'-DDE	ND	0.330	"								
4,4'-DDT	ND	0.330	"								
Dieldrin	ND	0.330	"								
Endosulfan I	ND	0.330	"								
Endosulfan II	ND	0.330	"								
Endosulfan sulfate	ND	0.330	"								
Endrin	ND	0.330	"								
Endrin aldehyde	ND	0.330	"								
Endrin ketone	ND	0.330	"								
Heptachlor	ND	0.330	"								
Heptachlor epoxide	ND	0.330	"								
Methoxychlor	ND	1.65	"								
Toxaphene	ND	16.7	"								
Surrogate: Decachlorobiphenyl	*49.3*		*"*	*67.0*		*73.6*	*30-140*				
Surrogate: Tetrachloro-m-xylene	*45.4*		*"*	*67.7*		*67.2*	*30-140*				
LCS (BE50085-BS1)											Prepared: 05/03/2015 Analyzed: 05/04/2015
Aldrin	21.6	0.330	ug/kg wet	33.3		64.7	40-140				
alpha-BHC	23.1	0.330	"	33.3		69.3	40-140				
beta-BHC	21.8	0.330	"	33.3		65.3	40-140				
delta-BHC	21.4	0.330	"	33.3		64.2	40-140				
gamma-BHC (Lindane)	22.1	0.330	"	33.3		66.2	40-140				
gamma-Chlordane	21.5	0.330	"	33.3		64.4	40-140				
alpha-Chlordane	21.7	0.330	"	33.3		65.2	40-140				
4,4'-DDD	19.5	0.330	"	33.3		58.5	40-140				
4,4'-DDE	24.1	0.330	"	33.3		72.2	40-140				
4,4'-DDT	22.8	0.330	"	33.3		68.5	40-140				
Dieldrin	21.4	0.330	"	33.3		64.2	40-140				
Endosulfan I	22.0	0.330	"	33.3		66.0	40-140				
Endosulfan II	20.0	0.330	"	33.3		59.9	40-140				
Endosulfan sulfate	18.7	0.330	"	33.3		56.1	40-140				
Endrin	20.9	0.330	"	33.3		62.6	40-140				
Endrin aldehyde	16.0	0.330	"	33.3		48.1	40-140				
Endrin ketone	18.7	0.330	"	33.3		56.1	40-140				
Heptachlor	18.8	0.330	"	33.3		56.4	40-140				
Heptachlor epoxide	20.7	0.330	"	33.3		62.0	40-140				
Methoxychlor	19.3	1.65	"	33.3		58.0	40-140				
Surrogate: Decachlorobiphenyl	*48.3*		*"*	*67.0*		*72.1*	*30-140*				
Surrogate: Tetrachloro-m-xylene	*48.2*		*"*	*67.7*		*71.3*	*30-140*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50085 - EPA 3550C											
LCS Dup (BE50085-BSD1)										Prepared: 05/03/2015 Analyzed: 05/04/2015	
Aldrin	21.6	0.330	ug/kg wet	33.3		64.9	40-140		0.313	30	
alpha-BHC	22.9	0.330	"	33.3		68.8	40-140		0.672	30	
beta-BHC	21.8	0.330	"	33.3		65.3	40-140		0.127	30	
delta-BHC	21.5	0.330	"	33.3		64.6	40-140		0.688	30	
gamma-BHC (Lindane)	21.9	0.330	"	33.3		65.8	40-140		0.542	30	
gamma-Chlordane	21.7	0.330	"	33.3		65.2	40-140		1.20	30	
alpha-Chlordane	22.0	0.330	"	33.3		65.9	40-140		1.10	30	
4,4'-DDD	19.8	0.330	"	33.3		59.3	40-140		1.23	30	
4,4'-DDE	24.2	0.330	"	33.3		72.7	40-140		0.703	30	
4,4'-DDT	23.4	0.330	"	33.3		70.1	40-140		2.31	30	
Dieldrin	21.7	0.330	"	33.3		65.0	40-140		1.29	30	
Endosulfan I	22.4	0.330	"	33.3		67.3	40-140		1.94	30	
Endosulfan II	20.1	0.330	"	33.3		60.4	40-140		0.964	30	
Endosulfan sulfate	19.0	0.330	"	33.3		56.9	40-140		1.33	30	
Endrin	21.2	0.330	"	33.3		63.5	40-140		1.43	30	
Endrin aldehyde	16.1	0.330	"	33.3		48.4	40-140		0.692	30	
Endrin ketone	18.8	0.330	"	33.3		56.4	40-140		0.515	30	
Heptachlor	18.8	0.330	"	33.3		56.4	40-140		0.0745	30	
Heptachlor epoxide	20.8	0.330	"	33.3		62.5	40-140		0.769	30	
Methoxychlor	18.9	1.65	"	33.3		56.8	40-140		2.15	30	
Surrogate: Decachlorobiphenyl	*48.6*		*"*	*67.0*		*72.6*	*30-140*				
Surrogate: Tetrachloro-m-xylene	*47.9*		*"*	*67.7*		*70.8*	*30-140*				
Matrix Spike (BE50085-MS1)	*Source sample: 15E0070-03 (SB03_5-5.5)									Prepared: 05/03/2015 Analyzed: 05/04/2015	
Aldrin	29.0	2.26	ug/kg dry	45.6	ND	63.7	30-150				
alpha-BHC	33.2	2.26	"	45.6	ND	73.0	30-150				
beta-BHC	36.2	2.26	"	45.6	ND	79.4	30-150				
delta-BHC	28.6	2.26	"	45.6	ND	62.7	30-150				
gamma-BHC (Lindane)	33.9	2.26	"	45.6	ND	74.3	30-150				
gamma-Chlordane	30.2	2.26	"	45.6	ND	66.2	30-150				
alpha-Chlordane	31.0	2.26	"	45.6	ND	68.0	30-150				
4,4'-DDD	30.1	2.26	"	45.6	ND	66.1	30-150				
4,4'-DDE	30.4	2.26	"	45.6	ND	66.8	30-150				
4,4'-DDT	32.4	2.26	"	45.6	ND	71.2	30-150				
Dieldrin	32.3	2.26	"	45.6	ND	70.8	30-150				
Endosulfan I	27.4	2.26	"	45.6	ND	60.2	30-150				
Endosulfan II	27.8	2.26	"	45.6	ND	61.0	30-150				
Endosulfan sulfate	29.6	2.26	"	45.6	ND	65.1	30-150				
Endrin	32.2	2.26	"	45.6	ND	70.8	30-150				
Endrin aldehyde	26.9	2.26	"	45.6	ND	59.0	30-150				
Endrin ketone	31.9	2.26	"	45.6	ND	70.1	30-150				
Heptachlor	30.0	2.26	"	45.6	ND	65.9	30-150				
Heptachlor epoxide	32.9	2.26	"	45.6	ND	72.1	30-150				
Methoxychlor	32.5	11.3	"	45.6	ND	71.4	30-150				
Surrogate: Decachlorobiphenyl	*70.1*		*"*	*91.6*		*76.5*	*30-140*				
Surrogate: Tetrachloro-m-xylene	*71.6*		*"*	*92.5*		*77.4*	*30-140*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50097 - EPA SW846-3510C Low Level											
Blank (BE50097-BLK1)								Prepared & Analyzed: 05/04/2015			
Aldrin	ND	0.00400	ug/L								
alpha-BHC	ND	0.00400	"								
beta-BHC	ND	0.00400	"								
delta-BHC	ND	0.00400	"								
gamma-BHC (Lindane)	ND	0.00400	"								
gamma-Chlordane	ND	0.0100	"								
alpha-Chlordane	ND	0.00400	"								
Chlordane, total	ND	0.0400	"								
4,4'-DDD	ND	0.00400	"								
4,4'-DDE	ND	0.00400	"								
4,4'-DDT	ND	0.00400	"								
Dieldrin	ND	0.00200	"								
Endosulfan I	ND	0.00400	"								
Endosulfan II	ND	0.00400	"								
Endosulfan sulfate	ND	0.00400	"								
Endrin	ND	0.00400	"								
Endrin aldehyde	ND	0.0100	"								
Endrin ketone	ND	0.0100	"								
Heptachlor	ND	0.00400	"								
Heptachlor epoxide	ND	0.00400	"								
Methoxychlor	ND	0.00400	"								
Toxaphene	ND	0.100	"								
Surrogate: Decachlorobiphenyl	*0.138*		*"*	*0.201*		*68.6*	*30-120*				
Surrogate: Tetrachloro-m-xylene	*0.116*		*"*	*0.203*		*57.0*	*30-120*				
LCS (BE50097-BS1)								Prepared & Analyzed: 05/04/2015			
Aldrin	0.0660	0.00400	ug/L	0.100		66.0	40-120				
alpha-BHC	0.0687	0.00400	"	0.100		68.7	40-120				
beta-BHC	0.0671	0.00400	"	0.100		67.1	40-120				
delta-BHC	0.0481	0.00400	"	0.100		48.1	40-120				
gamma-BHC (Lindane)	0.0647	0.00400	"	0.100		64.7	40-120				
gamma-Chlordane	0.0612	0.0100	"	0.100		61.2	40-120				
alpha-Chlordane	0.0640	0.00400	"	0.100		64.0	40-120				
4,4'-DDD	0.0586	0.00400	"	0.100		58.6	40-120				
4,4'-DDE	0.0738	0.00400	"	0.100		73.8	40-120				
4,4'-DDT	0.0719	0.00400	"	0.100		71.9	40-120				
Dieldrin	0.0626	0.00200	"	0.100		62.6	40-120				
Endosulfan I	0.0680	0.00400	"	0.100		68.0	40-120				
Endosulfan II	0.0568	0.00400	"	0.100		56.8	40-120				
Endosulfan sulfate	0.0560	0.00400	"	0.100		56.0	40-120				
Endrin	0.0621	0.00400	"	0.100		62.1	40-120				
Endrin aldehyde	0.0585	0.0100	"	0.100		58.5	40-120				
Endrin ketone	0.0672	0.0100	"	0.100		67.2	40-120				
Heptachlor	0.0515	0.00400	"	0.100		51.5	40-120				
Heptachlor epoxide	0.0608	0.00400	"	0.100		60.8	40-120				
Methoxychlor	0.0652	0.00400	"	0.100		65.2	40-120				
Surrogate: Decachlorobiphenyl	*0.119*		*"*	*0.201*		*59.4*	*30-120*				
Surrogate: Tetrachloro-m-xylene	*0.111*		*"*	*0.203*		*54.8*	*30-120*				

Organochlorine Pesticides by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50097 - EPA SW846-3510C Low Level											
LCS Dup (BE50097-BSD1)								Prepared & Analyzed: 05/04/2015			
Aldrin	0.0753	0.00400	ug/L	0.100		75.3	40-120		13.2	30	
alpha-BHC	0.0803	0.00400	"	0.100		80.3	40-120		15.5	30	
beta-BHC	0.0769	0.00400	"	0.100		76.9	40-120		13.7	30	
delta-BHC	0.0562	0.00400	"	0.100		56.2	40-120		15.6	30	
gamma-BHC (Lindane)	0.0747	0.00400	"	0.100		74.7	40-120		14.3	30	
gamma-Chlordane	0.0690	0.0100	"	0.100		69.0	40-120		12.1	30	
alpha-Chlordane	0.0724	0.00400	"	0.100		72.4	40-120		12.3	30	
4,4'-DDD	0.0654	0.00400	"	0.100		65.4	40-120		11.0	30	
4,4'-DDE	0.0836	0.00400	"	0.100		83.6	40-120		12.4	30	
4,4'-DDT	0.0810	0.00400	"	0.100		81.0	40-120		11.9	30	
Dieldrin	0.0707	0.00200	"	0.100		70.7	40-120		12.2	30	
Endosulfan I	0.0773	0.00400	"	0.100		77.3	40-120		12.9	30	
Endosulfan II	0.0633	0.00400	"	0.100		63.3	40-120		10.8	30	
Endosulfan sulfate	0.0624	0.00400	"	0.100		62.4	40-120		10.8	30	
Endrin	0.0692	0.00400	"	0.100		69.2	40-120		10.8	30	
Endrin aldehyde	0.0657	0.0100	"	0.100		65.7	40-120		11.6	30	
Endrin ketone	0.0749	0.0100	"	0.100		74.9	40-120		10.9	30	
Heptachlor	0.0583	0.00400	"	0.100		58.3	40-120		12.4	30	
Heptachlor epoxide	0.0686	0.00400	"	0.100		68.6	40-120		12.1	30	
Methoxychlor	0.0722	0.00400	"	0.100		72.2	40-120		10.2	30	
Surrogate: Decachlorobiphenyl	*0.135*		*"*	*0.201*		*66.9*	*30-120*				
Surrogate: Tetrachloro-m-xylene	*0.127*		*"*	*0.203*		*62.6*	*30-120*				

Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50085 - EPA 3550C											
Blank (BE50085-BLK1)											Prepared: 05/03/2015 Analyzed: 05/04/2015
Aroclor 1016	ND	0.0167	mg/kg wet								
Aroclor 1221	ND	0.0167	"								
Aroclor 1232	ND	0.0167	"								
Aroclor 1242	ND	0.0167	"								
Aroclor 1248	ND	0.0167	"								
Aroclor 1254	ND	0.0167	"								
Aroclor 1260	ND	0.0167	"								
Total PCBs	ND	0.0167	"								
Surrogate: Tetrachloro-m-xylene	*0.0437*		*"*	*0.0677*		*64.5*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0443*		*"*	*0.0670*		*66.2*	*30-140*				
LCS (BE50085-BS2)											Prepared: 05/03/2015 Analyzed: 05/04/2015
Aroclor 1016	0.273	0.0167	mg/kg wet	0.333		82.0	40-130				
Aroclor 1260	0.281	0.0167	"	0.333		84.4	40-130				
Surrogate: Tetrachloro-m-xylene	*0.0477*		*"*	*0.0677*		*70.4*	*30-140*				
Surrogate: Decachlorobiphenyl	*0.0477*		*"*	*0.0670*		*71.1*	*30-140*				
Batch BE50097 - EPA SW846-3510C Low Level											
Blank (BE50097-BLK1)											Prepared & Analyzed: 05/04/2015
Aroclor 1016	ND	0.0500	ug/L								
Aroclor 1221	ND	0.0500	"								
Aroclor 1232	ND	0.0500	"								
Aroclor 1242	ND	0.0500	"								
Aroclor 1248	ND	0.0500	"								
Aroclor 1254	ND	0.0500	"								
Aroclor 1260	ND	0.0500	"								
Total PCBs	ND	0.0500	"								
Surrogate: Tetrachloro-m-xylene	*0.134*		*"*	*0.203*		*66.0*	*30-120*				
Surrogate: Decachlorobiphenyl	*0.144*		*"*	*0.201*		*71.6*	*30-120*				

Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50097 - EPA SW846-3510C Low Level											
LCS (BE50097-BS2)								Prepared & Analyzed: 05/04/2015			
Aroclor 1016	0.752	0.0500	ug/L	1.00		75.2	40-120				
Aroclor 1260	0.905	0.0500	"	1.00		90.5	40-120				
Surrogate: Tetrachloro-m-xylene	*0.162*		*"*	*0.203*		*79.8*	*30-120*				
Surrogate: Decachlorobiphenyl	*0.165*		*"*	*0.201*		*82.1*	*30-120*				
LCS Dup (BE50097-BSD2)								Prepared & Analyzed: 05/04/2015			
Aroclor 1016	0.758	0.0500	ug/L	1.00		75.8	40-120		0.874	30	
Aroclor 1260	0.888	0.0500	"	1.00		88.8	40-120		1.87	30	
Surrogate: Tetrachloro-m-xylene	*0.161*		*"*	*0.203*		*79.3*	*30-120*				
Surrogate: Decachlorobiphenyl	*0.163*		*"*	*0.201*		*81.1*	*30-120*				

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 BE50101 - EPA 3050B											
Blank (BE50101-BLK1)									Prepared & Analyzed: 05/04/2015		
Aluminum	ND	5.00	mg/kg wet								
Antimony	ND	0.500	"								
Arsenic	ND	1.00	"								
Barium	ND	1.00	"								
Beryllium	ND	0.100	"								
Cadmium	ND	0.300	"								
Calcium	ND	5.00	"								
Chromium	ND	0.500	"								
Cobalt	ND	0.500	"								
Copper	ND	0.500	"								
Iron	ND	2.00	"								
Lead	ND	0.300	"								
Magnesium	ND	5.00	"								
Manganese	ND	0.500	"								
Nickel	ND	0.500	"								
Potassium	ND	5.00	"								
Selenium	ND	1.00	"								
Silver	ND	0.500	"								
Sodium	ND	10.0	"								
Thallium	ND	1.00	"								
Vanadium	ND	1.00	"								
Zinc	ND	1.00	"								
Duplicate (BE50101-DUP1)	*Source sample: 15E0070-04 (SB04_.5-1)								Prepared & Analyzed: 05/04/2015		
Aluminum	5320	5.57	mg/kg dry		5350				0.540	35	
Antimony	ND	0.557	"		ND					35	
Arsenic	4.51	1.11	"		4.83				6.85	35	
Barium	62.3	1.11	"		62.7				0.679	35	
Beryllium	ND	0.111	"		ND					35	
Cadmium	ND	0.334	"		ND					35	
Calcium	16400	5.57	"		16400				0.111	35	
Chromium	12.4	0.557	"		12.5				0.924	35	
Cobalt	7.80	0.557	"		7.79				0.0836	35	
Copper	31.1	0.557	"		31.3				0.646	35	
Iron	12300	2.23	"		12300				0.321	35	
Lead	109	0.334	"		109				0.0808	35	
Magnesium	5840	5.57	"		5830				0.227	35	
Manganese	260	0.557	"		259				0.595	35	
Nickel	54.7	0.557	"		55.4				1.21	35	
Potassium	1090	5.57	"		1100				0.399	35	
Selenium	1.85	1.11	"		1.48				22.3	35	
Silver	ND	0.557	"		ND					35	
Sodium	595	11.1	"		597				0.345	35	
Thallium	ND	1.11	"		ND					35	
Vanadium	16.7	1.11	"		16.9				1.12	35	
Zinc	80.5	1.11	"		81.4				1.01	35	

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 BE50101 - EPA 3050B											
Matrix Spike (BE50101-MS1)	*Source sample: 15E0070-04 (SB04_.5-1)							Prepared & Analyzed: 05/04/2015			
Aluminum	5540	5.57	mg/kg dry	223	5350	83.0	75-125				
Antimony	27.6	0.557	"	27.8	ND	99.1	75-125				
Arsenic	220	1.11	"	223	4.83	96.8	75-125				
Barium	293	1.11	"	223	62.7	104	75-125				
Beryllium	4.66	0.111	"	5.57	ND	83.8	75-125				
Cadmium	5.43	0.334	"	5.57	ND	97.5	75-125				
Chromium	33.6	0.557	"	22.3	12.5	94.6	75-125				
Cobalt	62.7	0.557	"	55.7	7.79	98.6	75-125				
Copper	60.7	0.557	"	27.8	31.3	106	75-125				
Iron	12200	2.23	"	111	12300	NR	75-125	Low Bias			
Lead	162	0.334	"	55.7	109	94.8	75-125				
Magnesium	5790	5.57	"		5830		75-125				
Manganese	314	0.557	"	55.7	259	99.5	75-125				
Nickel	113	0.557	"	55.7	55.4	104	75-125				
Potassium	1090	5.57	"		1100		75-125				
Selenium	221	1.11	"	223	1.48	98.6	75-125				
Silver	3.57	0.557	"	5.57	ND	64.2	75-125	Low Bias			
Sodium	594	11.1	"		597		75-125				
Thallium	216	1.11	"	223	ND	97.1	75-125				
Vanadium	72.2	1.11	"	55.7	16.9	99.4	75-125				
Zinc	131	1.11	"	55.7	81.4	89.5	75-125				
Reference (BE50101-SRM1)								Prepared & Analyzed: 05/04/2015			
Aluminum	6610	5.00	mg/kg wet	8740		75.6	41.6-158				
Antimony	154	0.500	"	108		143	23-255				
Arsenic	145	1.00	"	151		96.3	70.9-130				
Barium	257	1.00	"	262		98.1	73.7-126				
Beryllium	130	0.100	"	133		98.0	75.1-125				
Cadmium	142	0.300	"	152		93.7	73-126				
Calcium	6120	5.00	"	6400		95.6	73.9-126				
Chromium	110	0.500	"	117		93.6	69.7-130				
Cobalt	70.0	0.500	"	68.7		102	74.4-126				
Copper	70.0	0.500	"	68.6		102	73.2-129				
Iron	10900	2.00	"	12300		88.7	30.5-170				
Lead	238	0.300	"	254		93.6	75.6-125				
Magnesium	3240	5.00	"	3600		90.1	68.3-132				
Manganese	548	0.500	"	563		97.3	77.4-123				
Nickel	315	0.500	"	315		99.9	74.3-127				
Potassium	2730	5.00	"	3040		89.8	62.5-137				
Selenium	159	1.00	"	162		98.0	67.3-132				
Silver	40.0	0.500	"	44.3		90.4	66.4-124				
Sodium	698	10.0	"	746		93.6	56.8-143				
Thallium	247	1.00	"	259		95.5	69.5-131				
Vanadium	111	1.00	"	116		95.6	67.5-132				
Zinc	286	1.00	"	306		93.6	71.9-133				

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 BE50103 - EPA 3010A/1311											
Blank (BE50103-BLK1)									Prepared & Analyzed: 05/04/2015		
Arsenic	ND	0.004	mg/L								
Barium	ND	0.010	"								
Cadmium	ND	0.003	"								
Chromium	ND	0.005	"								
Lead	ND	0.003	"								
Selenium	ND	0.010	"								
Silver	ND	0.005	"								
Blank (BE50103-BLK2)									Prepared & Analyzed: 05/04/2015		
Arsenic	ND	0.004	mg/L								
Barium	ND	0.010	"								
Cadmium	ND	0.003	"								
Chromium	ND	0.005	"								
Lead	ND	0.003	"								
Selenium	ND	0.010	"								
Silver	ND	0.005	"								
Duplicate (BE50103-DUP1)	*Source sample: 15E0070-01 (SB01_2.5-3)								Prepared & Analyzed: 05/04/2015		
Arsenic	0.020	0.004	mg/L		0.022				11.5	20	
Barium	0.242	0.010	"		0.243				0.414	20	
Cadmium	ND	0.003	"		ND					20	
Chromium	ND	0.005	"		ND					20	
Lead	0.040	0.003	"		0.042				4.48	20	
Selenium	ND	0.010	"		0.012					20	
Silver	ND	0.005	"		ND					20	
Matrix Spike (BE50103-MS1)	*Source sample: 15E0070-01 (SB01_2.5-3)								Prepared & Analyzed: 05/04/2015		
Arsenic	1.98	0.004	mg/L	2.00	0.022	98.1	75-125				
Barium	1.99	0.010	"	2.00	0.243	87.2	75-125				
Cadmium	0.044	0.003	"	0.0500	ND	88.6	75-125				
Chromium	0.175	0.005	"	0.200	ND	87.3	75-125				
Lead	0.452	0.003	"	0.500	0.042	81.9	75-125				
Selenium	2.17	0.010	"	2.00	0.012	108	75-125				
Silver	0.044	0.005	"	0.0500	ND	87.9	75-125				

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 BE50103 - EPA 3010A/1311											
Reference (BE50103-SRM1)								Prepared & Analyzed: 05/04/2015			
Arsenic	0.647	0.004	mg/L	0.681		95.1	84.4-114				
Barium	0.534	0.010	"	0.487		110	85-115				
Cadmium	0.299	0.003	"	0.293		102	85-115				
Chromium	0.123	0.005	"	0.123		100	85.4-115				
Lead	0.380	0.003	"	0.362		105	85.1-115				
Selenium	0.351	0.010	"	0.364		96.5	84.9-115				
Silver	0.223	0.005	"	0.215		104	85.1-115				
Batch BE50108 - EPA 3010A											
Blank (BE50108-BLK1)								Prepared & Analyzed: 05/04/2015			
Aluminum	ND	0.050	mg/L								
Antimony	ND	0.005	"								
Arsenic	ND	0.004	"								
Barium	ND	0.010	"								
Beryllium	ND	0.001	"								
Cadmium	ND	0.003	"								
Calcium	ND	0.050	"								
Chromium	ND	0.005	"								
Cobalt	ND	0.005	"								
Copper	ND	0.003	"								
Iron	ND	0.020	"								
Lead	ND	0.003	"								
Magnesium	ND	0.050	"								
Manganese	ND	0.005	"								
Nickel	ND	0.005	"								
Potassium	ND	0.050	"								
Selenium	ND	0.010	"								
Silver	ND	0.005	"								
Sodium	ND	0.100	"								
Thallium	ND	0.005	"								
Vanadium	ND	0.010	"								
Zinc	ND	0.010	"								

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 BE50108 - EPA 3010A											
Duplicate (BE50108-DUP1)	*Source sample: 15E0070-06 (TMW01_050215)							Prepared & Analyzed: 05/04/2015			
Aluminum	0.133	0.050	mg/L		0.129				3.33	20	
Antimony	ND	0.005	"		ND					20	
Arsenic	ND	0.004	"		ND					20	
Barium	0.133	0.010	"		0.133				0.448	20	
Beryllium	ND	0.001	"		ND					20	
Cadmium	ND	0.003	"		ND					20	
Calcium	127	0.050	"		127				0.0729	20	
Chromium	ND	0.005	"		ND					20	
Cobalt	ND	0.005	"		ND					20	
Copper	0.003	0.003	"		0.004				6.08	20	
Iron	5.97	0.020	"		6.10				2.13	20	
Lead	0.005	0.003	"		0.004				7.41	20	
Magnesium	25.9	0.050	"		26.4				1.93	20	
Manganese	1.04	0.005	"		1.04				0.502	20	
Nickel	ND	0.005	"		ND					20	
Potassium	21.1	0.050	"		21.4				1.79	20	
Selenium	0.013	0.010	"		0.013				3.74	20	
Silver	ND	0.005	"		ND					20	
Sodium	108	0.100	"		109				0.308	20	
Thallium	ND	0.005	"		ND					20	
Vanadium	ND	0.010	"		ND					20	
Zinc	0.012	0.010	"		0.012				0.939	20	
Matrix Spike (BE50108-MS1)	*Source sample: 15E0070-06 (TMW01_050215)							Prepared & Analyzed: 05/04/2015			
Antimony	0.249	0.005	mg/L	0.250	ND	99.4	75-125				
Arsenic	2.18	0.004	"	2.00	ND	109	75-125				
Barium	2.24	0.010	"	2.00	0.133	105	75-125				
Beryllium	0.053	0.001	"	0.0500	ND	106	75-125				
Cadmium	0.051	0.003	"	0.0500	ND	103	75-125				
Chromium	0.199	0.005	"	0.200	ND	99.4	75-125				
Cobalt	0.515	0.005	"	0.500	ND	103	75-125				
Copper	0.262	0.003	"	0.250	0.004	103	75-125				
Iron	7.10	0.020	"	1.00	6.10	101	75-125				
Lead	0.493	0.003	"	0.500	0.004	97.7	75-125				
Manganese	1.57	0.005	"	0.500	1.04	105	75-125				
Nickel	0.516	0.005	"	0.500	ND	103	75-125				
Selenium	2.43	0.010	"	2.00	0.013	121	75-125				
Silver	0.044	0.005	"	0.0500	ND	88.5	75-125				
Thallium	1.96	0.005	"	2.00	ND	98.2	75-125				
Vanadium	0.511	0.010	"	0.500	ND	102	75-125				
Zinc	0.545	0.010	"	0.500	0.012	107	75-125				

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 BE50108 - EPA 3010A											
Reference (BE50108-SRM1)								Prepared & Analyzed: 05/04/2015			
Aluminum	1.79	0.050	mg/L	1.80		99.3	82.8-115				
Antimony	0.397	0.005	"	0.415		95.6	79.8-117				
Arsenic	0.640	0.004	"	0.681		94.0	84.4-114				
Barium	0.528	0.010	"	0.487		108	85-115				
Beryllium	0.278	0.001	"	0.277		100	84.8-115				
Cadmium	0.294	0.003	"	0.293		100	85-115				
Chromium	0.121	0.005	"	0.123		98.5	85.4-115				
Cobalt	0.517	0.005	"	0.485		107	84.9-115				
Copper	0.388	0.003	"	0.378		103	84.9-115				
Iron	1.40	0.020	"	1.32		106	84.8-115				
Lead	0.377	0.003	"	0.362		104	85.1-115				
Manganese	0.325	0.005	"	0.308		105	85.1-115				
Nickel	0.513	0.005	"	0.526		97.5	87.3-114				
Selenium	0.343	0.010	"	0.364		94.3	84.9-115				
Silver	0.220	0.005	"	0.215		102	85.1-115				
Thallium	0.644	0.005	"	0.606		106	82.3-116				
Vanadium	0.752	0.010	"	0.784		95.9	84.9-115				
Zinc	0.711	0.010	"	0.715		99.5	85-115				

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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50080 - EPA 7473 soil											
Blank (BE50080-BLK1)								Prepared & Analyzed: 05/03/2015			
Mercury	ND	0.0300	mg/kg wet								
Reference (BE50080-SRM1)								Prepared & Analyzed: 05/03/2015			
Mercury	6.4474		mg/kg	5.76		112	71.2-129				
Batch BE50094 - EPA 7473 water											
Blank (BE50094-BLK1)								Prepared & Analyzed: 05/04/2015			
Mercury	ND	0.00020	mg/L								
Reference (BE50094-SRM1)								Prepared & Analyzed: 05/04/2015			
Mercury	0.00199		mg/kg	0.00230		86.6	61.3-135				
Batch BE50095 - EPA 7473 water											
Blank (BE50095-BLK1)								Prepared & Analyzed: 05/04/2015			
Mercury	ND	0.000200	mg/L								
Reference (BE50095-SRM1)								Prepared & Analyzed: 05/04/2015			
Mercury	0.00186		mg/L	0.00230		80.7	61.3-135				

Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BE50118 - % Solids Prep											
Duplicate (BE50118-DUP1)	*Source sample: 15E0070-05 (SB05_5-5.5)								Prepared & Analyzed: 05/04/2015		
% Solids	86.8	0.100	%		87.5				0.755	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 BE50079 - EPA SW 846-1311 TCLP ext. for metals											
Blank (BE50079-BLK1)									Prepared: 05/02/2015 Analyzed: 05/04/2015		
TCLP Extraction	Completed	1.00	N/A								

Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
15E0070-01	SB01_2.5-3	40mL Vial with Stir Bar-Cool 4° C
15E0070-02	SB02_2.5-3	40mL Vial with Stir Bar-Cool 4° C
15E0070-03	SB03_5-5.5	40mL Vial with Stir Bar-Cool 4° C
15E0070-04	SB04_.5-1	40mL Vial with Stir Bar-Cool 4° C
15E0070-05	SB05_5-5.5	40mL Vial with Stir Bar-Cool 4° C
15E0070-06	TMW01_050215	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
15E0070-07	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

Notes and Definitions

M-SeTC	It is noted that a known interference with selenium at the analytical line for analysis by ICP is caused by carbon emission from the TCLP or high organics matrix. The data user may subtract the matrix blank value from the data if needed.
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).
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
EXT-COMP	Completed
EXT-Temp	Extraction temperture slightly exceeded acceptance range.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.
M-MISpk	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The SRM was within acceptance limits, therefore data are acceptable.
SCAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%).
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.
QL-03	This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.
QM-01	The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
S-01	The surrogate recovery for this sample may not be available due to sample dilution required from high analyte concentration and/or matrix interferences.
S-08	The recovery of this surrogate was outside of QC limits.
M-HCSpk	Sample conc. >10 X spike conc.

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*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference

Wet — The data has been reported on an as-received (wet weight) basis

Low Bias — Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias — High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. — Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

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

Field Chain-of-Custody Record

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

York Project No. 15E0070

YOUR Information
Company: LANGAN
Address: 360 W 31st St. 8th Fl
New York, NY
Phone No. 212-479-5400
Contact Person: Ryan Manderback
E-Mail Address: rmanderback@langan.com

Report To:
Company: LANGAN
Address: 360 W 31st St 8th Fl
New York, NY
Phone No. 212-479-5400
Attention: Ryan Manderback
E-Mail Address:

Invoice To:
Company: E+M Realty Corp
Address: 335 Bond St
Brooklyn, NY 11231
Phone No.
Attention: Edward Slinin
E-Mail Address:

YOUR Project ID
1703625O1

Purchase Order No.

Samples from: CT ___ NY X NJ ___

Turn-Around Time
- RUSH - Same Day ☐
- RUSH - Next Day (24/NS) X
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☐

Report Type
- Summary Report X
- Summary w/ QA Summary ___
- CT RCP Package ___
- CTRCP DQA/DUE Pkg ___
- NY ASP A Package ___
- NY ASP B Package ___
- NJDEP Red. Deliv. ___

Electronic Data Deliverables (EDD)
- Simple Excel X
- NYSDEC EQuIS ___
- EQuIS (std) ___
- EZ-EDD (EQuIS) ___
- NJDEP SRP HazSite EDD ___
- GIS/KEY (std) ___
- Other ___
- **York Regulatory Comparison**
- **Excel Spreadsheet**

Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature)
Emily Snead
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded No Dioxins/Furans	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog.only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
SB01_2.5-3	5/2/15 10:30	Soil	TCL/TAL, Part375FullList VOC, SVOC, Metals, Pesticides, PCB, TCLP metals	Glass
SB02_2.5-3	5/2/15 11:20	Soil	TCL/TAL, Part375 FullList VOC, SVOC, metals, Pesticides, PCBs, TCLP metals	
SB03_5-5.5	5/2/15 11:50	Soil	TCL/TAL, Part375 FullList VOC, SVOC, metals, pesticides, PCBs, TCLP metals	
SB04_.5-1	5/2/15 14:50	Soil	TCL/TAL, Part375 FullList VOC, SVOC, metals, Pesticides, PCBs, TCLP metals	
SB05_5-5.5	5/2/15 15:00	Soil	TCL/TAL, Part375 FullList VOC, SVOC, metals, pesticides, PCBs, TCLP metals	
TMW01_050215	5/2/15 14:00	GW	TCL/TAL, Part375 Full List VOC, SVOC, Total metals, Pesticides, PCBs	Total metals only* ✓
Trip Blank	—	—	VOCs	glass

Comments
24-hr RUSH
need results COB Mon. 5/4/15

Preservation Check those Applicable
Special Instructions
Field Filtered ☐
Lab to Filter ☐

4°C X Frozen ___ HCl ___ MeOH X HNO3 ___ H2SO4 ___ NaOH ___
ZnAc Ascorbic Acid Other

Emily Snead	5/2/15 15:38	Bob Fishman	5/2/15 1538
Samples Relinquished By	Date/Time	Samples Received By	Date/Time
Bob Fishman	5/2/15 17:35	E. Schreck	5/2/15 17:33
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time

Temperature on Receipt 3.7 °C

Technical Report

prepared for:

Langan Engineering & Environmental Services (NYC)
21 Penn Plaza, 360 West 31st Street
New York NY, 10001
Attention: Ryan Manderbach

Report Date: 05/04/2015
Client Project ID: 170362501
York Project (SDG) No.: 15E0069

Report Date: 05/04/2015
Client Project ID: 170362501
York Project (SDG) No.: 15E0069

Langan Engineering & Environmental Services (NYC)
21 Penn Plaza, 360 West 31st Street
New York NY, 10001
Attention: Ryan Manderbach

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 May 02, 2015 and listed below. The project was identified as your project: **170362501**.

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

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

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
15E0069-01	SV01-050215	Soil Vapor	05/02/2015	05/02/2015

General Notes for York Project (SDG) No.: 15E0069

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

Approved By: 

Date: 05/04/2015

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: SV01-050215 **York Sample ID:** 15E0069-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0069	170362501	Soil Vapor	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m^3	8.0	16	23.44	EPA TO-15 Certifications:	05/03/2015 06:13	05/03/2015 06:13	ALD
71-55-6	**1,1,1-Trichloroethane**	**180**		ug/m^3	13	13	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m^3	16	16	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m^3	18	18	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
79-00-5	1,1,2-Trichloroethane	ND		ug/m^3	13	13	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
75-34-3	**1,1-Dichloroethane**	**14**		ug/m^3	9.5	9.5	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
75-35-4	1,1-Dichloroethylene	ND		ug/m^3	9.3	9.3	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m^3	17	17	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m^3	12	12	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
106-93-4	1,2-Dibromoethane	ND		ug/m^3	18	18	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
95-50-1	1,2-Dichlorobenzene	ND		ug/m^3	14	14	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
107-06-2	1,2-Dichloroethane	ND		ug/m^3	9.5	9.5	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
78-87-5	1,2-Dichloropropane	ND		ug/m^3	11	11	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m^3	16	16	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m^3	12	12	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
106-99-0	1,3-Butadiene	ND		ug/m^3	10	10	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
541-73-1	1,3-Dichlorobenzene	ND		ug/m^3	14	14	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
142-28-9	* 1,3-Dichloropropane	ND		ug/m^3	11	11	23.44	EPA TO-15 Certifications:	05/03/2015 06:13	05/03/2015 06:13	ALD
106-46-7	1,4-Dichlorobenzene	ND		ug/m^3	14	14	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
123-91-1	1,4-Dioxane	ND		ug/m^3	8.4	8.4	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
78-93-3	2-Butanone	ND		ug/m^3	6.9	6.9	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD

Sample Information

Client Sample ID: SV01-050215 **York Sample ID:** 15E0069-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0069	170362501	Soil Vapor	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	ND		ug/m³	19	19	23.44	EPA TO-15 Certifications:	05/03/2015 06:13	05/03/2015 06:13	ALD
107-05-1	* 3-Chloropropene	ND		ug/m³	7.3	7.3	23.44	EPA TO-15 Certifications:	05/03/2015 06:13	05/03/2015 06:13	ALD
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	9.6	9.6	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
67-64-1	**Acetone**	**130**		ug/m³	5.6	5.6	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
107-13-1	* Acrylonitrile	ND		ug/m³	5.1	5.1	23.44	EPA TO-15 Certifications:	05/03/2015 06:13	05/03/2015 06:13	ALD
71-43-2	**Benzene**	**19**		ug/m³	7.5	7.5	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
100-44-7	Benzyl chloride	ND		ug/m³	12	12	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
75-27-4	Bromodichloromethane	ND		ug/m³	15	15	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
75-25-2	Bromoform	ND		ug/m³	24	24	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
74-83-9	Bromomethane	ND		ug/m³	9.1	9.1	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
75-15-0	Carbon disulfide	ND		ug/m³	7.3	7.3	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
56-23-5	Carbon tetrachloride	ND		ug/m³	3.7	3.7	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
108-90-7	Chlorobenzene	ND		ug/m³	11	11	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
75-00-3	Chloroethane	ND		ug/m³	6.2	6.2	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
67-66-3	**Chloroform**	**30**		ug/m³	11	11	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
74-87-3	Chloromethane	ND		ug/m³	4.8	4.8	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	9.3	9.3	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	11	11	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
110-82-7	Cyclohexane	ND		ug/m³	8.1	8.1	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
124-48-1	Dibromochloromethane	ND		ug/m³	19	19	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
75-71-8	Dichlorodifluoromethane	ND		ug/m³	12	12	23.44	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	05/03/2015 06:13	05/03/2015 06:13	ALD
141-78-6	* Ethyl acetate	ND		ug/m³	17	17	23.44	EPA TO-15 Certifications:	05/03/2015 06:13	05/03/2015 06:13	ALD

Sample Information

Client Sample ID: SV01-050215 **York Sample ID:** 15E0069-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0069	170362501	Soil Vapor	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/m³	10	10	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
87-68-3	Hexachlorobutadiene	ND		ug/m³	25	25	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
67-63-0	**Isopropanol**	**800**		ug/m³	12	12	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
80-62-6	Methyl Methacrylate	ND		ug/m³	9.6	9.6	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	8.4	8.4	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
75-09-2	Methylene chloride	ND		ug/m³	16	16	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
142-82-5	n-Heptane	ND		ug/m³	9.6	9.6	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
110-54-3	**n-Hexane**	**17**		ug/m³	8.3	8.3	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
95-47-6	o-Xylene	ND		ug/m³	10	10	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
179601-23-1	p- & m- Xylenes	ND		ug/m³	20	20	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
622-96-8	* p-Ethyltoluene	ND		ug/m³	12	12	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications:			
115-07-1	* Propylene	ND		ug/m³	4.0	4.0	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications:			
100-42-5	Styrene	ND		ug/m³	10	10	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
127-18-4	**Tetrachloroethylene**	**2500**		ug/m³	4.0	4.0	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
109-99-9	* Tetrahydrofuran	ND		ug/m³	6.9	6.9	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications:			
108-88-3	**Toluene**	**38**		ug/m³	8.8	8.8	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	9.3	9.3	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	11	11	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
79-01-6	**Trichloroethylene**	**120**		ug/m³	3.1	3.1	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	13	13	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
108-05-4	Vinyl acetate	ND		ug/m³	8.3	8.3	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			
593-60-2	Vinyl bromide	ND		ug/m³	10	10	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: SV01-050215 **York Sample ID:** 15E0069-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
15E0069	170362501	Soil Vapor	May 2, 2015 3:00 pm	05/02/2015

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	1.5	1.5	23.44	EPA TO-15	05/03/2015 06:13	05/03/2015 06:13	ALD
								Certifications: NELAC-NY10854,NJDEP			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*93.5 %*	*72-118*

Notes and Definitions

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

YORK ANALYTICAL LABORATORIES INC

Field Chain-of-Custody Record - AIR

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

York Project No. 15E0069

YOUR Information
Company: LANGAN
Address: 360 W31st St 8th Fl. New York, NY
Phone No. 212-479-5400
Contact Person: Ryan Manderbach
E-Mail Address: Rmanderbach@langan.com

Report To:
Company: LANGAN
Address: 360 W31st St 8th Fl New York, NY
Phone No. 212-479-5400
Attention: Ryan Manderbach
E-Mail Address: Rmanderbach@langan.com

Invoice To:
Company: E+M Realty Corp
Address: 335 Bond St Brooklyn, NY 11231
Phone No.
Attention: Eduard Slinin
E-Mail Address:

YOUR Project ID: 170362501

Purchase Order No.

Samples from: CT___ NY___ NJ___

Turn-Around Time
RUSH - Same Day ☐
RUSH - Next Day ☒ (24 hrs)
RUSH - Two Day ☐
RUSH - Three Day ☐
RUSH - Four Day ☐
Standard(5-7 Days) ☐

Report Type/Deliverables
Summary Report X
Summary w/ QA Summary ___
CT RCP Package ___
NY ASP A Package ___
NY ASP B/CLP Pkg ___
NJDEP Reduced ___
Electronic Deliverables:
EDD (Specify Type) ___
Standard Excel X
Regulatory Comparison Excel ___

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature) ____________

Name (printed) ____________

Air Matrix Codes
AI - INDOOR Ambient Air
AO- OUTDOOR Amb. Air
AE- Vapor Extraction Well/ Process Gas/Effluent
AS- SOIL Vapor/Sub-Slab

Additional Notes:

Detection Limits Required
≤ 1 ug/m³ ___
NYSDEC VI Limits ___ (VI =vapor instrusion)
NJDEP low level ___
Routine Survey ___
Other___

Special Instructions

Please enter the following Field Data

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Canister ID	Flow Cont.ID	ANALYSES REQUESTED	Sampling Media
SV01-050215	5/2/15	AS	-30	-6.5	17351	T13	TO-15 VOCs	6 Liter canister X Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag
								6 Liter canister___ Tedlar Bag

Comments
24-hr RUSH → need results COB 5/4/15
* canister NO. 17340 (controller # T12) had NO vacuum upon receipt

Samples Relinquished By	Date/Time	Samples Received By	Date/Time
[signature]	5/2/15 15:39	Bob Yuhas [signature] 5/2/15	5/2/15 1538
Bob Yuhas [signature]	5/2/15 17:33	[signature] (Samples Received in LAB by) @17:33	5/2/15

APPENDIX B
Health and Safety Plan

HEALTH AND SAFETY PLAN
335 Bond Street
BROOKLYN, NEW YORK

Prepared For:

E&M Realty Corp.
335 Bond Street
Brooklyn, NY 11231

Prepared By:

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor
New York, New York 10001

October 2015

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SECTION 1.0 SUMMARY

Emergency Contacts

Emergency contacts are listed on Table 1.

Emergency Procedures

Emergency procedures are described in Section 6. The route to the hospital is provided as Figure 1.

Site-Specific Hazards and Training

Site-specific hazards are described in Section 3.

The Field Safety Officer (FSO) will be responsible for providing site-specific training to all personnel that work at the site. This training will cover the following topics:

- Names of personnel responsible for site safety and health.
- Hazards potentially present at the site.
- Proper use of personal protective equipment.
- Work practices by which the employee can minimize risk from hazards.
- Acute effects of compounds at the site.
- Decontamination procedures.

Personnel will be required to sign and date the Site-Specific Training Form provided in Attachment B prior to working on-site.

General Health and Safety Requirements

Personnel will be required to sign and date the Health and Safety Plan and Work Plan Acceptance Form provided in Attachment B prior to working on-site.

Personnel Protective Equipment

Level D protection will be worn for initial entry on-site and for all activities except as noted in Section 4. Level D protection will consist of:

- Standard work clothes
- Steel-toe safety boots

- Safety glasses or goggles must be worn when splash hazard is present
- Hard hat

Modified Level D protection may be required under conditions where potential contact of the skin or clothes with significant contamination occurs. Modified Level D is the same as Level D but includes Tyvek coveralls and disposable polyethylene overboots.

Level C protection, unless otherwise specified in Section 4, will consist of Level D equipment and the following additional equipment:

- Full-face or half-mask air-purifying respirator (APR)
- Combination dust/organic vapor cartridges
- Tyvek coveralls if particulate hazard present
- PE-Coated Tyvek coverall if liquid contamination present
- PVC or nitrile inner and nitrile outer gloves
- 5-minute escape SCBA

Level B protection, unless otherwise specified in Section 4, will consist of Level D equipment and the following additional equipment:

- Hard hat
- Positive Pressure SCBA or positive pressure air line and respirator with escape SCBA
- PE-Coated Tyvek coverall
- Nitrile outer and PVC or nitrile inner gloves
- Nitrile boot covers

Air Monitoring

A summary of the action levels and restrictions is presented on Table 2.

FIGURE 1-HOSPITAL ROUTE PLAN (New York Methodist Hospital)

Site Location: **335 Bond Street**

Brooklyn, NY 11231

Hospital Location: **506 6th Street**

Brooklyn, NY 11215

Information Line (718) 780-3000

Route to Hospital

From 335 Bond Street, Brooklyn, New York to New York Methodist Hospital, located at 506 6th Street, Brooklyn, New York.

1. Depart Bond Street toward President Street (NORTH)
2. Turn RIGHT onto Union Street
3. Turn RIGHT onto 4th Avenue
4. Turn LEFT onto 5th Street
5. Turn RICGHT onto 7th Avenue
6. Arrive at Destination on the LEFT

Total Est. Time: 7 minutes Total Est. Distance: 1.3 miles

TABLE 1

EMERGENCY CONTACTS

In the event of any situation or unplanned occurrence requiring assistance, the appropriate contact(s) should be made from the list below. For emergency situations, contact should first be made with the Field Team Leader (or designee) and the Site Safety Officer, who will notify emergency personnel who will then contact the appropriate response teams. This emergency contacts list must be in an easily accessible location at the site.

Emergency Contacts	**Phone Number**
Fire Department:	911
Police:	911
New York City One Call Center: (48-hour notice required for utility mark-outs)	811
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802

Medical Emergency

Ambulance Service:	911
Hospital Name:	New York Methodist Hospital
Hospital Telephone Number:	(718) 780-3000
Hospital Address:	506 6th Street Brooklyn, NY
Route to Hospital:	See Page 3 and 4
Travel Time From Site:	7 minutes

Langan Contacts

Principal/Associate:	Michael Burke, CHMM	(212) 479-5413
Program Manager:	Ryan Manderbach	(212) 479-5582
Health & Safety Officer:	Tony Moffa	(215) 756-2523
Field Safety Officer	Bill Bohrer	(212) 479-5533
Field Team Leader	Albert Tashji	(508) 918-5527
Quality Assurance Officer	Nicole Rice	(212) 479-5491

TABLE 2
SUMMARY OF ACTION LEVELS AND RESTRICTIONS

Conditions for Level D:

All areas

- PID readings < 25 ppm and benzene < 1 ppm
- No visible fugitive dust emissions from site activities

Conditions for Level C:

All areas

- Where PID readings > 25 ppm (sustained for 15 minutes in the breathing zone) to 200 ppm and benzene < 5ppm, and/or
- Any visible fugitive dust emissions from site activities that disturb contaminated soil.

Conditions for Level B (or retreat):

All areas

- Where PID readings > 500 ppm or benzene > 25 ppm,
- Visible fugitive dust emissions from site activities cloud the surrounding air.

SECTION 2.0 INTRODUCTION

2.1 PUPOSE AND POLICY

The purpose of this Health and Safety Plan (HASP) is to establish personnel protection standards and mandatory safety practices and procedures for potential encounters with non-hazardous soil or groundwater during investigation and construction at the Site. This plan assigns responsibilities, establishes standard operating procedures, and provides for contingencies that may arise while operations are being conducted during investigation.

The provisions of the plan are mandatory for all on-site personnel. Supplemental HASP plans shall be developed and used by contractors and subcontractors that shall conform to this plan at a minimum. All personnel who engage in project activities must be familiar with this plan, comply with its requirements, and sign the Plan Acceptance Form (Attachment B), page number B-5, prior to working on the site. The Plan Acceptance Form must be submitted to the Langan Health and Safety Officer (HSO). In addition to this plan, all work shall be performed in accordance with all applicable federal, state and local regulations.

2.2 SITE DESCRIPTION

The Site is located at 335 Bond Street, Brooklyn, New York, and occupied by an office and garage. The Site encompasses approximately 15,480 square feet. The proposed development at the Site consists of mixed commercial and residential use.

2.3 SCOPE OF WORK

The scope of work for the Site is a geophysical survey, soil borings, and collection and analysis of soil samples from five soil borings, collection of one groundwater sample from one soil boring, collection of one sub-slab soil vapor sample, and collection of one ambient air sample. Additional discussion on the proposed investigation is provided below.

Geophysical Survey: A geophysical survey, including ground penetrating radar (GPR), will be performed at the Site to locate utilities, possible USTs and subsurface structures or anomalies. Proposed boring locations will be screened for obstructions and utilities. Based on the findings of the geophysical survey, boring locations may be adjusted and test pits may be recommended.

Soil Boring Investigation: Nine soil borings will be advanced with a Geoprobe® direct-push drill rig. Borings will be advanced approximately 15 feet below ground surface (bgs). Soil cuttings will be collected continuously into four-foot Macrocore barrels fitted with dedicated acetate sleeves.

A Langan field engineer will classify the extracted soil and screen the soil cuttings for visual and olfactory indicators of contamination. A photoionization detector (PID) will be used to screen the soil cuttings for the presence of volatile organic compounds. One grab soil sample will be collected from the 0-2 ft bgs interval and one sample will be collected

from the interval exhibiting the most field contamination (soil that exhibits staining, odors and/or elevated PID readings).

Groundwater Investigation: Nine permanent groundwater monitoring wells will be advanced, one into each of the soil borings. The wells will be developed using a peristaltic pump, and groundwater samples will be collected. A Langan field engineer will collect groundwater quality parameters during low-flow sampling using a Horiba U-52.

Soil Vapor and Ambient Air Sampling: Two sub-slab soil vapor samples will be collected in the site basement, using 6-L summa canisters. In addition, one ambient air sample will be collected on the sidewalk adjoining the site entrance using a 6-L summa canister.

Sampling procedures for this investigation will be performed in accordance with the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation. Each soil boring location will be accurately measured to fixed benchmarks (i.e., property lines, adjacent structures, etc.) or by a precision Global Positioning System (GPS) that is capable of coordinating a fixed point within one foot.

2.4 LANGAN PROJECT TEAM ORGANIZATION

Table 3 describes the responsibilities of Langan personnel associated with this project. The names of principal personnel associated with this project are:

Principal/Associate:	Michael Burke, CHMM	(212) 479-5413
Program Manager:	Ryan Manderbach	(212) 479-5582
Health & Safety Officer:	Tony Moffa	(215) 756-2523
Field Safety Officer	Bill Bohrer	(212) 479-5533
Field Team Leader	Albert Tashji	(212) 549-5527
Quality Assurance Officer	Nicole Rice	(212) 479-5491

All Langan personnel have been appropriately trained in first aid and hazardous waste safety procedures, including the operating and fitting of personal protective equipment, and are experienced with the field operations planned for this site.

TABLE 3
ON-SITE PERSONNEL AND RESPONSIBILITIES

PROJECT MANAGER - Assumes control over site activities. Reports to upper-level management. Has authority to direct response operations.

Responsibilities:

- Prepares and organizes the background review of the situation, the Work Plan, the Site Health and Safety Plan, and the field team.
- Obtains permission for site access and coordinates activities with appropriate officials.
- Ensures that the Work Plan is executed and on schedule.
- Briefs the field team on their specific assignments.
- Coordinates with the site Health and Safety Officer (HSO) to ensure that health and safety requirements are met.
- Prepares the final report and support files on the response activities.
- Serves as the liaison with public officials.

FIELD SAFETY OFFICER (FSO) - Advises the HSO and Project Manager on all aspects of health and safety on site. Stops work if any operation threatens worker or public health or safety.

Responsibilities:

- Ensures that all necessary Health and Safety Equipment is available on-site. Ensures that all equipment is functional.
- Periodically inspects protective clothing and equipment.
- Ensures that protective clothing and equipment are properly stored and maintained.
- Controls entry and exit at the Access Control Points.
- Coordinates health and safety program activities with the Project HSO.
- Confirms each team member's suitability for work based on a physician's recommendation.
- Monitors the work parties for signs of stress, such as cold exposure, heat stress, and fatigue.
- Implements the Site Health and Safety Plan.
- Conducts periodic inspections to determine if the Site Health and Safety Plan is being followed.
- Enforces the "buddy" system.

TABLE 3 - CONTINUED
ON-SITE PERSONNEL AND RESPONSIBILITIES

Field Safety Officer Responsibilities (continued)

- Knows emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire department, and police department.
- Notifies, when necessary, local public emergency officials.
- Coordinates emergency medical care.
- Sets up decontamination lines and the decontamination solutions appropriate for the type of chemical contamination on the site.
- Controls the decontamination of all equipment, personnel, and samples from the contaminated areas.
- Assures proper disposal of contaminated clothing and materials.
- Ensures that all required equipment is available.
- Advises medical personnel of potential exposures and consequences.
- Notifies emergency response personnel by telephone or radio in the event of an emergency.

FIELD TEAM LEADER - Advises the Project Manager on all aspects of health and safety on site. Stops work if any operation threatens worker or public health or safety. Is directly responsible for the field team and the safety of site operations.

Responsibilities:

- Manages field operations.
- Executes the Work Plan and schedule.
- Enforces safety procedures.
- Coordinates with the Site Safety Officer in determining protection level.
- Enforces site control.
- Documents field activities and sample collection.
- Serves as a liaison with public officials.

WORK TEAM – Operators, laborers, samplers. The work party must consist of at least two people.

Responsibilities:

- Safely completes the on-site tasks required to fulfill the Work Plan.
- Complies with Site Safety Plan.
- Notifies Site Safety Officer or supervisor of suspected unsafe condition

SECTION 3 RISK ANALYSIS

3.1 CHEMICAL HAZARDS

Despite the lack of previous environmental studies, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, and metals may exist on site. Other compounds that may be encountered are site equipment fuels (gasoline, diesel, etc.) that contain volatile components. Relevant properties of select compounds are outlined in Table 4, and complete Safety Data Sheets (SDS) are included as Attachment C.

A PID will be used to screen soils and monitor for volatile compounds.

In addition to existing suspected compounds on site, some solvents used in decontamination of equipment are potentially hazardous to human health if they are not used properly. SDS for detected soil contaminants as well as decontamination solvents that will be used on site are included in Attachment C.

3.2 RADIATION HAZARDS

No radiation hazards are known or expected at the site.

3.3 BIOLOGICAL HAZARDS

3.3.1 Animals

Animals, such as dogs, pigeons, sea gulls, mice, and rats may be encountered during construction activities. Workers shall use discretion and avoid all contact with animals. Bites and scratches from dogs can be painful and can lead to the worker contracting the rabies virus if the dog is rabid. Contact with rat and mice droppings may lead to the worker contracting hantavirus. Inhalation of dried pigeon droppings may lead to the worker contracting psittacosis; crytococcosis and histoplasmosis are also diseases associated with exposure to dried bird droppings, but these diseases are less likely to occur in a construction-type occupational setting.

TABLE 4
RELEVANT PROPERTIES OF VOLATILES (PETROLEUM [GASOLINE, DIESEL, ETC.]), METALS, SEMIVOLATILES, AND PESTICIDES KNOWN OR SUSPECTED AT THE SITE

Compound (Synonym)	OSHA PEL[(1)] (ppm)	IDLH (ppm)	LEL (%)	Odor Threshold[(2)] (ppm)	Odor Character	Vapor Pressure (mm Hg)	Physical State	Detectable w/ 10.6 eV lamp PID (I.P. eV)
Tetrachlorethene	25	150	NA	NA	Sweet	14	NonCombustible Liquid	Yes
Trichloroethene	50	1000	8	NA	Sweet	58	Combustible Liquid	Yes
Benzene	1	500	1.2	NA	Aromatic	75	Flammable Liquid	Yes
Mercury(Hg)	0.01 mg/m3	10 mg/m3	NA	NA	Odorless	0.0012	Noncombustible Liquid	NA
Arsenic	NA	5 mg/m3 (CA)	NA	NA	Odorless	0 (approx.)	Noncombustible Solid	NA
Lead (Pb)	0.05 mg/m3	100 mg/m3	NA	NA	Odorless	0 (approx.)	Noncombustible Solid	NA
Nickel	1 mg/m3	10 mg/m3 (Ca)	NA	NA	Odorless	0 (approx.)	Noncombustible Solid	NA
Copper	1 mg/m3	100 mg/m3	NA	NA	NA	NA	Solid	NA
Antimony	0.5 mg/m3	50 mg/m3	NA	NA	NA	0 (approx.)	Noncombustible Solid	NA
Iron	NA	NA	NA	NA	NA	0 (approx.)	Noncombustible Solid	NA
Manganese	5 mg/m3	500 mg/m3	NA	NA	NA	0 (approx.)	Combustible Solid	NA
Sodium	NA	NA	NA	NA	NA	NA	Combustible Solid	NA

TABLE 4
RELEVANT PROPERTIES OF VOLATILES (PETROLEUM [GASOLINE, DIESEL, ETC.]), METALS, SEMIVOLATILES, AND PESTICIDES KNOWN OR SUSPECTED AT THE SITE

Compound (Synonym)	OSHA PEL[(1)] (ppm)	IDLH (ppm)	LEL (%)	Odor Threshold (ppm)	Odor Character	Vapor Pressure (mm Hg)	Physical State	Detectable w/ 10.6 eV lamp PID (I.P. eV)
Zinc	NA	NA	NA	NA	NA	NA	Noncombustible Solid	NA
Dibenz(a,h)anthracene	0.2 mg/m3	NA (CA)	NA	NA	NA	0 (approx.)	Combustible Solid	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	Odorless	0 (approx.)	Combustible Solid	NA
Chrysene	0.2 mg/m3	NA (CA)	NA	NA	Odorless	0 (approx.)	Noncombustible Solid	NA
Benzo(a)anthracene	0.2 mg/m3	NA (CA)	NA	NA	Odorless	0 (approx.)	Noncombustible Solid	NA
Benzo(a)pyrene	0.2 mg/m3	80 (CA)	NA	NA	NA	0 (approx.)	Combustible Solid	NA
Benzo(b)fluoranthene	0.2 mg/m3	NA (CA)	NA	NA	Odorless	0 (approx.)	Combustible Solid	NA
Benzo(k)fluoranthene	NA	NA (CA)	NA	NA	NA	0 (approx.)	Solid	NA
4-4'-DDD	NA	NA	NA	NA	NA	0 (approx.)	Solid	NA
4-4'-DDT	1 mg/m3	500 mg/m3	NA	NA	Aromatic	0 (approx.)	Solid	NA

(1) 29 CFR 1910, June 30, 1993 (8-hour Time weighted average unless otherwise specified.)
[IDLH] Immediately dangerous to life or health
[CA] Suspect carcinogen - Minimize all possible exposures

3.3.2 Insects

Insects, including bees, wasps, hornets, mosquitoes, and spiders, may be encountered during construction activities. Individuals allergic to insect bites or stings may succumb to anaphylactic shock, which is a life-threatening condition and may result in death. In addition, mosquito bites may lead to a worker contracting West Nile encephalitis or other contagious diseases known to be carried by a mosquito host. Personnel bitten or stung by an insect should notify the HSO immediately. The following is a list of preventive measures related to insect bites or stings:

- Apply insect repellent prior to work and or as often as needed throughout the work shift;
- Wear protective clothing (work boots, socks and light colored pants);
- When walking in wooded areas, to the extent possible avoid contact with bushes, tall grass, or brush; and
- Field personnel who are allergic to insects or are otherwise susceptible to insect bites and stings should notify the HSO prior to commencing work and shall be responsible for supplying allergy medication for their own use throughout the work shift.
- The HSO or FSO will instruct the project personnel in the recognition and procedures for encountering potentially hazardous insects at the site.

Lyme Disease

Lyme disease is caused by infection from a deer tick that carries *Borrelia burgdorferi*, *B. garinii*, or *B. afzelii*, all spirochaete bacteria. Lyme disease is a flu-like illness most commonly observed in patients between May and October when ticks are the most active. Symptoms of lyme disease may include a stiff neck, chills, fever, sore throat, headache, fatigue, and joint pain. Early signs of an infection may include the characteristic circular and bulls-eye-shaped skin rash (*erythema chronicum migrans*) and joint pain. Lyme disease can cause serious nerve or heart problems as well as a disabling arthritis if left untreated. If a worker feels sick or exhibits any of the symptoms identified above, he or she should notify the HSO immediately.

This site-specific HASP recommends personnel check themselves when working and after working in areas that could harbor deer ticks and wear light-colored clothing. If a worker finds a tick on his or her body, he or she should notify the HSO immediately. The tick can be removed by pulling gently at the tick's head with tweezers. The affected area should then be disinfected with an antiseptic wipe.

3.4 PHYSICAL HAZARDS

3.4.1 Explosion

No explosion hazards are expected for the scope of work at this site.

3.4.2 Heat Stress

The use of Level C protective equipment, or greater, may create heat stress. Monitoring of personnel wearing personal protective clothing should commence when the ambient temperature is 72^{O}F or above. Table 5 presents the suggested frequency for such monitoring. Monitoring frequency should increase as ambient temperature increases or as slow recovery rates are observed. Refer to the Table 6 below to assist in assessing when the risk for heat related illness is likely. To use this table, the ambient temperature and relative humidity must be obtained (a regional weather report should suffice). Heat stress monitoring should be performed by the Field Safety Officer, who shall be able to recognize symptoms related to heat stress.

Table 5
Suggested Frequency of Physiological Monitoring
For Fit and Acclimated Workers[a]

Adjusted Temperature[b]	Normal Work Ensemble[c]	Impermeable Ensemble
90°F or above (32.2°C) or above	After each 45 min. of work	After each 15 min. of work
87.5°F (30.8°-32.2°C)	After each 60 min. of work	After each 30 min. of work
82.5°-87.5°F (28.1°-30.8°C)	After each 90 min. of work	After each 60 min. of work
77.5°-82.5°F (25.3°-28.1°C)	After each 120 min. of work	After each 90 min. of work
72.5°-77.5°F (22.5°-25.3°C)	After each 150 min. of work	After each 120 min. of work

a For work levels of 250 kilocalories/hour.

b Calculate the adjusted air temperature (ta adj) by using this equation: ta adj ^{o}F = ta ^{o}F + (13 x % sunshine). Measure air temperature (ta) with a standard mercury-in-glass thermometer, with the bulb shielded from radiant heat. Estimate percent sunshine by judging what percent time the sun is not covered by clouds that are thick enough to produce a shadow. (100 percent sunshine = no cloud cover and a sharp, distinct shadow; 0 percent sunshine = no shadows.)

c A normal work ensemble consists of cotton coveralls or other cotton clothing with long sleeves and pants.

Table 6 - HEAT INDEX

ENVIRONMENTAL TEMPERATURE (Fahrenheit)

RELATIVE HUMIDITY	70	75	80	85	90	95	100	105	110	115	120
	APPARENT TEMPERATURE*										
0%	64	69	73	78	83	87	91	95	99	103	107
10%	65	70	75	80	85	90	95	100	105	111	116
20%	66	72	77	82	87	93	99	105	112	120	**130**
30%	67	73	78	84	90	96	104	113	123	**135**	**148**
40%	68	74	79	86	93	101	110	123	**137**	**151**	
50%	69	75	81	88	96	107	120	**135**	**150**		
60%	70	76	82	90	100	114	**132**	**149**			
70%	70	77	85	93	106	124	**144**				
80%	71	78	86	97	113	**136**					
90%	71	79	88	102	122						
100%	72	80	91	108							

*Combined Index of Heat and Humidity...what it "feels like" to the body
Source: National Oceanic and Atmospheric Administration

How to use Heat Index:
1. Across top locate Environmental Temperature
2. Down left side locate Relative Humidity
3. Follow across and down to find Apparent Temperature
4. Determine Heat Stress Risk on chart at right

Note: Exposure to full sunshine can increase Heat Index values

Apparent Temperature	Heat Stress Risk with Physical Activity and/or Prolonged Exposure
90-105	Heat Cramps or Heat Exhaustion Possible
105-130	Heat Cramps or Heat Exhaustion Likely, Heat Stroke Possible

To monitor the workers, be familiar with the following heat-related disorders and their symptoms:

- **Prickly Heat** (Heat rash)
  - Painful, itchy red rash. Occurs during sweating, on skin covered by clothing.
- **Heat Cramps**
  - Painful spasm of arm, leg or abdominal muscles, during or after work.
- **Heat Exhaustion**
  - Headache, nausea, dizziness. Cool, clammy, moist skin. Heavy sweating. Weak, fast pulse. Shallow respiration, normal temperature.
- **Heat Fatigue**
  - Weariness, irritability, loss of skill for fine or precision work. Decreased ability to concentrate. No loss of temperature control.
- **Heat Syncope** (Heat Collapse)
  - Fainting while standing in a hot environment.
- **Heat Stroke**
  - Headache, nausea, weakness, hot dry skin, fever, rapid strong pulse, rapid deep respirations, loss of consciousness, convulsions, coma. **This is a life threatening condition.**

Do not permit a worker to wear a semi-permeable or impermeable garment when they are showing signs or symptoms of heat-related illness.

To monitor the worker, measure:

- Heart rate. Count the radial pulse during a 30-second period as early as possible in the rest period.
  - If the heart rate exceeds 100 beats per minute at the beginning of the rest period, shorten the next work cycle by one-third and keep the rest period the same.
  - If the heart rate still exceeds 100 beats per minute at the next rest period, shorten the following work cycle by one-third. A worker cannot return to work after a rest period until their heart rate is below 100 beats per minute.
- Oral temperature. Use a clinical thermometer (3 minutes under the tongue) or similar device to measure the oral temperature at the end of the work period (before drinking).

- If oral temperature exceeds 99.6^{o}F (37.6^{o}C), shorten the next work cycle by one-third without changing the rest period. A worker cannot return to work after a rest period until their oral temperature is below 99.6^{o}F.
- If oral temperature still exceeds 99.6^{o}F (37.6^{o}C) at the beginning of the next rest period, shorten the following cycle by one-third.
- Do not permit a worker to wear a semi-permeable or impermeable garment when oral temperature exceeds 100.6^{o}F (38.1^{o}C).

Prevention of Heat Stress - Proper training and preventative measures will aid in averting loss of worker productivity and serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat related illness. To avoid heat stress the following steps should be taken:

- Adjust work schedules.
- Mandate work slowdowns as needed.
- Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.
- Provide shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat, id., eight fluid ounces (0.23 liters) of water must be ingested for approximately every eight ounces (0.23 kg) of weight lost. The normal thirst mechanism is not sensitive enough to ensure that enough water will be drunk to replace lost sweat. When heavy sweating occurs, encourage the worker to drink more. The following strategies may be useful:
  - Maintain water temperature 50^{o} to 60^{o}F (10^{o} to 16.6^{o}C).
  - Provide small disposal cups that hold about four ounces (0.1 liter).
  - Have workers drink 16 ounces (0.5 liters) of fluid (preferably water or dilute drinks) before beginning work.
  - Urge workers to drink a cup or two every 15 to 20 minutes, or at each monitoring break. A total of 1 to 1.6 gallons (4 to 6 liters) of fluid per day are recommended, but more may be necessary to maintain body weight.
  - Train workers to recognize the symptoms of heat related illness.

3.4.3 Cold-Related Illness

If work on this project begins in the winter months, thermal injury due to cold exposure can become a problem for field personnel. Systemic cold exposure is referred to as hypothermia. Local cold exposure is generally called frostbite.

Hypothermia - Hypothermia is defined as a decrease in the patient core temperature below 96^{O}F. The body temperature is normally maintained by a combination of central (brain and spinal cord) and peripheral (skin and muscle) activity. Interference with any of these mechanisms can result in hypothermia, even in the absence of what normally is considered a "cold" ambient temperature. Symptoms of hypothermia include: shivering, apathy, listlessness, sleepiness, and unconsciousness.

Frostbite - Frostbite is both a general and medical term given to areas of local cold injury. Unlike systemic hypothermia, frostbite rarely occurs unless the ambient temperatures are less than freezing and usually less than 20^{O}F. Symptoms of frostbite are: a sudden blanching or whitening of the skin; the skin has a waxy or white appearance and is firm to the touch; tissues are cold, pale, and solid.

Prevention of Cold-Related Illness - To prevent cold-related illness:

- Educate workers to recognize the symptoms of frostbite and hypothermia
- Identify and limit known risk factors:
- Assure the availability of enclosed, heated environment on or adjacent to the site.
- Assure the availability of dry changes of clothing.
- Assure the availability of warm drinks.
- Start (oral) temperature recording at the job site:
    - At the FSO or Field Team Leader's discretion when suspicion is based on changes in a worker's performance or mental status.
    - At a worker's request.
    - As a screening measure, two times per shift, under unusually hazardous conditions (e.g., wind-chill less than 20^{O}F, or wind-chill less than 30^{O}F with precipitation).
    - As a screening measure whenever any one worker on the site develops hypothermia.

Any person developing moderate hypothermia (a core temperature of 92^{O}F) cannot return to work for 48 hours.

3.4.4 Noise

Work activities during the proposed investigation activities may be conducted at locations with high noise levels from the operation of equipment. Hearing protection will be used as necessary.

3.4.5 Hand and Power Tools

In order to complete the various tasks for the project, personnel will utilize hand and power tools. The use of hand and power tools can present a variety of hazards, including physical harm from being struck by flying objects, being cut or struck by the tool, fire, and electrocution. Ground Fault Circuit Interrupters (GFCIs) are required for all portable tools.

3.4.6 Slips, Trips and Fall Hazards

Care should be exercised when walking at the site, especially when carrying equipment. The presence of surface debris, uneven surfaces, pits, facility equipment, and soil piles contribute to tripping hazards and fall hazards. To the extent possible, all hazards should be identified and marked on the Site, with hazards communicated to all workers in the area.

3.4.7 Utilities (Electrocution and Fire Hazards)

The possibility of encountering underground utilities poses fire, explosion, and electrocution hazards. All excavation work will be preceded by review of available utility drawings and by notification of the subsurface work to the N.Y. One Call Center. Potential adverse effects of electrical hazards include burns and electrocution, which could result in death.

3.5 TASK HAZARD ANALYSIS

3.5.1 Soil Sampling

Soil borings will be advanced with a Geoprobe® direct-push drill rig. Soil cuttings will be collected continuously into four-foot Macrocore barrels fitted with dedicated acetate sleeves and sampled.

Drilling and soil sampling activities are inherently dangerous. Special attention should be given to establishing the location of any underground utilities prior to excavating.

Chemical exposure may occur as these activities progress across the site, where workers may be exposed to contaminants in the excavated soils, encountered groundwater, or products used on-site including gasoline, diesel, and motor oil. Also, sampling of both in-situ and stockpiled soils presents similar potential exposure hazard. Activities will be conducted initially in Level D but may be upgraded to Modified Level

D. Although not anticipated, there will be a Level C and B contingency should pockets of contaminants be brought to the surface and breathing zone air becomes contaminated.

If evidence of historic or unknown contamination is encountered during investigation activities or other contaminated materials, such as oily materials, high PID readings, etc., the FSO will make a determination of the appropriate level of personnel protection.

SECTION 4 PERSONNEL PROTECTION AND MONITORING

4.1 OSHA TRAINING

All on-site personnel who will be actively involved in drilling and investigative activities that involve potentially encountering hazardous waste must have completed hazardous waste operations-related training, as required by OSHA Regulations 29 CFR 1910.120. Personnel who completed this training more than 12 months prior to the start of the project must have completed an 8-hour refresher course within the past 12 months. Documentation of OSHA training for project personnel must be provided to Langan prior to starting work.

4.2 SITE-SPECIFIC TRAINING

The Site Safety Officer will be responsible for developing a site-specific occupational hazard training program and providing training to all personnel that are to work at the site. This training will be conducted prior to starting field work and will consist of the following topics:

- Names of personnel responsible for site safety and health.
- Hazards potentially present at the site.
- Proper use of personal protective equipment.
- Requirements of this HASP.
- Work practices by which the employee can minimize risk from hazards. This may include a specific review of heavy equipment safety, safety during inclement weather, changes in common escape rendezvous point, site security measures, or other site-specific issues that need to be addressed before work begins.
- Safe use of engineering controls and equipment on the site.
- Acute effects of compounds present at the site.
- Decontamination procedures.

Upon completion of site-specific training, workers will sign the Site-Specific-Training Form provided in Attachment B. A copy of the completed Site-Specific Training Form will be included in the project files for future reference.

4.3 MONITORING REQUIREMENTS

Based on the existing site data, it is possible that organic vapors will be encountered during the site work. Soil and groundwater will be screened with a PID during ground intrusive work (as described in Section 6.4).

Fugitive dust generation that could affect site workers, site occupants, or the public will be visually monitored.

VOCs will be monitored with a PID (MiniRAE 2000 or equivalent) in accordance with the HASP with an action level of 25 ppm in the absence of benzene. If the action level is exceeded and adequate ventilation cannot be provided, work will cease and the potential affected portion of the work area will be evacuated until adequate mechanical ventilation can be set up to control the hazard. Level C respiratory protection may be donned in accordance with the HASP if untrained personnel are not present and the action level is exceeded.

A PID will be used to monitor for organic vapors in the breathing zone and to screen soil samples. Air monitoring results will be recorded in the field book during investigation activities and made available for review.

4.4 SUMMARY OF ACTION LEVELS AND RESTRICTIONS

A PID, equipped with a 10.6 eV lamp shall be used to screen for total VOCs. All readings pertain to sustained readings for 15 minutes in the worker breathing zone. The following conditions shall apply to each level of protection.

Conditions for Level D:

All areas where PID readings < 25 ppm and Benzene < 1 ppm

Conditions for Level C:

- All areas where PID readings > 25 ppm or Benzene > 1 ppm (sustained for 15 minutes in the breathing zone) to 200 ppm

Conditions for Level B (or retreat):

All areas where PID readings > 500 ppm or Benzene > 20 ppm

4.4.1 Level D and Modified Level D

Level D protection will be worn for initial entry on-site and initially for all activities. Level D protection will consist of:

- Standard work clothes
- Steel-toe safety boots
- Safety glasses (goggles must be worn when splash hazard is present)
- Nitrile gloves must be worn during all activities requiring contact with grossly-contaminated soils.
- Hard hat (must be worn during all site activities)

Modified Level D is the same as Level D but includes Tyvek coveralls and disposable polyethylene overboots to contact with the skin or clothes if significant contamination is present in subsurface materials.

4.4.2 Level C

The level of personal protection will be upgraded to Level C if the concentration of volatile organic compounds which can be detected with a photoionization detector (PID) in the breathing zone equals or exceeds the specified action limits and the contaminants of concern have characteristic warning properties appropriate for air purifying respirators (e.g. taste, odor). Level C protection will consist of the following equipment:

- Full-face or half-mask air-purifying respirator (APR) or powered air purifier (PAPR), depending on presence and abundance of airborne toxic constituents of concern
- Combination HEPA filter/organic vapor cartridges
- Tyvek coveralls must be worn if particulate hazard present
- PE-coated Tyvek coveralls if liquid contamination present
- Steel-toe safety boots
- Nitrile outer gloves must be worn during all activities requiring contact with saturated soil.
- Hard hat (must be worn during all site activities)

Cartridges will be disposed at the end of each day's use.

4.4.3 Level B (Retreat)

If the concentration of volatile organics which can be detected with a PID equals or exceeds the specified action levels, all field personnel associated with the project will immediately retreat to a location up-wind of the source of contamination. At this point the Site Safety Officer must consult with the Langan HSO to discuss appropriate actions.

4.4.4 OSHA Requirements for Personal Protective Equipment

All personal protective equipment used during the course of this field investigation must meet the following OSHA standards:

Type of Protection	Regulation	Source
Eye and Face	29 CFR 1910.133 29 CFR 1926.102	ANSI Z87.1-1968
Respiratory	29 CFR 1910.134 29 CFR 1926.103	ANSI Z88.1-1980
Head	29 CFR 1910.135 29 CFR 1926.100	ANSI Z89.1-1969
Foot	29 CFR 1910.136 29 CFR 1926.96	ANSI Z41.1-1967

ANSI = American National Standards Institute

Both the respirator and cartridges specified for use in Level C protection must be fit-tested prior to use in accordance with OSHA regulations (29 CFR 1910.1025; 29 CFR 1910.134).

Based on performance criteria of air purifying respirators, they cannot be worn under the following conditions:

- Oxygen deficiency;
- Immediately Dangerous to Life or Health (IDLH) concentrations;
- High relative humidity; and
- If contaminant levels exceed designated use concentrations.

SECTION 5 WORK ZONES AND DECONTAMINATION

5.1 SITE WORK ZONES

To reduce the spread of hazardous materials by workers from potentially contaminated areas to the clean areas, work zones will be delineated at the site, as required. The flow of personnel between the zones should be controlled. The establishment of the work zones will help ensure that personnel are properly protected against the hazards present where they are working, and ensure that work activities and contamination are confined to the appropriate areas. The work zones described below may be modified in the field depending on field conditions.

5.1.1 Hot Zone

Hot zones will be established within a 25 foot radius around drilling and sampling activities involving hazardous materials, where applicable and feasible. All personnel within the hot zone must don the appropriate levels of personal protection as set forth by the FSO. It is not anticipated that Level C or higher will be required for this site.

All personnel within the hot zone will be required to use the specified level of protection. No food, drink, or smoking will be allowed in the hot or warm zones.

5.1.2 Warm Zone

If PID action levels are exceeded or obvious indications of contamination (by sight or odor) are encountered, a warm zone will be established and utilized during the field activities. This zone will be established between the hot zone and the cold zone (discussed below), and will include the personnel and equipment necessary for decontamination of equipment and personnel exiting the hot zone. Personnel and equipment in the hot zone must pass through this zone before entering the cold zone. This zone should always be located upwind of the hot zone.

5.1.3 Cold Zone

The cold zone will include the remaining areas of the job site. Break areas and support facilities (include equipment storage and maintenance areas) will be located in this zone. No equipment or personnel will be permitted to enter the cold zone from the hot zone without passing through the decontamination station in the warm zone (if necessitated). Eating, smoking, and drinking will be allowed only in this area.

5.2 DECONTAMINATION

Any water used in decontamination procedures will be placed in containers, temporarily stored on-site, and properly characterized and disposed.

5.2.1 Decontamination of Personnel

Decontamination of personnel will be necessary for all Site workers in contact with contaminated material. All Site workers shall pass through a cleaning procedure when exiting the active work areas in the contaminated material; including washing their hands and removing any loose material from their clothing and boots. This will be accomplished in the designated Site Worker Cleaning Area to be located adjacent to active work areas in the contaminated material. A field wash station for Site Workers, equipment, and PPE shall be set up and maintained by the Contractor. This will include a gross wash and rinse for boots worn in contaminated material areas and, as necessary, equipment and facilities for Site Workers to wash their hands, arms, neck, and face after exiting areas of contaminated material.

5.2.2 Decontamination of Field Equipment

Decontamination of field equipment will be necessary for all equipment in contact with contaminated material. Decontamination activities shall be performed in the Vehicle Cleaning Area. Equipment to be decontaminated includes, but is not limited to, excavators and pumping equipment, and shall be cleaned prior to 1) crossing into areas of the Site where no contaminated material is present; 2) handling non-contaminated material/topsoil; and 3) leaving the Site.

5.2.3 Vehicle Cleaning Area/Stabilized Construction Entrances

If required during soil handling, one or more temporary vehicle cleaning areas will be constructed to clean disposal trucks and other vehicles and equipment prior to leaving the Site. This area will reduce the amount of contaminated material that disposal trucks and other vehicles spread onto the public roadway. The vehicle cleaning area will be constructed of gravel and will be of sufficient size to prevent vehicles from spreading contaminated material into the public roads and/or previously excavated areas of the Site where all contaminated material has been removed. Before any disposal truck or other vehicle leaves the Site, the sides and wheels will be inspected. If any contaminated materials are observed on the wheels or body of the truck, they will be removed and collected for disposal using a shovel, broom, and/or other hand tools in the designated cleaning area. The vehicle cleaning area may be upgraded to include wet vehicle cleaning procedures (i.e., power washing), if deemed necessary by the FSO.

5.3 REMEDIAL ACTIVITY-DERIVED WASTE

All PPE related remedial activity-derived waste materials (PPE, decontamination waste) will be placed in labeled containers and appropriately disposed. Contaminated soil will be kept moist, properly characterized and disposed off-site. Stockpiling of contaminated materials will only occur temporarily and if adequate space exists.

SECTION 6 ACCIDENT PREVENTION AND CONTINGENCY PLAN

6.1 ACCIDENT PREVENTION

6.1.1 Site-Specific Training

All field personnel will receive health and safety training prior to the initiation of any site activities. The site-specific training form provided in Attachment B must be signed, dated, and returned to the Langan Field Safety Officer. On a day-to-day basis, individual personnel should be constantly alert for indicators of potentially hazardous situations and for signs and symptoms in themselves and others that warn of hazardous conditions and exposures. Rapid recognition of dangerous situations can avert an emergency. Before daily work assignments, a regular meeting should be held. Discussion should include:

- Tasks to be performed;
- Time constraints (e.g., rest breaks, cartridge changes);
- Hazards that may be encountered, including their effects, how to recognize symptoms or monitor them, concentration limits, or other danger signals; and
- Emergency procedures.

6.1.2 Vehicles and Heavy Equipment

Working with large motor vehicles and heavy equipment could be a major hazard at this site. Injuries can result from equipment hitting or running over personnel, impacts from flying objects, or overturning of vehicles. Vehicle and heavy equipment design and operation will be in accordance with 29 CFR, Subpart O, 1926.600 through 1926.602. In particular, the following precautions will be utilized to help prevent injuries/accidents.

- Brakes, hydraulic lines, light signals, fire extinguishers, fluid levels, steering, tires, horn, and other safety devices will be checked at the beginning of each shift.
- Large construction or drilling motor vehicles will not be backed up unless:
  - The vehicle has a reverse signal alarm audible above the surrounding noise level; or
  - The vehicle is backed up only when an observer signals that it is safe to do so.
- Heavy equipment or motor vehicle cable will be kept free of all nonessential items, and all loose items will be secured.
- Large construction or drilling motor vehicles and heavy equipment will be provided with necessary safety equipment (such as seat belts, roll-over protection, emergency shut-off in case of roll-over, backup warning lights and audible alarms).

- Blades and buckets will be lowered to the ground and parking brakes will be set before shutting off any heavy equipment or vehicles.

6.2 SPILL CONTROL PLAN

All personnel must take every precaution to minimize the potential for spills during site operations. Any spill shall be reported immediately to the FSO. Spill control apparatus (sorbent materials) will be located on-site. All materials used for the cleanup of spills will be containerized and labeled separately from other wastes, as required.

6.3 CONTINGENCY PLAN

6.3.1 Emergency Procedures

In the event that an emergency develops on site, the procedures delineated herein are to be immediately followed. Emergency conditions are considered to exist if:

- Any member of the field crew is involved in an accident or experiences any adverse effects or symptoms of exposure while on site.
- A condition is discovered that suggests the existence of a situation more hazardous than anticipated.

General emergency procedures, and specific procedures for personal injury, chemical exposure and radiation exposure, are described below.

6.3.2 Chemical Exposure

If a member of the field crew demonstrates symptoms of chemical exposure the procedures outlined below should be followed:

- Another team member (buddy) should remove the individual from the immediate area of contamination. The buddy should communicate to the Field Team Leader (via voice and hand signals) of the chemical exposure. The Field Team Leader should contact the appropriate emergency response agency.
- Precautions should be taken to avoid exposure of other individuals to the chemical.
- If the chemical is on the individual's clothing, the chemical should be neutralized or removed if it is safe to do so.
- If the chemical has contacted the skin, the skin should be washed with copious amounts of water.
- In case of eye contact, an emergency eye wash should be used. Eyes should be washed for at least 15 minutes.
- All chemical exposure incidents must be reported in writing to the Langan Health and Safety Officer. The Field Safety Officer or Field Team Leader is responsible for completing the accident report.

6.3.3 Personal Injury

In case of personal injury at the site, the following procedures should be followed:

- Another team member (buddy) should signal the Field Team Leader that an injury has occurred.
- A field team member trained in first aid can administer treatment to an injured worker.
- The victim should then be transported to the nearest hospital or medical center. If necessary, an ambulance should be called to transport the victim.
- For less severe cases, the individual can be taken to the site dispensary.
- The Field Team Leader or Field Safety Officer is responsible for making certain that an Accident Report Form is completed. This form is to be submitted to the Langan Health and Safety Officer. Follow-up action should be taken to correct the situation that caused the accident.
- Any incident (near miss, property damage, first aid, medical treatment, etc.) must be reported.

A first-aid kit and blood-born pathogens kit will be kept on-site during the field activities.

6.3.4 Evacuation Procedures

- The Field Team Leader will initiate evacuation procedures by signaling to leave the site.
- All personnel in the work area should evacuate the area and meet in the common designated area.
- All personnel suspected to be in or near the contract work area should be accounted for and the whereabouts or missing persons determined immediately.
- The Field Team Leader will then give further instruction.

6.3.5 Procedures Implemented in the Event of a Major Fire, Explosion, or Emergency

- Notify the paramedics and/or fire department, as necessary;
- Signal the evacuation procedure previously outlined and implement the entire procedure;
- Isolate the area;
- Stay upwind of any fire;
- Keep the area surrounding the problem source clear after the incident occurs;
- Complete accident report for and distribute to appropriate personnel.

6.4 ODOR, VAPOR AND DUST MONITORING AND RESPONSE

6.4.1 Periodic Monitoring

Periodic monitoring for VOCs will be performed during the collection of soil and groundwater samples. Periodic monitoring during sample collection, for instance, will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, adjacent to a public park, or adjacent to a residence. Exceedances of action levels observed during periodic monitoring of VOCs will be reported to the Project Manager and included in the Investigation Report.

VOC Monitoring, Response Levels, and Actions

VOCs will be monitored during investigative drilling work. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate.

- If the ambient air concentration of total organic vapors at the downwind perimeter exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be visually monitored during ground intrusive work. If dust is identified, the Contractor will implement dust suppression techniques.

6.4.2 Vapor Emission Response Plan

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the hot zone, work activities will be halted or odor controls will be employed, and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities can resume, provided:

- The organic vapor level outside the hot zone is below 1 ppm over background, and
- More frequent intervals of monitoring, as directed by the Site Health and Safety Officer, are conducted.

If the organic vapor level is greater than 5 ppm above background at the perimeter of the hot zone, work activities must be shut down or odor controls must be employed. When work shut-down occurs, downwind air monitoring as directed by the Site Health and Safety Officer will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

6.4.3 Major Vapor Emission

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work site, or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted or odor controls must be implemented.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the hot zone, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If either of the following criteria is exceeded in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be implemented.

- Sustained organic vapor levels approaching 5 ppm above background for a period of more than 30 minutes, or
- Organic vapor levels greater than 5 ppm above background for any time period.

6.4.4 Major Vapor Emission Response Plan

Upon activation, the following activities will be undertaken:

1. The local police authorities will immediately be contacted by the Site Health and Safety Officer and advised of the situation;

2. Frequent air monitoring will be conducted at 30-minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Site Health and Safety Officer; and

All Emergency contacts will go into effect as appropriate.

ATTACHMENT A

Air Monitoring Equipment Calibration and Maintenance

All monitoring instruments must be calibrated and maintained periodically. Calibration and on-site maintenance records will be kept in the field log book. The operator must understand the limitations and possible sources of errors for each instrument. It is important that the operator checks that the instrument responds properly to the substances it was designed to monitor. Portable air quality monitoring equipment that measures total ionizables present such as the RaeSystems MiniRae 2000 (or equivalent) photoionization detector (PID) must be calibrated at least once each day. DusTRAK aerosol monitors must be calibrated daily. The specific instructions for calibration and maintenance provided for each instrument should be followed.

ATTACHMENT B

Forms for Health and Safety Related Activity

Note: The OSHA Job Safety and Health Protection Poster must be posted prominently during field activities. The following page is an example of the poster to be used in the field. The actual poster must be an 11 inch by 17 inch size version of this page. The OSHA 300 Log of injuries and illnesses is maintained in the home office of each Langan employee.

You Have a Right to a Safe and Healthful Workplace.

IT'S THE LAW!

- You have the right to notify your employer or OSHA about workplace hazards. You may ask OSHA to keep your name confidential.
- You have the right to request an OSHA inspection if you believe that there are unsafe and unhealthful conditions in your workplace. You or your representative may participate in the inspection.
- You can file a complaint with OSHA within 30 days of discrimination by your employer for making safety and health complaints or for exercising your rights under the *OSH Act*.
- You have a right to see OSHA citations issued to your employer. Your employer must post the citations at or near the place of the alleged violation.
- Your employer must correct workplace hazards by the date indicated on the citation and must certify that these hazards have been reduced or eliminated.
- You have the right to copies of your medical records or records of your exposure to toxic and harmful substances or conditions.
- Your employer must post this notice in your workplace.

The Occupational Safety and Health Act of 1970 (OSH Act), P.L. 91-596, assures safe and healthful working conditions for working men and women throughout the Nation. The Occupational Safety and Health Administration, in the U.S. Department of Labor, has the primary responsibility for administering the *OSH Act*. The rights listed here may vary depending on the particular circumstances. To file a complaint, report an emergency, or seek OSHA advice, assistance, or products, call 1-800-321-OSHA or your nearest OSHA office: • Atlanta (404) 562-2300 • Boston (617) 565-9860 • Chicago (312) 353-2220 • Dallas (214) 767-4731 • Denver (303) 844-1600 • Kansas City (816) 426-5861 • New York (212) 337-2378 • Philadelphia (215) 861-4900 • San Francisco (415) 975-4310 • Seattle (206) 553-5930. Teletypewriter (TTY) number is 1-877-889-5627. To file a complaint online or obtain more information on OSHA federal and state programs, visit OSHA's website at **www.osha.gov**. If your workplace is in a state operating under an OSHA-approved plan, your employer must post the required state equivalent of this poster.

1-800-321-OSHA

www.osha.gov

U.S. Department of Labor • Occupational Safety and Health Administration • OSHA 3165

Langan **ACCIDENT REPORT FORM**

Project Name:_____

Injured or Ill Employee

1. Name _____ Social Security #_____
   (First) (Middle) (Last)
2. Home Address _____
   (No. and Street) (City or Town) (State and Zip)
3. Age _____ 4. Sex: Male ( ) Female ( )
5. Occupation _____
   (Specific job title, not the specific activity employee was performing at time of injury)
6. Department _____
   (Enter name of department in which injured person is employed, even though they may have been temporarily working in another department at the time of injury)

Employer

7. Name _____
8. Mailing Address _____
   (No. and Street) (City or Town) (State and Zip)
9. Location (if different from mailing address):_____
   _____

The Accident or Exposure to Occupational Illness

10. Place of accident or exposure _____
    (No. and Street) (City or Town) (State and Zip)
11. Was place of accident or exposure on employer's premises? _____(Yes/No)
12. What was the employee doing when injured?_____
    _____
    (Be specific - was employee using tools or equipment or handling material?)
    _____
13. How did the accident occur? _____
    (Describe fully the events that resulted in the injury or
    _____
    occupational illness. Tell what happened and how. Name objects and substances involved.
    _____
    Give details on all factors that led to accident. Use separate sheet if needed)
14. Time of accident: _____
15. Date of injury or initial diagnosis of occupational illness _____

16. WITNESS TO ACCIDENT

(Name)	(Affiliation)	(Phone No.)
(Name)	(Affiliation)	(Phone No.)
(Name)	(Affiliation)	(Phone No.)

Occupational Injury or Occupational Illness

17. Describe the injury or illness in detail; indicate part of body affected.

18. Name the object or substance that directly injured the employee. (For example, object that struck employee; the vapor or poison inhaled or swallowed; the chemical or radiation that irritated the skin; or in cases of strains, hernias, etc., the object the employee was lifting, pulling, etc.)

19. Did the accident result in employee fatality? _____ (Yes or No)
20. Number of lost workdays ____/restricted workdays _____ resulting from injury or illness?

Other

21. Did you see a physician for treatment? _____ (Yes or No) _____ (Date)
22. Name and address of physician _____

(No. and Street) (City or Town) (State and Zip)

23. If hospitalized, name and address of hospital _____

(No. and Street) (City or Town) (State and Zip)

Date of report _____ Prepared by _____

Official position _____

Project Health and Safety Plan and Work plan Acceptance Form

(For Langan employees only)

I have read and agree to abide by the contents of the Work Plan and Health and Safety Plan for the following project:

_____

(Project Title) (Project Number)

Furthermore, I have read and am familiar with the work plan or proposal that describes the field work to be conducted and the procedures to be utilized in the conduct of this work.

Name (print)	Signature	Date

Place in project Health and Safety File as soon as possible

Site-Specific Health and Safety Training

(For all Langan and subcontract employees on site)

I hereby confirm that site-specific health and safety training has been conducted by the site health and safety officer that included:

- Names of personnel responsible for site safety and health
- Safety, health, and other hazards at the site
- Proper use of personal protective equipment
- Work practices by which the employee can minimize risk from hazards
- Safe use of engineering controls and equipment on the site
- Acute effects of compounds at the site
- Decontamination procedures

For the following project:

_____

(Project Title) (Project Number)

Name (print)	Signature	Date

Place in project Health and Safety File as soon as possible

ATTACHMENT C

Safety Data Sheets

- Acetone
- Methylene chloride
- Vinyl Chloride
- Cis-1,2-dichloroethene
- Tetrachloroethene
- 1,4-dioxane
- 1,1 dichloroethane
- 1-1-dichloroethene
- Trans-1,2-dichloroethene
- 1,1,1-trichloroethane,
- Chloroethane
- 1,2,4-trimethylbenzene
- MTBE
- Benzene
- Ethylbenzene
- Toluene
- Xylenes
- Trichloroethene
- Phenanthrene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Dibenzo(a,h)anthracene
- Pyrene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Chrysene
- Fluoranthene
- Ideno(1,2,3-cd)pyrene
- Naphthalene
- Phenol
- Bis(2-ethylhexyl)phthalate
- Fluorine
- Acenapthene
- Dibenzofuran
- Aluminum
- Antimony
- Arsenic
- Barium
- Cadmium
- Chromium
- Copper
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Nickel
- Sodium
- Silver
- Zinc
- PCBs
- 4,4'-DDE
- 4,4'DDD
- 4,4'DDT
- Dieldrin
- Unleaded Gasoline
- Diesel Fuel
- Motor Oil, 10W-40
- Isobutylene Gas in Air, 100 ppm
- Compressed Air

ATTACHMENT D

Standard Safe Work Practices

1) Eating, drinking, chewing tobacco, smoking and carrying matches or lighters is prohibited in a contaminated or potentially contaminated area or where the possibility for the transfer of contamination exists.

2) Avoid contact with potentially contaminated substances. Do not walk through puddles, pools, mud, etc. Avoid, whenever possible, kneeling on the ground, leaning or sitting on equipment or ground. Do not place monitoring equipment on potentially contaminated surfaces (i.e., ground, etc.).

3) All field crew members should make use of their senses to alert them to potentially dangerous situations in which they should not become involved; i.e., presence of strong and irritating or nauseating odors.

4) Prevent, to the extent possible, spills. In the event that a spillage occurs, contain liquid if possible.

5) Field crew members shall be familiar with the physical characteristics of investigations, including:
    - Communication
    - Hot zone (areas of known or suspected contamination)
    - Site access
    - Nearest water sources

6) All wastes generated during activities on-site should be disposed of as directed by the project manager or his on-site representative.

7) Employees shall follow procedures to avoid at-risk behaviors that could result in an incident.

APPENDIX C
Quality Assurance Project Plan

Quality Assurance Project Plan

Remedial Investigation
335 BOND STREET
Brooklyn, New York
NYSDEC BCP Site No. C224225

Prepared For:

E & M Realty Corp.
335 Bond Street
Brooklyn, New York 11231

Prepared By:

Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, New York 10001

January 11, 2016
Langan Project No. 170362501

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Attachment A: Resumes
Attachment B: Laboratory Reporting Limits and Method Detection Limits
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Attachment D: Sample Nomenclature

1.0 PROJECT DESCRIPTION

1.1 INTRODUCTION

This Quality Assurance Project Plan (QAPP) was prepared on behalf of E & M Realty Corp. (the Volunteer) for the property at 335 Bond Street (Block 445, Lot 1), in Brooklyn, New York (the Site). The Site was accepted into the New York State Brownfield Cleanup Program (BCP) as a Volunteer and a Brownfield Cleanup Agreement (BCA) was executed on August 25, 2015. Additional Site information including Site maps and data collected previously by Langan and others is provided in the Remedial Investigation Work Plan (RIWP).

This QAPP specifies analytical methods to be used to ensure that data collected during the remedial investigation are precise, accurate, representative, comparable, complete, and meet the sensitivity requirements of the project.

1.2 PROJECT OBJECTIVES

The objective of the RIWP is to investigate and characterize the nature and extent of on-site environmental impacts associated with potential areas of concern (AOC) and the historical usage of the Site. This QAPP addresses sampling and analytical methods that may be necessary in support of the RIWP. These objectives have been established in order to meet standards that will protect public health and the environment for the Site.

1.3 SCOPE OF WORK

The scope of work covered in this QAPP is detailed in the RIWP. In general, the RIWP proposes soil boring installation and sampling, sediment sampling, groundwater monitoring well installation and sampling, and sub-slab and soil vapor sampling.

2.0 DATA QUALITY OBJECTIVES AND PROCESS

Data Quality Objectives (DQOs) are qualitative and quantitative statements to help ensure that data of known and appropriate quality are obtained during the project. The overall project objective is to investigate subsurface conditions associated with AOCs for the Site. The sampling program will provide for collection of soil, soil vapor, indoor air, and groundwater samples. DQOs for sampling activities are determined by evaluating five factors:

- Data needs and uses: The types of data required and how the data will be used after it is obtained.
- Parameters of Interest: The types of chemical or physical parameters required for the intended use.
- Level of Concern: Levels of constituents, which may require remedial actions or further investigations.
- Required Analytical Level: The level of data quality, data precision, and QA/QC documentation required for chemical analysis.
- Required Detection Limits: The detection limits necessary based on the above information.

The quality assurance and quality control objectives for all measurement data include:

- **Precision** – an expression of the reproducibility of measurements of the same parameter under a given set of conditions. Field sampling precision will be determined by analyzing coded duplicate samples and analytical precision will be determined by analyzing internal QC duplicates and/or matrix spike duplicates.
- **Accuracy** – a measure of the degree of agreement of a measured value with the true or expected value of the quantity of concern. For soil and groundwater samples, accuracy will be determined through the assessment of the analytical results of equipment blanks and trip blanks for each sample set. Analytical accuracy will be assessed by examining the percent recoveries of surrogate compounds that are added to each sample (organic analyses only), internal standards, laboratory method blanks, instrument calibration, and the percent recoveries of matrix spike compounds added to selected samples and laboratory blanks. For soil vapor or air samples, analytical accuracy will be assessed by examining the percent recoveries that are added to each sample, internal standards, laboratory method blanks, and instrument calibration.

- **Representativeness** – expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is dependent upon the adequate design of the sampling program and will be satisfied by ensuring that the scope of work is followed and that specified sampling and analysis techniques are used. Representativeness in the laboratory is ensured by compliance to nationally-recognized analytical methods, meeting sample holding times, and maintaining sample integrity while the samples are in the laboratory's possession. This is accomplished by following all applicable methods, laboratory-issued standard operating procedures (SOPs), the laboratory's Quality Assurance Manual, and this QAPP. The laboratory is required to be properly certified and accredited.
- **Completeness** – the percentage of measurements made which are judged to be valid. Completeness will be assessed through data validation. The QC objective for completeness is generation of valid data for at least 90 percent of the analyses requested.
- **Comparability** – expresses the degree of confidence with which one data set can be compared to another. The comparability of all data collected for this project will be ensured using several procedures, including standard methods for sampling and analysis as documented in the QAPP, using standard reporting units and reporting formats, and data validation.
- **Sensitivity** – the ability of the instrument or method to detect target analytes at the levels of interest. The project manager will select, with input from the laboratory and QA personnel, sampling and analytical procedures that achieve the required levels of detection.

3.0 PROJECT ORGANIZATION

All work included with implementing the NYSDEC-approved RIWP will be overseen by Langan, on behalf of E & M Realty Corp.. Langan will collect media samples and will subcontract with a qualified driller and an ELAP-certified laboratory. Data validation services will be performed by an approved data validator.

For the scope of work described in the RIWP, sampling will be conducted by Langan, the analytical services will be performed by York Analytical Laboratories Inc. of Stratford, Connecticut (NYSDOH ELAP certification number 10854). Data validation services will be performed by Emily Strake. Resumes for key personnel are attached (Attachment A).

Key contacts for this project are as follows:

E & M Realty Corp.:	Mr. Eduard Slinin Telephone: (718) 643-3900
Langan Project Manager:	Mr. Ryan Manderbach Telephone: (212) 479-5582
Langan Quality Assurance Officer (QAO):	Ms. Emily Snead Telephone: (212) 479-5432
Program Quality Assurance Monitor:	Mr. Albert Tashji, PE Telephone: (212) 479-5508
Data Validator:	Ms. Emily Strake Telephone: (215) 491-6526
Laboratory Representative:	York Analytical Rich August Telephone: (203) 325-1371

4.0 QUALITY ASSURANCE OBJECTIVES FOR COLLECTION OF DATA

The overall quality assurance objective is to develop and implement procedures for sampling, laboratory analysis, field measurements, and reporting that will provide data of sufficient quality for the remedial investigation at the Site. The sample set, chemical analysis results, and interpretations must be based on data that meet or exceed quality assurance objectives established for the Site. Quality assurance objectives are usually expressed in terms of accuracy or bias, sensitivity, completeness, representativeness, comparability, and sensitivity of analysis. Variances from the quality assurance objectives at any stage of the investigation will result in the implementation of appropriate corrective measures and an assessment of the impact of corrective measures on the usability of the data.

4.1 PRECISION

Precision is a measure of the degree to which two or more measurements are in agreement. Field precision is assessed through the collection and measurement of field duplicates. Laboratory precision and sample heterogeneity also contribute to the uncertainty of field duplicate measurements. This uncertainty is taken into account during the data assessment process. For field duplicates, results less than 2x the reporting limit (RL) meet the precision criteria if the absolute difference is less than ±2x the RL and acceptable based on professional judgement. For results greater than 2x the RL, the acceptance criteria is a relative percent difference (RPD) of ≤50% (soil and air), <30% (water). RLs and method detection limits (MDL) are provided in Attachment B.

4.2 ACCURACY

Accuracy is the measurement of the reproducibility of the sampling and analytical methodology. It should be noted that precise data may not be accurate data. For the purpose of this QAPP, bias is defined as the constant or systematic distortion of a measurement process, which manifests itself as a persistent positive or negative deviation from the known or true value. This may be due to (but not limited to) improper sample collection, sample matrix, poorly calibrated analytical or sampling equipment, or limitations or errors in analytical methods and techniques.

Accuracy in the field is assessed through the use of equipment blanks and through compliance to all sample handling, preservation, and holding time requirements. All equipment blanks should be non-detect when analyzed by the laboratory. Any contaminant detected in an associated equipment blank will be evaluated against

laboratory blanks (preparation or method) and evaluated against field samples collected on the same day to determine potential for bias. Trip blanks are not required for non-aqueous matrices but are planned for non-aqueous matrices where high concentrations of VOCs are anticipated.

Laboratory accuracy is assessed by evaluating the percent recoveries of matrix spike/matrix spike duplicate (MS/MSD) samples, laboratory control samples (LCS), surrogate compound recoveries, and the results of method preparation blanks. MS/MSD, LCS, and surrogate percent recoveries will be compared to either method-specific control limits or laboratory-derived control limits. Sample volume permitting, samples displaying outliers should be reanalyzed. All associated method blanks should be non-detect when analyzed by the laboratory.

4.3 COMPLETENESS

Laboratory completeness is the ratio of total number of samples analyzed and verified as acceptable compared to the number of samples submitted to the fixed-base laboratory for analysis, expressed as a percent. Three measures of completeness are defined:

- Sampling completeness, defined as the number of valid samples collected relative to the number of samples planned for collection;
- Analytical completeness, defined as the number of valid sample measurements relative to the number of valid samples collected; and
- Overall completeness, defined as the number of valid sample measurements relative to the number of samples planned for collection.

Air, soil vapor, soil, and groundwater data will meet a 90% completeness criterion. If the criterion is not met, sample results will be evaluated for trends in rejected and unusable data. The effect of unusable data required for a determination of compliance will also be evaluated.

4.4 REPRESENTATIVENESS

Representativeness expresses the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition within a defined spatial and/or temporal boundary. Representativeness is dependent upon the adequate design of the

sampling program and will be satisfied by ensuring that the scope of work is followed and that specified sampling and analysis techniques are used. This is performed by following applicable standard operating procedures (SOPs) and this QAPP. All field technicians will be given copies of appropriate documents prior to sampling events and are required to read, understand, and follow each document as it pertains to the tasks at hand.

Representativeness in the laboratory is ensured by compliance to nationally-recognized analytical methods, meeting sample holding times, and maintaining sample integrity while the samples are in the laboratory's possession. This is performed by following all applicable EPA methods, laboratory-issued SOPs, the laboratory's Quality Assurance Manual, and this QAPP. The laboratory is required to be properly certified and accredited.

4.5 COMPARABILITY

Comparability is an expression of the confidence with which one data set can be compared to another. Comparability is dependent upon the proper design of the sampling program and will be satisfied by ensuring that the sampling plan is followed and that sampling is performed according to the SOPs or other project-specific procedures. Analytical data will be comparable when similar sampling and analytical methods are used as documented in the QAPP. Comparability will be controlled by requiring the use of specific nationally-recognized analytical methods and requiring consistent method performance criteria. Comparability is also dependent on similar quality assurance objectives. Previously collected data will be evaluated to determine whether they may be combined with contemporary data sets.

4.6 SENSITIVITY

Sensitivity is the ability of the instrument or method to detect target analytes at the levels of interest. The project director will select, with input from the laboratory and QA personnel, sampling and analytical procedures that achieve the required levels of detection and QC acceptance limits that meet established performance criteria. Concurrently, the project director will select the level of data assessment to ensure that only data meeting the project DQOs are used in decision-making.

Field equipment will be used that can achieve the required levels of detection for analytical measurements in the field. In addition, the field sampling staff will collect and submit full volumes of samples as required by the laboratory for analysis, whenever

possible. Full volume aliquots will help ensure achievement of the required limits of detection and allow for reanalysis if necessary. The concentration of the lowest level check standard in a multi-point calibration curve will represent the reporting limit.

Analytical methods and quality assurance parameters associated with the sampling program are presented in Attachment C. The frequency of associated equipment blanks and duplicate samples will be based on the recommendations listed in DER-10, and as described in Section 5.3.

Site-specific MS and MSD samples will be prepared and analyzed by the analytical laboratory by spiking an aliquot of submitted sample volume with analytes of interest. Additional sample volume is not required by the laboratory for this purpose. An MS/MSD analysis will be analyzed at a rate of 1 out of every 20 samples, or one per analytical batch. MS/MSD samples are only required for soil and groundwater samples.

5.0 SAMPLE COLLECTION AND FIELD DATA ACQUISITION PROCEDURES

Soil, sediment and groundwater sampling, if necessary, will be conducted in accordance with the established NYSDEC protocols contained in DER-10/Technical Guidance for Site Investigation and Remediation (May 2010). Air sampling will be conducted in accordance with the established New York State Department of Health (NYSDOH) protocols contained in the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). The following sections describe procedures to be followed for specific tasks.

5.1 FIELD DOCUMENTATION PROCEDURES

Field documentation procedures will include summarizing field observations in field books, logging soil borings and monitoring well construction, completing forms for sediment, groundwater and soil vapor sampling, and proper sample labeling. These procedures are described in the following sections.

5.1.1 Field Data and Notes

Field notebooks contain the documentary evidence regarding procedures conducted by field personnel. Hard cover, bound field notebooks will be used because of their compact size, durability, and secure page binding. The pages of the notebook will not be removed.

Entries will be made in waterproof, permanent blue or black ink. No erasures will be allowed. If an incorrect entry is made, the information will be crossed out with a single strike mark and the change initialed and dated by the team member making the change. Each entry will be dated. Entries will be legible and contain accurate and complete documentation of the individual or sampling team's activities or observations made. The level of detail will be sufficient to explain and reconstruct the activity conducted. Each entry will be signed by the person(s) making the entry.

The following types of information will be provided for each sampling task, as appropriate:

- Project name and number
- Reasons for being on-site or taking the sample
- Date and time of activity

- Sample identification numbers
- Geographical location of sampling points with references to the site, other facilities or a map coordinate system. Sketches will be made in the field logbook when appropriate
- Physical location of sampling locations such as depth below ground surface
- Description of the method of sampling including procedures followed, equipment used and any departure from the specified procedures
- Description of the sample including physical characteristics, odor, etc.
- Readings obtained from health and safety equipment
- Weather conditions at the time of sampling and previous meteorological events that may affect the representative nature of a sample
- Photographic information including a brief description of what was photographed, the date and time, the compass direction of the picture and the number of the picture on the camera
- Other pertinent observations such as the presence of other persons on the site, actions by others that may affect performance of site tasks, etc.
- Names of sampling personnel and signature of persons making entries

Field records will also be collected on field data sheets including boring logs, which will be used for geologic and drilling data during soil boring activities. Field data sheets will include the project-specific number and stored in the field project files when not in use. At the completion of the field activities, the field data sheets will be maintained in the central project file.

5.1.2 Sample Labeling

Each sample collected will be assigned a unique identification number in accordance with the sample nomenclature guidance included in Attachment D, and placed in an appropriate sample container. Each sample container will have a sample label affixed to the outside with the date and time of sample collection and project name. In addition,

the label will contain the sample identification number, analysis required and chemical preservatives added, if any. All documentation will be completed in waterproof ink.

5.2 EQUIPMENT CALIBRATION AND PREVENTATIVE MAINTENANCE

A photoionization detector (PID) will be used during the sampling activities to evaluate work zone action levels, collect pre- and post-sample readings for air samples, screen soil samples, and collect monitoring well headspace readings. Field calibration and/or field checking of the PID will be the responsibility of the field team leader and the site HSO, and will be accomplished by following the procedures outlined in the operating manual for the instrument. At a minimum, field calibration and/or field equipment checking will be performed once daily, prior to use. Field calibration will be documented in the field notebook. Entries made into the logbook regarding the status of field equipment will include the following information:

- Date and time of calibration
- Type of equipment serviced and identification number (such as serial number)
- Reference standard used for calibration
- Calibration and/or maintenance procedure used
- Other pertinent information

A water quality meter (Horiba U-52 or similar) will be used during purging of groundwater to measure pH, specific conductance, temperature, dissolved oxygen, turbidity and oxidation-reduction-potential (ORP), every five minutes. Water-quality meters should be calibrated and the results documented before use each day using standardized field calibration procedures and calibration checks.

Equipment that fails calibration or becomes inoperable during use will be removed from service and segregated to prevent inadvertent utilization. The equipment will be properly tagged to indicate that it is out of calibration. Such equipment will be repaired and recalibrated to the manufacturer's specifications by qualified personnel. Equipment that cannot be repaired will be replaced.

Off-site calibration and maintenance of field instruments will be conducted as appropriate throughout the duration of project activities. All field instrumentation, sampling equipment and accessories will be maintained in accordance with the

manufacturer's recommendations and specifications and established field equipment practice. Off-site calibration and maintenance will be performed by qualified personnel. A logbook will be kept to document that established calibration and maintenance procedures have been followed. Documentation will include both scheduled and unscheduled maintenance.

5.3 SAMPLE COLLECTION

Soil and Sediment Samples

Soil and sediment samples will be visually classified and field screened using a PID to assess potential impacts from VOCs and for health and safety monitoring. Soil and sediment samples collected for analysis of VOCs will be collected using either EnCore® or Terra Core® sampling equipment. For analysis of non-volatile parameters, samples will be homogenized and placed into glass jars. After collection, all sample jars will be capped and securely tightened, and placed in iced coolers and maintained at 4°C ±2°C until they are transferred to the laboratory for analysis, in accordance with the procedures outlined in Section 5.4. Analysis and/or extraction and digestion of collected soil and sediment samples will meet the holding times required for each analyte as specified in Attachment C. In addition, analysis of collected soil sample will meet all quality assurance criteria set forth by this QAPP and DER-10.

Groundwater Samples

Groundwater sampling will be conducted using low-flow sampling procedures following USEPA guidance ("Low Stress [low flow] Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells", EQASOP-GW 001, January 19, 2010).

During purging, field parameters should be measured, including: water level drawdown, purge rate, pH, specific conductance, temperature, dissolved oxygen, turbidity and oxidation-reduction-potential (ORP), every five minutes using a water quality meter (Horiba U-52 or similar) and a depth-to-water interface probe that should be decontaminated between wells. Samples should generally not be collected until the field parameters have stabilized. Field parameters will be considered stable once three sets of measurements are within ±0.1 standard units for pH, ±3% for conductivity and temperature, ±10 millivolts for ORP, and ±10% for turbidity and dissolved oxygen. Purge rates should be adjusted to keep the drawdown in the well to less than 0.3 feet, as practical. Additionally, an attempt should be made to achieve a stable turbidity

reading of less than 10 Nephelometric Turbidity Units (NTU) prior to sampling. If the turbidity reading does not stabilize at reading of less than 10 NTU for a given well, then both filtered and unfiltered samples should be collected from that well. If necessary, field filtration should be performed using a 0.45 micron disposable in-line filter. Groundwater samples should be collected after parameters have stabilized as noted above or the readings are within the precision of the meter. Deviations from the stabilization and drawdown criteria, if any, should be noted on the sampling logs.

Samples should be collected directly into laboratory-supplied jars. After collection, all sample jars will be capped and securely tightened, and placed in iced coolers and maintained at 4°C ±2°C until they are transferred to the laboratory for analysis, in accordance with the procedures outlined in Section 5.4. Analysis and/or extraction and digestion of collected groundwater samples will meet the holding times required for each analyte as specified in Attachment C. In addition, analysis of collected groundwater samples will meet all quality assurance criteria set forth by this QAPP and DER-10.

Air samples

Prior to sample collection, a pre-sampling inspection will be conducted to document chemicals and potential subsurface pathways at the Site. The pre-sampling inspection will assess the potential for interference from chemical storage nearby or within the building. Soil vapor samples will be collected into laboratory-supplied, batch certified-clean Summa® canisters calibrated for a sampling rate of two hours. Indoor air samples will be collected into laboratory-supplied, batch certified-clean Summa® canisters calibrated for a sampling rate of eight hours. The pressure gauges on each calibrated flow controller should be monitored throughout sample collection. Sample collection should be stopped when the pressure reading reaches -4 mmHg.

Sample Equipment Blanks and Duplicates

Equipment blanks will be collected for quality assurance purposes at a rate of one per 20 investigative samples per matrix (soil and groundwater only). Equipment blanks will be obtained by pouring laboratory-demonstrated analyte-free water on or through a decontaminated sampling device following use and implementation of decontamination protocols. The water will be collected off of the sampling device into a laboratory-provided sample container for analysis. Equipment blank samples will be analyzed for the complete list of analytes on the day of sampling. Trip blanks will be collected at a rate of one per day if soil samples are analyzed for VOCs during that day.

Duplicate samples will be collected and analyzed for quality assurance purposes. Duplicate samples will be collected at a frequency of 1 per 20 investigative samples per matrix (soil and groundwater only) and will be submitted to the laboratory as "blind" samples. If less than 20 samples are collected during a particular sampling event, one duplicate sample will be collected.

Matrix Spikes/Matrix Spike Duplicates

Matrix spike/matrix spike duplicate (MS/MSD) samples will be collected and analyzed for quality assurance purposes. MS/MSD samples will be collected at a frequency of 1 per 20 investigative samples per matrix (soil and groundwater only). If less than 20 samples are collected during a particular sampling event, one MS/MSD sample will be collected.

5.4 SAMPLE CONTAINERS AND HANDLING

Certified, commercially clean sample containers will be obtained from the analytical laboratory. For soil and groundwater samples, the laboratory will also prepare and supply the required trip blanks and equipment blank sample containers and reagent preservatives. Sample bottle containers, including the equipment blank containers, will be placed into plastic coolers by the laboratory. These coolers will be received by the field sampling team within 24 hours of their preparation in the laboratory. Prior to the commencement of field work, Langan field personnel will fill the plastic coolers with ice in Ziploc® bags (or equivalent) to maintain a temperature of 4° ±2° C.

Soil, sediment and groundwater samples collected in the field for laboratory analysis will be placed directly into the laboratory-supplied sample containers. Samples will then be placed and stored on-ice in laboratory provided coolers until shipment to the laboratory. The temperature in the coolers containing samples and associated equipment blanks will be maintained at a temperature of 4°±2°C while on-site and during sample shipment to the analytical laboratory.

Possession of samples collected in the field will be traceable from the time of collection until they are analyzed by the analytical laboratory or are properly disposed. Chain-of-custody procedures, described in Section 5.9, will be followed to maintain and document sample possession. Samples will be packaged and shipped as described in Section 5.6.

5.5 SAMPLE PRESERVATION

Sample preservation measures will be used in an attempt to prevent sample decomposition by contamination, degradation, biological transformation, chemical interactions and other factors during the time between sample collection and analysis. Preservation will commence at the time of sample collection and will continue until analyses are performed. Should chemical preservation be required, the analytical laboratory will add the preservatives to the appropriate sample containers before shipment to the office or field. Samples will be preserved according to the requirements of the specific analytical method selected, as shown in Attachment C.

5.6 SAMPLE SHIPMENT

5.6.1 Packaging

Air samples canisters can be stored and transported without additional packaging. Soil and groundwater sample containers will be placed in plastic coolers. Ice in Ziploc® bags (or equivalent) will be placed around sample containers. Cushioning material will be added around the sample containers if necessary. Chains-of-custody and other paperwork will be placed in a Ziploc® bag (or equivalent) and placed inside the cooler. The cooler will be taped closed and custody seals will be affixed to one side of the cooler at a minimum. If the samples are being shipped by an express delivery company (e.g. FedEx) then laboratory address labels will be placed on top of the cooler.

5.6.2 Shipping

Standard procedures to be followed for shipping environmental samples to the analytical laboratory are outlined below.

- All environmental samples will be transported to the laboratory by a laboratory-provided courier under the chain-of-custody protocols described in Section 5.9.
- Prior notice will be provided to the laboratory regarding when to expect shipped samples. If the number, type or date of shipment changes due to site constraints or program changes, the laboratory will be informed.

5.7 DECONTAMINATION PROCEDURES

Decontamination procedures will be used for non-dedicated sampling equipment. Decontamination of field personnel is discussed in the site-specific sample Health and

Safety Plan (HASP) included in Appendix B of the RIWP. Field sampling equipment that is to be reused will be decontaminated in the field in accordance with the following procedures:

1. Laboratory-grade glassware detergent and tap water scrub to remove visual contamination
2. Generous tap water rinse
3. Distilled/de-ionized water rinse

5.8 RESIDUALS MANAGEMENT

Debris (e.g., paper, plastic and disposable PPE) will be collected in plastic garbage bags and disposed of as non-hazardous industrial waste. Debris is expected to be transported to a local municipal landfill for disposal. If applicable, residual solids (e.g., leftover soil cuttings) will be placed back in the borehole from which it was sampled. If gross contamination is observed, soil will be collected and stored in Department of Transportation (DOT)-approved 55-gallon drums in a designated storage area at the Site. The residual materials stored in a designated storage area at the site for further characterization, treatment or disposal.

Residual fluids (such as purge water) will be collected and stored in DOT-approved (or equivalent) 55-gallon drums in a designated storage area at the site. The residual fluids will be analyzed, characterized and disposed off-site in accordance with applicable federal and state regulations. Residual fluids such as decontamination water may be discharged to the ground surface, however, if gross contamination is observed, the residual fluids will be collected, stored, and transported similar purge water or other residual fluids.

5.9 CHAIN OF CUSTODY PROCEDURES

A chain-of-custody protocol has been established for collected samples that will be followed during sample handling activities in both field and laboratory operations. The primary purpose of the chain-of-custody procedures is to document the possession of the samples from collection through shipping, storage and analysis to data reporting and disposal. Chain-of-custody refers to actual possession of the samples. Samples are considered to be in custody if they are within sight of the individual responsible for their security or locked in a secure location. Each person who takes possession of the

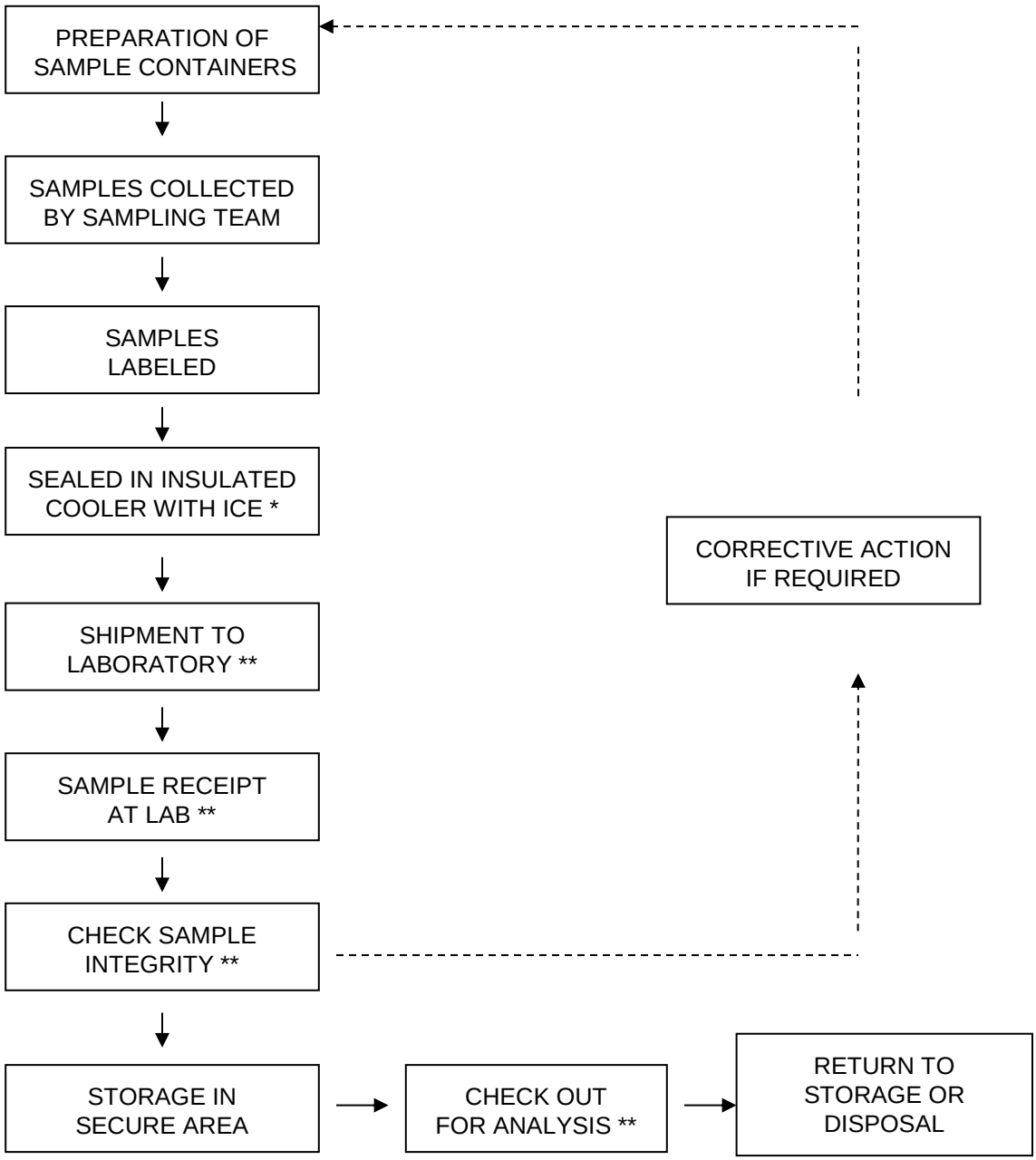
samples, except the shipping courier, is responsible for sample integrity and safe keeping. Chain-of-custody procedures are provided below:

- Chain-of-custody will be initiated by the laboratory supplying the pre-cleaned and prepared sample containers. Chain-of-custody forms will accompany the sample containers.
- Following sample collection, the chain-of-custody form will be completed for the sample collected. The sample identification number, date and time of sample collection, analysis requested and other pertinent information (e.g., preservatives) will be recorded on the form. All entries will be made in waterproof, permanent blue or black ink.
- Langan field personnel will be responsible for the care and custody of the samples collected until the samples are transferred to another party, dispatched to the laboratory, or disposed. The sampling team leader will be responsible for enforcing chain-of-custody procedures during field work.
- When the form is full or when all samples have been collected that will fit in a single cooler, the sampling team leader will check the form for possible errors and sign the chain-of-custody form. Any necessary corrections will be made to the record with a single strike mark, dated, and initialed.

Sample coolers will be accompanied by the chain-of-custody form, sealed in a Ziploc® bag (or equivalent) and placed on top of the samples or taped to the inside of the cooler lid. If applicable, a shipping bill will be completed for each cooler and the shipping bill number recorded on the chain-of-custody form.

Samples will be packaged for shipment to the laboratory with the appropriate chain-of-custody form. A copy of the form will be retained by the sampling team for the project file and the original will be sent to the laboratory with the samples. Bills of lading will also be retained as part of the documentation for the chain-of-custody records, if applicable. When transferring custody of the samples, the individuals relinquishing and receiving custody of the samples will verify sample numbers and condition and will document the sample acquisition and transfer by signing and dating the chain-of-custody form. This process documents sample custody transfer from the sampler to the analytical laboratory. A flow chart showing a sample custody process is included as Figure 1.1. Blank chain-of-custody forms from York are included as Figures 1.2 and 1.3.

Figure 1.1 Sample Custody



*SUMMA CANISTERS SHOULD NOT BE ICED
** REQUIRES SIGN-OFF ON CHAIN-OF-CUSTODY FORM

Figure 1.2 Sample Chain-of-Custody Form – Air Sample

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

Field Chain-of-Custody Record - AIR

Page____ of ____

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

York Project No.________

YOUR Information	Report To:	Invoice To:	YOUR Project ID	Turn-Around Time	Report Type/Deliverables
Company:	Company:	Company:		RUSH - Same Day ☐	Summary Report ____
Address:	Address:	Address:		RUSH - Next Day ☐	Summary w/ QA Summary ____
			Purchase Order No.	RUSH - Two Day ☐	CT RCP Package ____
Phone No.	Phone No.	Phone No.		RUSH - Three Day ☐	NY ASP A Package ____
Contact Person:	Attention:	Attention:		RUSH - Four Day ☐	NY ASP B/CLP Pkg ____
E-Mail Address:	E-Mail Address:	E-Mail Address:	Samples from: CT__ NY__ NJ__	Standard(5-7 Days) ☐	NJDEP Reduced ____

Electronic Deliverables:
EDD (Specify Type) ____
Standard Excel
Regulatory Comparison Excel ____

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Samples Collected/Authorized By (Signature) ____________

Name (printed) ____________

Air Matrix Codes
AI - INDOOR Ambient Air
AO- OUTDOOR Amb. Air
AE- Vapor Extraction Well/ Process Gas/Effluent
AS- SOIL Vapor/Sub-Slab

TO15 Volatiles and Other Gas Analyses

EPA TO-15 List	EPA TO-14A List
NYSDEC VI list	Tentatively Identified Compounds
NYSDEC STARS List	Air VPH
Project Specific List by TO-15	Helium
NJDEP Target List	Methane
CTDEP RCP Target List	OTHER____

Detection Limits Required
≤ 1 ug/m³ ____
NYSDEC VI Limits ____
NJDEP low level ____
Routine Survey ____
Other ____

Special Instructions

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Choose Analyses Needed from the Menu Above and Enter Below	Sampling Media
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____
						6 Liter Summa canister____ Tedlar Bag____

Comments

Samples Relinquished By	Date/Time	Samples Received By	Date/Time
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time

Figure 1.3 Sample Chain-of-Custody Form – Soil and Groundwater

YORK

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

Field Chain-of-Custody Record

Page____ of ____

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

York Project No.____________

YOUR Information	Report To:	Invoice To:	YOUR Project ID	Turn-Around Time	Report Type
Company:	Company:	Company:		RUSH - Same Day ☐	Summary Report ____
Address:	Address:	Address:		RUSH - Next Day ☐	Summary w/ QA Summary ____
			Purchase Order No.	RUSH - Two Day ☐	CT RCP Package ____
Phone No.	Phone No.	Phone No.		RUSH - Three Day ☐	CTRCP DQA/DUE Pkg ____
Contact Person:	Attention:	Attention:		RUSH - Four Day ☐	NY ASP A Package ____
E-Mail Address:	E-Mail Address:	E-Mail Address:	Samples from: CT__ NY__ NJ__	Standard(5-7 Days) ☐	NY ASP B Package ____
					NJDEP Red. Deliv. ____

Electronic Data Deliverables (EDD)
Simple Excel ____
NYSDEC EQuIS ____
EQuIS (std) ____
EZ-EDD (EQuIS) ____
NJDEP SRP HazSite EDD ____
GIS/KEY (std) ____
Other ____
York Regulatory Comparison
Excel Spreadsheet ____
Compare to the following Regs. (please fill in):

Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

____
Samples Collected/Authorized By (Signature)

____
Name (printed)

Matrix Codes
S - soil
Other - specify(oil, etc.)
WW - wastewater
GW - groundwater
DW - drinking water
Air-A - ambient air
Air-SV - soil vapor

Volatiles		Semi-Vols.	Pest/PCB/Herb	Metals	Misc. Org.	Full Lists	Misc.
8260 full	TICs	8270 or 625	8082PCB	RCRA8	TPH GRO	Pri.Poll.	Corrosivity
624	Site Spec.	STARS list	8081Pest	PP13 list	TPH DRO	TCL Organics	Reactivity
STARS list	Nassau Co.	BN Only	8151Herb	TAL	CT ETPH	TAL Met/CN	Ignitability
BTEX	Suffolk Co.	Acids Only	CT RCP	CT15 list	NY 310-13	Full TCLP	Flash Point
MTBE	Ketones	PAH list	App. IX	TAGM list	TPH 1664	Full App. IX	Sieve Anal.
TCL list	Oxygenates	TAGM list	Site Spec.	NJDEP list	Air TO14A	Part 360-Routine	Heterotrophs
TAGM list	TCLP list	CT RCP list	SPLP or TCLP	Total	Air TO15	Part 360-Baseline	TOX
CT RCP list	524.2	TCL list	TCLP Pest	Dissolved	Air STARS	Part 360-Expanded	BTU/lb.
Arom. only	502.2	NJDEP list	TCLP Herb	SPLP or TCLP	Air VPH	Part 360-Expanded Full List	Aquatic Tox.
Halog. only	NJDEP list	App. IX	Chlordane	Indiv. Metals	Air TICs	NYCDEP Sewer	TOC
App.IX list	SPLP or TCLP	TCLP BNA	608 Pest	LIST Below	Methane	NYSDEC Sewer	Asbestos
8021B list		SPLP or TCLP	608 PCB		Helium	TAGM	Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)

Comments

Preservation
Check those Applicable
4°C____ Frozen____ HCl____ MeOH____ HNO_3____ H_2SO_4____ NaOH____
ZnAc____ Ascorbic Acid____ Other____

Special Instructions
Field Filtered ☐
Lab to Filter ☐

Samples Relinquished By	Date/Time	Samples Received By	Date/Time
Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time

Temperature on Receipt
____ °C

Laboratory chain-of-custody will be maintained throughout the analytical processes as described in the laboratory's Quality Assurance Manual. The analytical laboratory will provide a copy of the chain-of-custody in the analytical data deliverable package. The chain-of-custody becomes the permanent record of sample handling and shipment.

5.10 LABORATORY SAMPLE STORAGE PROCEDURES

The subcontracted laboratory will use a laboratory information management system (LIMS) to track and schedule samples upon receipt by the analytical laboratories. Any sample anomalies identified during sample log-in must be evaluated on individual merit for the impact upon the results and the data quality objectives of the project. When irregularities do exist, the environmental consultant must be notified to discuss recommended courses of action and documentation of the issue must be included in the project file.

For samples requiring thermal preservation, the temperature of each cooler will be immediately recorded. Each sample and container will be will be assigned a unique laboratory identification number and secured within the custody room walk-in coolers designated for new samples. Samples will be, as soon as practical, disbursed in a manner that is functional for the operational team. The temperature of all coolers and freezers will be monitored and recorded using a certified temperature sensor. Any temperature excursions outside of acceptance criteria (i.e., below 2°C or above 6°C) will initiate an investigation to determine whether any samples may have been affected. Samples for VOCs will be maintained in satellite storage areas within the VOC laboratory. Following analysis, the laboratory's specific procedures for retention and disposal will be followed as specified in the laboratory's SOPs and/or QA manual.

6.0 DATA REDUCTION, VALIDATION, AND REPORTING

6.1 INTRODUCTION

Data collected during the field investigation will be reduced and reviewed by the laboratory QA personnel, and a report on the findings will be tabulated in a standard format. The criteria used to identify and quantify the analytes will be those specified for the applicable methods in the USEPA SW-846 and subsequent updates. The data package provided by the laboratory will contain all items specified in the USEPA SW-846 appropriate for the analyses to be performed, and be reported in standard format.

The completed copies of the chain-of-custody records (both external and internal) accompanying each sample from time of initial bottle preparation to completion of analysis shall be attached to the analytical reports.

6.2 DATA REDUCTION

The Analytical Services Protocol (ASP) Category B data packages and an electronic data deliverable (EDD) will be provided by the laboratory after receipt of a complete sample delivery group. The Project Manager will immediately arrange for archiving the results and preparation of result tables. These tables will form the database for assessment of the site contamination condition.

Each EDD deliverable must be formatted using a Microsoft Windows operating system and the NYSDEC data deliverable format for EQuIS. To avoid transcription errors, data will be loaded directly into the ASCII format from the laboratory information management system (LIMS). If this cannot be accomplished, the consultant should be notified via letter of transmittal indicating that manual entry of data is required for a particular method of analysis. All EDDs must also undergo a QC check by the laboratory before delivery. The original data, tabulations, and electronic media are stored in a secure and retrievable fashion.

The Project Manager or Task Manager will maintain close contact with the QA reviewer to ensure all non-conformance issues are acted upon prior to data manipulation and assessment routines. Once the QA review has been completed, the Project Manager may direct the Team Leaders or others to initiate and finalize the analytical data assessment.

6.3 DATA VALIDATION

Data validation will be performed in accordance with the USEPA validation guidelines for organic and inorganic data review. Validation will include the following:

- Verification of the QC sample results,
- Verification of the identification of sample results (both positive hits and non-detects),
- Recalculation of 10% of all investigative sample results, and
- Preparation of Data Usability Summary Reports (DUSR).

A DUSR will be prepared and reviewed by the QAO before issuance. The DUSR will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and COC procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. The DUSR will also include copies of the Category B data package Form 1s that have been changed during data validation. A detailed assessment of each SDG will follow. For each of the organic analytical methods, the following will be assessed:

- Holding times;
- Instrument tuning;
- Instrument calibrations;
- Blank results;
- System monitoring compounds or surrogate recovery compounds (as applicable);
- Internal standard recovery results;
- MS and MSD results;
- Target compound identification;
- Chromatogram quality;
- Pesticide cleanup (if applicable);
- Compound quantitation and reported detection limits;
- System performance; and

- Results verification.

For each of the inorganic compounds, the following will be assessed:

- Holding times;
- Calibrations;
- Blank results;
- Interference check sample;
- Laboratory check samples;
- Duplicates;
- Matrix Spike;
- Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) QC;
- ICP serial dilutions; and
- Results verification and reported detection limits.

Based on the results of data validation, the validated analytical results reported by the laboratory will be assigned one of the following usability flags:

- "U" - Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank;
- "UJ" - Not detected. Quantitation limit may be inaccurate or imprecise;
- "J" - Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method
- "N" – Tentative identification. Analyte is considered present in the sample;
- "R" – Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample; and
- No Flag - Result accepted without qualification.

7.0 QUALITY ASSURANCE PERFORMANCE AUDITS AND SYSTEM AUDITS

7.1 INTRODUCTION

Quality assurance audits may be performed by the project quality assurance group under the direction and approval of the QAO. These audits will be implemented to evaluate the capability and performance of project and subcontractor personnel, items, activities, and documentation of the measurement system(s). Functioning as an independent body and reporting directly to corporate quality assurance management, the QAO may plan, schedule, and approve system and performance audits based upon procedures customized to the project requirements. At times, the QAO may request additional personnel with specific expertise from company and/or project groups to assist in conducting performance audits. However, these personnel will not have responsibility for the project work associated with the performance audit.

7.2 SYSTEM AUDITS

System audits may be performed by the QAO or designated auditors, and encompass a qualitative evaluation of measurement system components to ascertain their appropriate selection and application. In addition, field and laboratory quality control procedures and associated documentation may be system audited. These audits may be performed once during the performance of the project. However, if conditions adverse to quality are detected or if the Project Manager requests, additional audits may be performed.

7.3 PERFORMANCE AUDITS

The laboratory may be required to conduct an analysis of Performance Evaluation samples or provide proof that Performance Evaluation samples submitted by USEPA or a state agency have been analyzed within the past twelve months.

7.4 FORMAL AUDITS

Formal audits refer to any system or performance audit that is documented and implemented by the QA group. These audits encompass documented activities performed by qualified lead auditors to a written procedure or checklists to objectively verify that quality assurance requirements have been developed, documented, and instituted in accordance with contractual and project criteria. Formal audits may be performed on project and subcontractor work at various locations.

Audit reports will be written by auditors who have performed the site audit after gathering and evaluating all data. Items, activities, and documents determined by lead auditors to be in noncompliance shall be identified at exit interviews conducted with the involved management. Non-compliances will be logged, and documented through audit findings, which are attached to and are a part of the integral audit report. These audit-finding forms are directed to management to satisfactorily resolve the noncompliance in a specified and timely manner.

The Project Manager has overall responsibility to ensure that all corrective actions necessary to resolve audit findings are acted upon promptly and satisfactorily. Audit reports must be submitted to the Project Manager within fifteen days of completion of the audit. Serious deficiencies will be reported to the Project Manager within 24 hours. All audit checklists, audit reports, audit findings, and acceptable resolutions are approved by the QAO prior to issue. Verification of acceptable resolutions may be determined by re-audit or documented surveillance of the item or activity. Upon verification acceptance, the QAO will close out the audit report and findings.

8.0 CORRECTIVE ACTION

8.1 INTRODUCTION

The following procedures have been established to ensure that conditions adverse to quality, such as malfunctions, deficiencies, deviations, and errors, are promptly investigated, documented, evaluated, and corrected.

8.2 PROCEDURE DESCRIPTION

When a significant condition adverse to quality is noted at site, laboratory, or subcontractor location, the cause of the condition will be determined and corrective action will be taken to preclude repetition. Condition identification, cause, reference documents, and corrective action planned to be taken will be documented and reported to the QAO, Project Manager, Field Team Leader and involved contractor management, at a minimum. Implementation of corrective action is verified by documented follow-up action.

All project personnel have the responsibility, as part of the normal work duties, to promptly identify, solicit approved correction, and report conditions adverse to quality. Corrective actions will be initiated as follows:

- When predetermined acceptance standards are not attained;
- When procedure or data compiled are determined to be deficient;
- When equipment or instrumentation is found to be faulty;
- When samples and analytical test results are not clearly traceable;
- When quality assurance requirements have been violated;
- When designated approvals have been circumvented;
- As a result of system and performance audits;
- As a result of a management assessment;
- As a result of laboratory/field comparison studies; and
- As required by USEPA SW-846, and subsequent updates, or by the NYSDEC ASP.

Project management and staff, such as field investigation teams, remedial response planning personnel, and laboratory groups, monitor on-going work performance in the

normal course of daily responsibilities. Work may be audited at the sites, laboratories, or contractor locations. Activities, or documents ascertained to be noncompliant with quality assurance requirements will be documented. Corrective actions will be mandated through audit finding sheets attached to the audit report. Audit findings are logged, maintained, and controlled by the Task Manager.

Personnel assigned to quality assurance functions will have the responsibility to issue and control Corrective Action Request (CAR) Forms (see next page). The CAR identifies the out-of-compliance condition, reference document(s), and recommended corrective action(s) to be administered. The CAR is issued to the personnel responsible for the affected item or activity. A copy is also submitted to the Project Manager. The individual to whom the CAR is addressed returns the requested response promptly to the QA personnel, affixing his/her signature and date to the corrective action block, after stating the cause of the conditions and corrective action to be taken. The QA personnel maintain the log for status of CARs, confirms the adequacy of the intended corrective action, and verifies its implementation. CARs will be retained in the project file for the records.

Any project personnel may identify noncompliance issues; however, the designated QA personnel are responsible for documenting, numbering, logging, and verifying the close out action. The Project Manager will be responsible for ensuring that all recommended corrective actions are implemented, documented, and approved.

CORRECTIVE ACTION REQUEST

Number: _____ Date: _____

TO: _____

You are hereby requested to take corrective actions indicated below and as otherwise determined by you to (a) resolve the noted condition and (b) to prevent it from recurring. Your written response is to be returned to the project quality assurance manager by _____

CONDITION:

REFERENCE DOCUMENTS:

RECOMMENDED CORRECTIVE ACTIONS:

_____ _____ _____ _____ _____ _____

Originator Date Approval Date Approval Date

RESPONSE

CAUSE OF CONDITION

CORRECTIVE ACTION

(A) RESOLUTION

(B) PREVENTION

(C) AFFECTED DOCUMENTS

C.A. FOLLOWUP:

CORRECTIVE ACTION VERIFIED BY: _____
DATE:_____

9.0 REFERENCES

USEPA. Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry. SOP No. HW-24, Revision 4, dated October 2014. USEPA Region II.

USEPA. Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15. SOP No. HW-31, Revision 6, dated June 2014. USEPA Region II.

USEPA. Polychlorinated Biphenyl (PCB) Aroclor Data Validation. SOP No. HW-37, Revision 3, dated May 2013. USEPA Region II.

USEPA. Pesticide Data Validation. SOP No. HW-36, Revision 4, dated May 2013. USEPA Region II.

USEPA. Semivolatile Data Validation. SOP No. HW-35, Revision 2, dated March 2013. USEPA Region II.

USEPA. Tetro-through Octa-chlorinated Dioxins and Furans by Isotope Dilution (HRGC/HRMS). SOP For EPA Method 1613, Revision B, dated December 2010. USEPA Region II.

USEPA. PCDDs/PCDFs using HRGC/HRMS. SOP for SW-846 Method 8290 HW-19, Revision 1.1, dated December 2010. USEPA Region II.

USEPA, Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans. SW-846 Method 8280 HW-11, Revision 3, dated December 2010. USEPA Region II.

USEPA. Low/Medium Volatile Data Validation. SOP No. HW-33, Revision 3, dated March 2013. USEPA Region II.

USEPA. ICP-AES Data Validation. SOP No. HW-2a, Revision 15, dated December 2012. USEPA Region II.

USEPA. ICP-MS Data Validation. SOP No. HW-2b, Revision 15, dated December 2012. USEPA Region II.

USEPA. Mercury and Cyanide Data Validation. SOP No. HW-2c, Revision 15, dated December 2012, USEPA Region II.

USEPA. Trace Volatile Data Validation. SOP No. HW-34, Revision 3, dated February 2013, USEPA Region II.

ATTACHMENT A

RESUMES

Emily G. Strake

Project Chemist/ Risk Assessor
Human Health Risk Assessment
Chemical Data Validation

15 years in the industry ~ 2 years with Langan

Ms. Strake has fifteen years of environmental chemistry, risk assessment, auditing, and quality assurance experience. Most recently, she has focused her efforts on human health risk assessment, and has been the primary author or key contributor of risk assessment reports and screening evaluations for projects governed under RCRA, CERCLA, SWRCB, DTSC, DNREC, PADEP, NJDEP, CTDEEP, ODEQ, NYSDEC and MDE. She has experience in site-specific strategy development, which has enabled her to perform assessments to focus areas of investigation and identify risk-based alternatives for reducing remediation costs. Ms. Strake is a member of the Interstate Technology and Regulatory Council Risk Assessment Team responsible for the development and review of organizational risk assessment guidance documents and serves as a National Trainer in risk assessment for the organization.

Ms. Strake has over nine years of experience assessing potential adverse health effect to humans from exposure to hazardous contaminants in soil, sediment, groundwater, surface water, ambient and indoor air, and various types of animal, fish, and plant materials. She understands and applies environmental cleanup guidance and policies associated with multiple federal and state agencies. Additionally, she has broad experience in the development of preliminary remediation goals and site-specific action levels. She is proficient with the USEPA and Cal/EPA Johnson and Ettinger Model for Subsurface Vapor Intrusion into Buildings, USEPA's Adult Lead Methodology, DTSC's Leadspread 7 and 8, and statistical evaluation of data using USEPA's ProUCL software.

Ms. Strake has extensive experience in environmental data validation, focused on ensuring laboratory deliverables follow specific guidelines as described by regulatory agencies and the analytical methods employed. In addition, she has experience in EQuIS chemical database management. She also has a broad range of environmental field experience and maintains current OSHA HAZWOPER certification.

Ms. Strake is experienced in auditing laboratory and field-sampling activities for compliance with Quality Assurance Project Plans (QAPPs), the National Environmental Laboratory Accreditation Conference Standards Quality Systems manual, and applicable USEPA Guidance. Ms. Strake has also audited on-site laboratories in support of groundwater treatment operations and implemented corrective actions. Her responsibilities include writing reports on the value of laboratory work, writing/editing QAPPs for clients and project-specific sites, peer reviewing colleague's work, and mentoring staff within the office. She has also served as the Quality Assurance officer for several long-term projects, responsible for the achievement of all forms of Quality Control/Quality Assurance by onsite personnel relating to sampling, analysis, and data evaluation.

Ms. Strake has several years' experience analyzing investigative samples, writing laboratory Standard Operating Procedures (SOPs), and managing all

Education

M.B.A., Business Administration
The University of Scranton

B.S., Chemistry
Cedar Crest College

Memberships

Interstate Technology and Regulatory Council

Society for Risk Analysis

Training

Candidate, Certified Industrial Environmental Toxicologist. National Registry of Environmental Professionals.

40 hr. OSHA HAZWOPER Training/Nov 2002

8 hr. HAZWOPER Supervisor/June 2004

8 hr. OSHA HAZWOPER Refresher/Oct 2012

American Red Cross First Aid & CPR certified

Publications/Presentations

Decision Making at Contaminated Sites: Issues and Options in Human Health Risk Assessment. Interstate Technology and Regulatory Council

Alternate Approaches for Act 2 Risk Assessments Using Site-Specific Information. Pennsylvania Brownfields Conference

Tools from NJDEP's Attainment Guidance to Support Site Closure
LSRP Summit V

EPA Region IX Vapor Intrusion Policy for Silicon Valley
2014 Environmental Workshop

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aspects of procedures and analyses for Optical Emission Spectrometry, X-Ray Fluorescence, Ignition analysis, and Atomic Absorption. Her experience also includes operating and performing routine instrument maintenance for GC/MS and IR. Ms. Strake has worked extensively on developing rapid soil characterization programs for PCB and pesticide analyses utilizing enzyme-linked immunosorbent assays, and was also involved in efforts to develop new instrumentation to quantify microbial nitrification of ammonium.

Selected Project Experience

Human Health Risk Assessment

- Major League Soccer's San Jose Earthquakes Stadium – Utilized the Johnson and Ettinger advanced soil gas model to calculate risk and hazard associated with inhalation of chlorinated solvents for the redevelopment of a public soccer stadium. Soil gas data was modeled assuming three soil stratum and site-specific soil, building, and exposure parameters. The Earthquakes' stadium is set to open in 2015.
- Exelon - Developed a human health risk assessment for a utility-owned former Manufactured Gas Plant (MGP) site in Pennsylvania, under Pennsylvania's Act 2 Program. Used ProUCL 4.0 statistical software to determine upper limits for full data sets and non-detect data. Conducted vapor intrusion modeling (via the Johnson & Ettinger model) and prepared vapor intrusion reports showing that risks to volatile organic compounds in soils and groundwater were not impacting indoor air quality.
- Texas Instruments – Participated in a collaboration with Robert Ettinger and Geosyntec Consulting to develop comments to USEPA Region IX and the San Francisco Regional Water Quality Control Board regarding vapor intrusion at South Bay Superfund Sites. The focus of the response was to outline scientific and policy objections to EPA's recommended TCE interim short-term indoor air response action levels and guidelines, and to clarify the use of California-modified indoor air screening levels for assessing and responding to TCE and PCE subsurface vapor intrusion into indoor air.
- DuPont - Worked as a key participant in the human health risk evaluation of mercury associated with legacy contamination of the South River located in Waynesboro, Virginia.
- Veteran's Affairs - Completed a human health risk evaluation of the potential future risk associated with inhalation of indoor air for the Veteran's Administration. Soil, soil gas, and groundwater samples were collected as part of the site characterization. Achieved DTSC approval of the risk assessment approach and conclusions.
- Santa Clara Landfill – Developed a human health risk assessment to characterize risk associated with exposure to landfill gas at the Santa Clara All Purpose Landfill. The risk assessment evaluated specific compounds in landfill gas, their concentrations, spatial patterns, and extent throughout the site, and assessed the potential for vapor intrusion associated with a proposed future redevelopment.
- Avon - Completed a human health risk assessment in accordance with NYSDEC guidance for a redevelopment property located in Rye, New York. The objective of the evaluation was to characterize the risks associated with potential future human

exposures to soil and groundwater affected by a release from the Site's former No. 2 fuel oil UST. The intended future use of the Site was a playground to be utilized by the general public for open play on commercial recreational equipment.

- Golden Gate National Parks Conservancy – Peer reviewed a Preliminary Endangerment Assessment Report for the Battery East Trail. The assessment included a human health risk evaluation that estimated carcinogenic risk from exposure to PAHs and dioxin/furans in soil using toxic equivalency to benzo(a)pyrene and 2,3,7,8-TCDD.
- Sunoco Refineries – Derived site-specific soil PRGs for lead using the EPA's adult lead model for two former Sunoco refineries. Completed receptor evaluations in accordance with USEPA risk assessment guidance to develop exposure parameters under current and reasonably anticipated future land use scenarios.
- Honeywell - Completed a focused human health risk evaluation of PAH contaminants for under NJDEP's Site Remediation Program. Applied a blended approach of qualitative risk characterization and quantitative risk calculation to propose closure of AOCs following the remedial investigation.
- Delaware City Refinery - Performed comprehensive human health risk assessment for a petroleum refinery in Delaware City, Delaware. The risk assessment was the basis for a thorough characterization and assessment of potential risks posed by site-specific conditions. Developed various human exposure scenarios by using both Federal and State-Specific guidance for soil, groundwater, and surface water exposure.
- Occidental Chemical - Completed multiple AOC-specific risk assessments utilizing and applying the guidance set forth by the DTSC's Human Health Risk Assessment Note 1 (Default Exposure Factors for Use in Risk Assessment), Note 3 (Recommended Methodology for Use of USEPA Regional Screening Levels, and Note 4 (Screening Level Human Health Risk Assessments).
- Floreffe Terminal - Performed human health risk assessment for contamination resulting from a 3.9 million gallon diesel oil tank collapse along the Monongahela River. Evaluated potential impacts to human health via exposure to soil, groundwater, and surface water. Calculated site-specific standards for soil remediation.
- DOW Chemical - Calculated Medium Specific Concentrations (MSCs) for unregulated contaminants using the PADEP protocols to assist in the clean-up of a monomer tank explosion in Bristol, Pennsylvania. Selected appropriate surrogate toxicity data and evaluated novel on-site constituents by analogy.
- Ryder – Developed Alternative Direct Exposure Criteria for PAH-impacted fill material at a commercial facility. Site-specific soil screening levels for incidental ingestion of soil were calculated following a forward risk evaluation for current on-site receptors.
- Rohm and Haas - Prepared an Act 2 site-specific human health risk assessment for the oldest industrial facility in the United States, located in southeast Philadelphia. The objective of the risk assessment was to determine achievable possible future land-use options under Pennsylvania's Land Recycling Program. The risk assessment included evolution of multiple site-COPCs and constituent suites: VOCs, SVOCs, PCBs, pesticides, and metals

(including lead). Evaluated the potential for indoor air inhalation through J&E modeling of soil gas and groundwater.

- Regency - Conducted vapor intrusion modeling for a dry cleaning facility in the Philadelphia area. Predictive modeling using the Johnson and Ettinger approach indicated that estimated contaminant levels would not adversely affect human receptors.

Chemical Data Quality

- Audited multiple accredited laboratories in New Jersey and Pennsylvania on behalf of clients using USEPA Guidance on Technical Audits and Related Assessments for Environmental Data Operations. The audits included full-suite USEPA and SW-846 methodology; and included reviewing staff experience and training records, equipment and facilities, policies, practices, procedures, and documentation for sample receipt, analysis, instrument maintenance, standard preparation, calibration and traceability, control charting, corrective actions, data reduction and review, report generation, and waste disposal.
- Reviewed and validated data packages for RCRA Facilities Investigation at a Philadelphia-area chemical site; issued data validation reports to project personnel and regulatory agencies. The reviews included evaluation of quarterly groundwater, soil, and soil vapor matrices. Participated in RCRA groundwater sampling, developed and executed the investigation's QAPP, and coordinated with the laboratory to schedule and perform field-sampling events.
- Completed Data Usability Summary Reports in accordance with NYSDEC DER-10 guidance for soil, groundwater, sediment surface water, soil gas, ambient air and indoor air analytical results.
- Acted as the Quality Assurance Officer for several long-term projects in Pennsylvania, Maryland, and New Jersey, Delaware, responsible for the achievement of all forms of QA/QC as it related to sampling, analysis, and data evaluation.
- Participated in a CERCLA site investigation; assessed the usability of sample results for numerous matrices including dust, sediment, soils, and various aqueous matrices for a remedial investigation under the Contract Laboratory Program. Implemented an on-site pesticide immunoassay program to delineate soil contamination in real-time.
- EQuIS data manager for database migration of historical groundwater results associated with remediation activities; assisted with natural attenuation data evaluation and gained experience in geochemical trends associated with intrinsic biodegradation.
- Coordinated the collection of fish tissue samples and determined the validity of the analytical results associated with CERCLA and RCRA site characterizations. Assessed duck blood analytical results for the Connecticut Department of Energy and Environmental Protection Bureau of Natural Resources.

Stuart Knoop, PG, LEED AP

Senior Project Manager
Remedial and Geological Investigations

14 years in the industry

Mr. Knoop is a geologist with experience at sites in New York, Connecticut, North Carolina, South Carolina, and Georgia. He has managed high profile, multi-disciplinary projects and worked extensively on projects under City and State regulatory oversight in New York City. Mr. Knoop has developed remedial action and waste management plans and executed remedial investigations, remedial actions, closures at brownfield sites, and former MGP and commercial development sites throughout New York City. He has conducted numerous Phase I and Phase II Environmental Site Assessments, and coordinated remedial action programs at commercial, residential, industrial, telecommunication, and undeveloped sites. He has also coordinated an on-call environmental contract with the New York City School Construction Authority and managed sites under the New York State Brownfield Cleanup Program, and the New York City Voluntary Cleanup Program.

Mr. Knoop's experience includes coordination of free product recovery, development of soil vapor mitigation systems, and implementation of soil and groundwater remediation programs utilizing soil vapor extraction, air sparging, chemical injection, and contaminant removal. He has also supervised the assessment and removal of petroleum underground storage tanks in accordance with state regulatory standards. Additional experience includes extensive geologic mapping, stable isotope reaction and transport modeling, geotechnical analysis of soil and rock for highway, and utility construction projects.

Selected Projects

Queens Plaza Park, Long Island City, NY
Red Hook Development Sites, Brooklyn, NY
173-177 Harrison Avenue, Brooklyn, NY
Gotham West Development (Studio City), New York, NY
NYCHA, On-Call Environmental Contract, New York, NY
Kingsbridge Armory Redevelopment, Bronx, NY
54 Rutledge Street Property, Brooklyn, NY
Peter Cooper Village/Stuyvesant Town Utility Replacement Project, New York, NY
Former Linen Cleaning Facility, Bronx, NY
New York Sports Complex and Convention Center, New York, NY
West Side Site, New York, NY
Rikers Island Correctional Facility, East Elmhurst, NY
Macon County School Bus Garage, Franklin, NC
Skyland Distributing Facility, Asheville, NC
Rental Uniform Facilities, Various Locations, Nationwide
Interstate Brands Corporation, Winston-Salem, NC

Education

M.S., Geology
University of British Columbia

B.A., Economics and Environmental
Oberlin College

Hydrogeology and Geology Coursework
University of Texas

Professional Registration

Professional Geologist (PG) in NC

LEED Accredited Professional
(LEED AP)

Affiliations

Geological Society of America

Geological Association of New Jersey

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Selected Publications, Reports, and Presentations

”Small Site, Big Challenges: Negotiating Overlapping Regulatory Commitments for a Private School Development in Emergent, Post-Industrial Brooklyn, NY”, Poster Session, 2012 Langan Environmental Workshop, New Brunswick, NJ.

An Introduction to Phase I Environmental Site Assessments, Co-Presenter for Langan Training Webinar, November 2011.

“New Evidence for Syn-Tectonic Fluid Migration across the Hinterland-Foreland Transition of the Canadian Cordillera”, *Journal of Geophysical Research, v. 107,* Knoop, S., Kennedy, L., and Dipple, G. 2002.

“Were the Hinterland and Foreland Hydrologically Coupled during Mesozoic Contraction?”, *Abstracts with Programs, Geological Society of America, Annual Meeting,* Knoop, S., Kennedy, L., and Dipple, G. 1999. Presented at October 1999 meeting in Denver, CO.

“New Evidence for the Flow of Hinterland-Derived Fluids Into the Canadian Rockies During Mesozoic Contraction.”, *Abstracts with Programs, Geological Association of Canada, Annual Meeting, 2000. Presented as poster at May 2000 meeting in Calgary,* AB. Knoop, S., Kennedy, L., and Dipple, G.

Ryan Manderbach, CHMM

Senior Project Manager
Environmental Engineering & Site Assessments

14 years in the industry

Mr. Manderbach has extensive experience in New York, New Jersey, Massachusetts, Maine, Rhode Island, New Hampshire, and Connecticut. His recent experience includes New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup, Voluntary Cleanup and Spill Programs, and New York City Office of Environmental Remediation (OER) E-designated site investigation, and remediation. He has managed and performed Phase I and II Environmental Site Assessments; Underground Storage Tank (UST) removals and closures; soil vapor intrusion investigations; and site investigations and remediation. He also has extensive experience with Hazard Ranking System (HRS) evaluations, site assessments, removal actions, and emergency response activities under the EPA Regions I and II Superfund program.

Education

B.A., Environmental Analysis and Policy
Boston University

Professional Registration

Certified Hazardous Materials Manager (CHMM)

OSHA 29 CFR 1910.120 Certification (HAZWOPER)

Selected Projects

Columbia University, Manhattanville Development, New York, NY
Riverside Center – Parcels 1 through 5
The Shops at Atlas Park, Queens, NY
520 West 41st Street, New York, NY
Shore Parkway, Brooklyn, NY
100 West 125th Street, NY
11 North Moore Street, NY
290 West Street, NY
City University of New York (CUNY), John Jay College Expansion, New York, NY
Queens West Development, Long Island City, Queens, NY
United Nations Capital Master Plan, New York, NY
Former Air Products and Chemicals, Inc. Facility, Middlesex, NJ
Lower Manhattan Indoor Dust Test and Clean Program, New York, NY
Former Buckbee-Mears Facility, Cortland, NY
Old Landfill, Norton, MA
Boulter Farm Area, Cumberland, RI
Hollingsworth & Vose Co., Walpole, MA
Chlor-Alkali Facility (Former), Berlin, NH
Limerick Mill Complex, Limerick, ME
Danielson Pike Chlorinated Solvent Sites, Scituate, RI
Tiogue Lake Sediment Contamination Site, Coventry, RI
Atlas Copco Sites, Holyoke, MA
Fisherville Mill, Grafton MA
Hurricane Katrina Federal Disaster Response, New Orleans, LA
Hurricane Ike Federal Disaster Response, Pasadena, TX

ATTACHMENT B

LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

APPENDIX B

SOIL/SEDIMENT SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units
Volatile Organic Compounds					
EPA 8260C/5035	Soil	1,1,1,2-Tetrachloroethane	0.001	0.000318	mg/kg
EPA 8260C/5035	Soil	1,1,1-Trichloroethane	0.001	0.0001108	mg/kg
EPA 8260C/5035	Soil	1,1,2,2-Tetrachloroethane	0.001	0.0001008	mg/kg
EPA 8260C/5035	Soil	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.02	0.000274	mg/kg
EPA 8260C/5035	Soil	1,1,2-Trichloroethane	0.0015	0.000304	mg/kg
EPA 8260C/5035	Soil	1,1-Dichloroethane	0.0015	0.0000856	mg/kg
EPA 8260C/5035	Soil	1,1-Dichloroethene	0.001	0.000262	mg/kg
EPA 8260C/5035	Soil	1,1-Dichloropropene	0.005	0.0001414	mg/kg
EPA 8260C/5035	Soil	1,2,3-Trichlorobenzene	0.005	0.0001476	mg/kg
EPA 8260C/5035	Soil	1,2,3-Trichloropropane	0.01	0.0001626	mg/kg
EPA 8260C/5035	Soil	1,2,4,5-Tetramethylbenzene	0.004	0.0001302	mg/kg
EPA 8260C/5035	Soil	1,2,4-Trichlorobenzene	0.005	0.0001818	mg/kg
EPA 8260C/5035	Soil	1,2,4-Trimethylbenzene	0.005	0.0001414	mg/kg
EPA 8260C/5035	Soil	1,2-Dibromo-3-chloropropane	0.005	0.000396	mg/kg
EPA 8260C/5035	Soil	1,2-Dibromoethane	0.004	0.0001744	mg/kg
EPA 8260C/5035	Soil	1,2-Dichlorobenzene	0.005	0.0001532	mg/kg
EPA 8260C/5035	Soil	1,2-Dichloroethane	0.001	0.0001134	mg/kg
EPA 8260C/5035	Soil	1,2-Dichloropropane	0.0035	0.000228	mg/kg
EPA 8260C/5035	Soil	1,3,5-Trimethylbenzene	0.005	0.0001434	mg/kg
EPA 8260C/5035	Soil	1,3-Dichlorobenzene	0.005	0.000135	mg/kg
EPA 8260C/5035	Soil	1,3-Dichloropropane	0.005	0.0001452	mg/kg
EPA 8260C/5035	Soil	1,4-Dichlorobenzene	0.005	0.0001384	mg/kg
EPA 8260C/5035	Soil	1,4-Diethylbenzene	0.004	0.0001598	mg/kg
EPA 8260C/5035	Soil	1,4-Dioxane	0.1	0.01442	mg/kg
EPA 8260C/5035	Soil	2,2-Dichloropropane	0.005	0.000226	mg/kg
EPA 8260C/5035	Soil	2-Butanone	0.01	0.000272	mg/kg
EPA 8260C/5035	Soil	2-Hexanone	0.01	0.000666	mg/kg
EPA 8260C/5035	Soil	4-Ethyltoluene	0.004	0.000124	mg/kg
EPA 8260C/5035	Soil	4-Methyl-2-pentanone	0.01	0.000244	mg/kg
EPA 8260C/5035	Soil	Acetone	0.01	0.001036	mg/kg
EPA 8260C/5035	Soil	Acrolein	0.025	0.00806	mg/kg
EPA 8260C/5035	Soil	Acrylonitrile	0.01	0.000514	mg/kg
EPA 8260C/5035	Soil	Benzene	0.001	0.000118	mg/kg
EPA 8260C/5035	Soil	Bromobenzene	0.005	0.000208	mg/kg
EPA 8260C/5035	Soil	Bromochloromethane	0.005	0.000276	mg/kg
EPA 8260C/5035	Soil	Bromodichloromethane	0.001	0.0001732	mg/kg
EPA 8260C/5035	Soil	Bromoform	0.004	0.000236	mg/kg
EPA 8260C/5035	Soil	Bromomethane	0.002	0.000338	mg/kg
EPA 8260C/5035	Soil	Carbon disulfide	0.01	0.001102	mg/kg
EPA 8260C/5035	Soil	Carbon tetrachloride	0.001	0.00021	mg/kg
EPA 8260C/5035	Soil	Chlorobenzene	0.001	0.000348	mg/kg
EPA 8260C/5035	Soil	Chloroethane	0.002	0.000316	mg/kg
EPA 8260C/5035	Soil	Chloroform	0.0015	0.00037	mg/kg
EPA 8260C/5035	Soil	Chloromethane	0.005	0.000294	mg/kg
EPA 8260C/5035	Soil	cis-1,2-Dichloroethene	0.001	0.0001428	mg/kg
EPA 8260C/5035	Soil	cis-1,3-Dichloropropene	0.001	0.0001176	mg/kg
EPA 8260C/5035	Soil	Cyclohexane	0.02	0.000146	mg/kg
EPA 8260C/5035	Soil	Dibromochloromethane	0.001	0.0001536	mg/kg
EPA 8260C/5035	Soil	Dibromomethane	0.01	0.0001636	mg/kg
EPA 8260C/5035	Soil	Dichlorodifluoromethane	0.01	0.0001908	mg/kg
EPA 8260C/5035	Soil	Ethyl ether	0.005	0.00026	mg/kg
EPA 8260C/5035	Soil	Ethylbenzene	0.001	0.0001274	mg/kg
EPA 8260C/5035	Soil	Hexachlorobutadiene	0.005	0.000228	mg/kg
EPA 8260C/5035	Soil	Isopropylbenzene	0.001	0.0001038	mg/kg
EPA 8260C/5035	Soil	Methyl Acetate	0.02	0.00027	mg/kg
EPA 8260C/5035	Soil	Methyl cyclohexane	0.004	0.0001546	mg/kg
EPA 8260C/5035	Soil	Methyl tert butyl ether	0.002	0.0000844	mg/kg
EPA 8260C/5035	Soil	Methylene chloride	0.01	0.001104	mg/kg
EPA 8260C/5035	Soil	Naphthalene	0.005	0.0001384	mg/kg
EPA 8260C/5035	Soil	n-Butylbenzene	0.001	0.0001148	mg/kg
EPA 8260C/5035	Soil	n-Propylbenzene	0.001	0.0001092	mg/kg
EPA 8260C/5035	Soil	o-Chlorotoluene	0.005	0.0001598	mg/kg
EPA 8260C/5035	Soil	o-Xylene	0.002	0.0001718	mg/kg
EPA 8260C/5035	Soil	p/m-Xylene	0.002	0.0001978	mg/kg
EPA 8260C/5035	Soil	p-Chlorotoluene	0.005	0.0001328	mg/kg
EPA 8260C/5035	Soil	p-Isopropyltoluene	0.001	0.000125	mg/kg
EPA 8260C/5035	Soil	sec-Butylbenzene	0.001	0.000122	mg/kg
EPA 8260C/5035	Soil	Styrene	0.002	0.000402	mg/kg
EPA 8260C/5035	Soil	tert-Butyl Alcohol	0.06	0.00292	mg/kg
EPA 8260C/5035	Soil	tert-Butylbenzene	0.005	0.0001354	mg/kg
EPA 8260C/5035	Soil	Tetrachloroethene	0.001	0.0001402	mg/kg
EPA 8260C/5035	Soil	Toluene	0.0015	0.0001948	mg/kg
EPA 8260C/5035	Soil	trans-1,2-Dichloroethene	0.0015	0.000212	mg/kg
EPA 8260C/5035	Soil	trans-1,3-Dichloropropene	0.001	0.0001208	mg/kg
EPA 8260C/5035	Soil	trans-1,4-Dichloro-2-butene	0.005	0.000392	mg/kg
EPA 8260C/5035	Soil	Trichloroethene	0.001	0.000125	mg/kg
EPA 8260C/5035	Soil	Trichlorofluoromethane	0.005	0.000388	mg/kg
EPA 8260C/5035	Soil	Vinyl acetate	0.01	0.0001322	mg/kg
EPA 8260C/5035	Soil	Vinyl chloride	0.002	0.0001174	mg/kg
EPA 8260C/5035	Soil	Xylenes, Total	0.002	0.0001978	mg/kg

APPENDIX B

SOIL SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units
Semivolatile Organic Compounds					
EPA 8270D	Soil	1,2,4,5-Tetrachlorobenzene	0.1665	0.0515817	mg/kg
EPA 8270D	Soil	1,2,4-Trichlorobenzene	0.1665	0.0545787	mg/kg
EPA 8270D	Soil	1,2-Dichlorobenzene	0.1665	0.0546453	mg/kg
EPA 8270D	Soil	1,3-Dichlorobenzene	0.1665	0.0524808	mg/kg
EPA 8270D	Soil	1,4-Dichlorobenzene	0.1665	0.050616	mg/kg
EPA 8270D	Soil	2,3,4,6-Tetrachlorophenol	0.1665	0.028305	mg/kg
EPA 8270D	Soil	2,4,5-Trichlorophenol	0.1665	0.053946	mg/kg
EPA 8270D	Soil	2,4,6-Trichlorophenol	0.0999	0.0314019	mg/kg
EPA 8270D	Soil	2,4-Dichlorophenol	0.14985	0.053946	mg/kg
EPA 8270D	Soil	2,4-Dimethylphenol	0.1665	0.049617	mg/kg
EPA 8270D	Soil	2,4-Dinitrophenol	0.7992	0.227772	mg/kg
EPA 8270D	Soil	2,4-Dinitrotoluene	0.1665	0.0359307	mg/kg
EPA 8270D	Soil	2,6-Dinitrotoluene	0.1665	0.042624	mg/kg
EPA 8270D	Soil	2-Chloronaphthalene	0.1665	0.054279	mg/kg
EPA 8270D	Soil	2-Chlorophenol	0.1665	0.050283	mg/kg
EPA 8270D	Soil	2-Methylnaphthalene	0.1998	0.0531801	mg/kg
EPA 8270D	Soil	2-Methylphenol	0.1665	0.053613	mg/kg
EPA 8270D	Soil	2-Nitroaniline	0.1665	0.046953	mg/kg
EPA 8270D	Soil	2-Nitrophenol	0.35964	0.051948	mg/kg
EPA 8270D	Soil	3,3'-Dichlorobenzidine	0.1665	0.044289	mg/kg
EPA 8270D	Soil	3-Methylphenol/4-Methylphenol	0.23976	0.054612	mg/kg
EPA 8270D	Soil	3-Nitroaniline	0.1665	0.045954	mg/kg
EPA 8270D	Soil	4,6-Dinitro-o-cresol	0.4329	0.060939	mg/kg
EPA 8270D	Soil	4-Bromophenyl phenyl ether	0.1665	0.038295	mg/kg
EPA 8270D	Soil	4-Chloroaniline	0.1665	0.043956	mg/kg
EPA 8270D	Soil	4-Chlorophenyl phenyl ether	0.1665	0.0506493	mg/kg
EPA 8270D	Soil	4-Nitroaniline	0.1665	0.044955	mg/kg
EPA 8270D	Soil	4-Nitrophenol	0.2331	0.053946	mg/kg
EPA 8270D	Soil	Acenaphthene	0.1332	0.034299	mg/kg
EPA 8270D	Soil	Acenaphthylene	0.1332	0.0311355	mg/kg
EPA 8270D	Soil	Acetophenone	0.1665	0.051615	mg/kg
EPA 8270D	Soil	Anthracene	0.0999	0.0277056	mg/kg
EPA 8270D	Soil	Atrazine	0.1332	0.0377289	mg/kg
EPA 8270D	Soil	Azobenzene	0.1665	0.044622	mg/kg
EPA 8270D	Soil	Benzaldehyde	0.21978	0.067266	mg/kg
EPA 8270D	Soil	Benzidine	0.54945	0.130203	mg/kg
EPA 8270D	Soil	Benzo(a)anthracene	0.0999	0.0326007	mg/kg
EPA 8270D	Soil	Benzo(a)pyrene	0.1332	0.0407259	mg/kg
EPA 8270D	Soil	Benzo(b)fluoranthene	0.0999	0.033633	mg/kg
EPA 8270D	Soil	Benzo(ghi)perylene	0.1332	0.034632	mg/kg
EPA 8270D	Soil	Benzo(k)fluoranthene	0.0999	0.0317682	mg/kg
EPA 8270D	Soil	Benzoic Acid	0.53946	0.168498	mg/kg
EPA 8270D	Soil	Benzyl Alcohol	0.1665	0.051282	mg/kg
EPA 8270D	Soil	Biphenyl	0.37962	0.0549117	mg/kg
EPA 8270D	Soil	Bis(2-chloroethoxy)methane	0.17982	0.0504162	mg/kg
EPA 8270D	Soil	Bis(2-chloroethyl)ether	0.14985	0.0466866	mg/kg
EPA 8270D	Soil	Bis(2-chloroisopropyl)ether	0.1998	0.058608	mg/kg
EPA 8270D	Soil	Bis(2-Ethylhexyl)phthalate	0.1665	0.043623	mg/kg
EPA 8270D	Soil	Butyl benzyl phthalate	0.1665	0.0325341	mg/kg
EPA 8270D	Soil	Caprolactam	0.1665	0.045954	mg/kg
EPA 8270D	Soil	Carbazole	0.1665	0.0357975	mg/kg
EPA 8270D	Soil	Chrysene	0.0999	0.0327006	mg/kg
EPA 8270D	Soil	Dibenzo(a,h)anthracene	0.0999	0.0322344	mg/kg
EPA 8270D	Soil	Dibenzofuran	0.1665	0.0555777	mg/kg
EPA 8270D	Soil	Diethyl phthalate	0.1665	0.0351981	mg/kg
EPA 8270D	Soil	Dimethyl phthalate	0.1665	0.042291	mg/kg
EPA 8270D	Soil	Di-n-butylphthalate	0.1665	0.0321345	mg/kg
EPA 8270D	Soil	Di-n-octylphthalate	0.1665	0.040959	mg/kg
EPA 8270D	Soil	Fluoranthene	0.0999	0.0305694	mg/kg
EPA 8270D	Soil	Fluorene	0.1665	0.0477189	mg/kg
EPA 8270D	Soil	Hexachlorobenzene	0.0999	0.0310356	mg/kg
EPA 8270D	Soil	Hexachlorobutadiene	0.1665	0.046953	mg/kg
EPA 8270D	Soil	Hexachlorocyclopentadiene	0.47619	0.106893	mg/kg
EPA 8270D	Soil	Hexachloroethane	0.1332	0.0302697	mg/kg
EPA 8270D	Soil	Indeno(1,2,3-cd)Pyrene	0.1332	0.036963	mg/kg
EPA 8270D	Soil	Isophorone	0.14985	0.044289	mg/kg
EPA 8270D	Soil	Naphthalene	0.1665	0.055278	mg/kg
EPA 8270D	Soil	Nitrobenzene	0.14985	0.039627	mg/kg
EPA 8270D	Soil	NitrosoDiPhenylAmine(NDPA)/DPA	0.1332	0.034965	mg/kg
EPA 8270D	Soil	n-Nitrosodimethylamine	0.333	0.0539127	mg/kg
EPA 8270D	Soil	n-Nitrosodi-n-propylamine	0.1665	0.049617	mg/kg
EPA 8270D	Soil	P-Chloro-M-Cresol	0.1665	0.048285	mg/kg
EPA 8270D	Soil	Pentachlorophenol	0.1332	0.035631	mg/kg
EPA 8270D	Soil	Phenanthrene	0.0999	0.0325674	mg/kg
EPA 8270D	Soil	Phenol	0.1665	0.049284	mg/kg
EPA 8270D	Soil	Pyrene	0.0999	0.0323676	mg/kg

APPENDIX B

SOIL SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units
		Pesticides			
EPA 8081B	Soil	4,4'-DDD	0.007992	0.00285048	mg/kg
EPA 8081B	Soil	4,4'-DDE	0.007992	0.00184815	mg/kg
EPA 8081B	Soil	4,4'-DDT	0.014985	0.0064269	mg/kg
EPA 8081B	Soil	Aldrin	0.007992	0.00281385	mg/kg
EPA 8081B	Soil	Alpha-BHC	0.00333	0.00094572	mg/kg
EPA 8081B	Soil	Beta-BHC	0.007992	0.0030303	mg/kg
EPA 8081B	Soil	Chlordane	0.064935	0.0264735	mg/kg
EPA 8081B	Soil	cis-Chlordane	0.00999	0.00278388	mg/kg
EPA 8081B	Soil	Delta-BHC	0.007992	0.0015651	mg/kg
EPA 8081B	Soil	Dieldrin	0.004995	0.0024975	mg/kg
EPA 8081B	Soil	Endosulfan I	0.007992	0.00188811	mg/kg
EPA 8081B	Soil	Endosulfan II	0.007992	0.00267066	mg/kg
EPA 8081B	Soil	Endosulfan sulfate	0.00333	0.00158508	mg/kg
EPA 8081B	Soil	Endrin	0.00333	0.0013653	mg/kg
EPA 8081B	Soil	Endrin aldehyde	0.00999	0.0034965	mg/kg
EPA 8081B	Soil	Endrin ketone	0.007992	0.00205794	mg/kg
EPA 8081B	Soil	Heptachlor	0.003996	0.00179154	mg/kg
EPA 8081B	Soil	Heptachlor epoxide	0.014985	0.0044955	mg/kg
EPA 8081B	Soil	Lindane	0.00333	0.00148851	mg/kg
EPA 8081B	Soil	Methoxychlor	0.014985	0.004662	mg/kg
EPA 8081B	Soil	Toxaphene	0.14985	0.041958	mg/kg
EPA 8081B	Soil	trans-Chlordane	0.00999	0.00263736	mg/kg
		Polychlorinated Biphenyls			
EPA 8082A	Soil	Aroclor 1016	0.0335	0.0026465	mg/kg
EPA 8082A	Soil	Aroclor 1221	0.0335	0.0030887	mg/kg
EPA 8082A	Soil	Aroclor 1232	0.0335	0.0039262	mg/kg
EPA 8082A	Soil	Aroclor 1242	0.0335	0.0041004	mg/kg
EPA 8082A	Soil	Aroclor 1248	0.0335	0.0028274	mg/kg
EPA 8082A	Soil	Aroclor 1254	0.0335	0.0027537	mg/kg
EPA 8082A	Soil	Aroclor 1260	0.0335	0.0025527	mg/kg
EPA 8082A	Soil	Aroclor 1262	0.0335	0.0016616	mg/kg
EPA 8082A	Soil	Aroclor 1268	0.0335	0.0048575	mg/kg
EPA 8082A	Soil	Total PCBs	0.0335	0.0016616	mg/kg
		Herbicides			
EPA 8151A	Soil	2,4-D	0.1665	0.0051615	mg/kg
EPA 8151A	Soil	2,4,5-TP (Silvex)	0.1665	0.0044289	mg/kg
EPA 8151A	Soil	2,4,5-T	0.1665	0.0104895	mg/kg
		Metals			
EPA 6010C	Soil	Aluminum	4	0.8	mg/kg
EPA 6010C	Soil	Antimony	2	0.32	mg/kg
EPA 6010C	Soil	Arsenic	0.4	0.08	mg/kg
EPA 6010C	Soil	Barium	0.4	0.12	mg/kg
EPA 6010C	Soil	Beryllium	0.2	0.04	mg/kg
EPA 6010C	Soil	Cadmium	0.4	0.028	mg/kg
EPA 6010C	Soil	Calcium	4	1.2	mg/kg
EPA 6010C	Soil	Chromium	0.4	0.08	mg/kg
EPA 7196A	Soil	Hexvalent Chromium	0.8	0.16	mg/kg
EPA 6010C	Soil	Cobalt	0.8	0.2	mg/kg
EPA 6010C	Soil	Copper	0.4	0.08	mg/kg
EPA 6010C	Soil	Iron	2	0.8	mg/kg
EPA 6010C	Soil	Lead	2	0.08	mg/kg
EPA 6010C	Soil	Magnesium	4	0.4	mg/kg
EPA 6010C	Soil	Manganese	0.4	0.08	mg/kg
EPA 7473	Soil	Mercury	0.08	0.016896	mg/kg
EPA 6010C	Soil	Nickel	1	0.16	mg/kg
EPA 6010C	Soil	Potassium	100	16	mg/kg
EPA 6010C	Soil	Selenium	0.8	0.12	mg/kg
EPA 6010C	Soil	Silver	0.4	0.08	mg/kg
EPA 6010C	Soil	Sodium	80	12	mg/kg
EPA 6010C	Soil	Thallium	0.8	0.16	mg/kg
EPA 6010C	Soil	Vanadium	0.4	0.04	mg/kg
EPA 6010C	Soil	Zinc	2	0.28	mg/kg
		Other			
EPA 9038	Soil	Sulfate	100	10.8	mg/kg
SM4500NO3-F	Soil	Nitrogen, Nitrate	10	2.61	mg/kg
EPA 9010C/9012A	Soil	Cyanide, Total	1	0.2339	mg/kg
EPA 9060	Soil	Total Organic Carbon	500	500	mg/kg
EPA 8015C	Soil	TPH-DRO	33.35	3.2650984	mg/kg
EPA 8015C	Soil	TPH-GRO	2.5	0.04815	mg/kg

ATTACHMENT B

GROUNDWATER SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units
		Volatile Organic Compounds			
EPA 8260C	Groundwater	1,1,1,2-Tetrachloroethane	0.5	0.164	ug/L
EPA 8260C	Groundwater	1,1,1-Trichloroethane	0.5	0.158	ug/L
EPA 8260C	Groundwater	1,1,2,2-Tetrachloroethane	0.5	0.144	ug/L
EPA 8260C	Groundwater	1,1,2-Trichloro-1,2,2-Trifluoroethane	10	0.148	ug/L
EPA 8260C	Groundwater	1,1,2-Trichloroethane	0.75	0.144	ug/L
EPA 8260C	Groundwater	1,1-Dichloroethane	0.75	0.21	ug/L
EPA 8260C	Groundwater	1,1-Dichloroethene	0.5	0.142	ug/L
EPA 8260C	Groundwater	1,1-Dichloropropene	2.5	0.173	ug/L
EPA 8260C	Groundwater	1,2,3-Trichlorobenzene	2.5	0.234	ug/L
EPA 8260C	Groundwater	1,2,3-Trichloropropane	5	0.176	ug/L
EPA 8260C	Groundwater	1,2,4,5-Tetramethylbenzene	2	0.542	ug/L
EPA 8260C	Groundwater	1,2,4-Trichlorobenzene	2.5	0.22	ug/L
EPA 8260C	Groundwater	1,2,4-Trimethylbenzene	2.5	0.191	ug/L
EPA 8260C	Groundwater	1,2-Dibromo-3-chloropropane	2.5	0.327	ug/L
EPA 8260C	Groundwater	1,2-Dibromoethane	2	0.193	ug/L
EPA 8260C	Groundwater	1,2-Dichlorobenzene	2.5	0.184	ug/L
EPA 8260C	Groundwater	1,2-Dichloroethane	0.5	0.132	ug/L
EPA 8260C	Groundwater	1,2-Dichloropropane	1.75	0.133	ug/L
EPA 8260C	Groundwater	1,3,5-Trimethylbenzene	2.5	0.174	ug/L
EPA 8260C	Groundwater	1,3-Dichlorobenzene	2.5	0.186	ug/L
EPA 8260C	Groundwater	1,3-Dichloropropane	2.5	0.212	ug/L
EPA 8260C	Groundwater	1,4-Dichlorobenzene	2.5	0.187	ug/L
EPA 8260C	Groundwater	1,4-Diethylbenzene	2	0.392	ug/L
EPA 8260C	Groundwater	1,4-Dioxane	250	41.1	ug/L
EPA 8260C	Groundwater	2,2-Dichloropropane	2.5	0.204	ug/L
EPA 8260C	Groundwater	2-Butanone	5	1.94	ug/L
EPA 8260C	Groundwater	2-Hexanone	5	0.515	ug/L
EPA 8260C	Groundwater	4-Ethyltoluene	2	0.34	ug/L
EPA 8260C	Groundwater	4-Methyl-2-pentanone	5	0.416	ug/L
EPA 8260C	Groundwater	Acetone	5	1.46	ug/L
EPA 8260C	Groundwater	Acrolein	5	0.633	ug/L
EPA 8260C	Groundwater	Acrylonitrile	5	0.43	ug/L
EPA 8260C	Groundwater	Benzene	0.5	0.159	ug/L
EPA 8260C	Groundwater	Bromobenzene	2.5	0.152	ug/L
EPA 8260C	Groundwater	Bromochloromethane	2.5	0.138	ug/L
EPA 8260C	Groundwater	Bromodichloromethane	0.5	0.192	ug/L
EPA 8260C	Groundwater	Bromoform	2	0.248	ug/L
EPA 8260C	Groundwater	Bromomethane	1	0.256	ug/L
EPA 8260C	Groundwater	Carbon disulfide	5	0.299	ug/L
EPA 8260C	Groundwater	Carbon tetrachloride	0.5	0.134	ug/L
EPA 8260C	Groundwater	Chlorobenzene	0.5	0.178	ug/L
EPA 8260C	Groundwater	Chloroethane	1	0.134	ug/L
EPA 8260C	Groundwater	Chloroform	0.75	0.162	ug/L
EPA 8260C	Groundwater	Chloromethane	2.5	0.176	ug/L
EPA 8260C	Groundwater	cis-1,2-Dichloroethene	0.5	0.187	ug/L
EPA 8260C	Groundwater	cis-1,3-Dichloropropene	0.5	0.144	ug/L
EPA 8260C	Groundwater	Cyclohexane	10	0.271	ug/L
EPA 8260C	Groundwater	Dibromochloromethane	0.5	0.149	ug/L
EPA 8260C	Groundwater	Dibromomethane	5	0.363	ug/L
EPA 8260C	Groundwater	Dichlorodifluoromethane	5	0.245	ug/L
EPA 8260C	Groundwater	Ethyl ether	2.5	0.15	ug/L
EPA 8260C	Groundwater	Ethylbenzene	0.5	0.168	ug/L
EPA 8260C	Groundwater	Hexachlorobutadiene	0.5	0.217	ug/L
EPA 8260C	Groundwater	Isopropylbenzene	0.5	0.187	ug/L
EPA 8260C	Groundwater	Methyl Acetate	10	0.234	ug/L
EPA 8260C	Groundwater	Methyl cyclohexane	10	0.396	ug/L
EPA 8260C	Groundwater	Methyl tert butyl ether	1	0.16	ug/L
EPA 8260C	Groundwater	Methylene chloride	3	0.289	ug/L
EPA 8260C	Groundwater	Naphthalene	2.5	0.216	ug/L
EPA 8260C	Groundwater	n-Butylbenzene	0.5	0.192	ug/L
EPA 8260C	Groundwater	n-Propylbenzene	0.5	0.173	ug/L
EPA 8260C	Groundwater	o-Chlorotoluene	2.5	0.17	ug/L
EPA 8260C	Groundwater	o-Xylene	1	0.33	ug/L
EPA 8260C	Groundwater	p/m-Xylene	1	0.332	ug/L
EPA 8260C	Groundwater	p-Chlorotoluene	2.5	0.185	ug/L
EPA 8260C	Groundwater	p-Isopropyltoluene	0.5	0.188	ug/L
EPA 8260C	Groundwater	sec-Butylbenzene	0.5	0.181	ug/L
EPA 8260C	Groundwater	Styrene	1	0.359	ug/L
EPA 8260C	Groundwater	tert-Butyl Alcohol	10	0.899	ug/L
EPA 8260C	Groundwater	tert-Butylbenzene	2.5	0.185	ug/L
EPA 8260C	Groundwater	Tetrachloroethene	0.5	0.181	ug/L
EPA 8260C	Groundwater	Toluene	0.75	0.161	ug/L
EPA 8260C	Groundwater	trans-1,2-Dichloroethene	0.75	0.163	ug/L
EPA 8260C	Groundwater	trans-1,3-Dichloropropene	0.5	0.164	ug/L
EPA 8260C	Groundwater	trans-1,4-Dichloro-2-butene	2.5	0.173	ug/L
EPA 8260C	Groundwater	Trichloroethene	0.5	0.175	ug/L
EPA 8260C	Groundwater	Trichlorofluoromethane	2.5	0.161	ug/L
EPA 8260C	Groundwater	Vinyl acetate	5	0.311	ug/L
EPA 8260C	Groundwater	Vinyl chloride	1	0.0699	ug/L
EPA 8260C	Groundwater	Xylenes, Total	1	0.33	ug/L

ATTACHMENT B

GROUNDWATER SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units
Semivolatile Organic Compounds					
EPA 8270D	Groundwater	1,2,4,5-Tetrachlorobenzene	10	0.357	ug/L
EPA 8270D	Groundwater	1,2,4-Trichlorobenzene	5	0.21	ug/L
EPA 8270D	Groundwater	1,2-Dichlorobenzene	2	0.302	ug/L
EPA 8270D	Groundwater	1,3-Dichlorobenzene	2	0.35	ug/L
EPA 8270D	Groundwater	1,4-Dichlorobenzene	2	0.323	ug/L
EPA 8270D	Groundwater	2,3,4,6-Tetrachlorophenol	5	0.59	ug/L
EPA 8270D	Groundwater	2,4,5-Trichlorophenol	5	0.748	ug/L
EPA 8270D	Groundwater	2,4,6-Trichlorophenol	5	0.775	ug/L
EPA 8270D	Groundwater	2,4-Dichlorophenol	5	0.564	ug/L
EPA 8270D	Groundwater	2,4-Dimethylphenol	5	0.578	ug/L
EPA 8270D	Groundwater	2,4-Dinitrophenol	20	1.4081	ug/L
EPA 8270D	Groundwater	2,4-Dinitrotoluene	5	1.05	ug/L
EPA 8270D	Groundwater	2,6-Dinitrotoluene	5	0.89	ug/L
EPA 8270D	Groundwater	2-Chloronaphthalene	2	0.455	ug/L
EPA 8270D	Groundwater	2-Chlorophenol	2	0.58	ug/L
EPA 8270D	Groundwater	2-Methylnaphthalene	2	0.355	ug/L
EPA 8270D	Groundwater	2-Methylphenol	5	0.703	ug/L
EPA 8270D	Groundwater	2-Nitroaniline	5	0.956	ug/L
EPA 8270D	Groundwater	2-Nitrophenol	10	1.05	ug/L
EPA 8270D	Groundwater	3,3'-Dichlorobenzidine	5	0.478	ug/L
EPA 8270D	Groundwater	3-Methylphenol/4-Methylphenol	5	0.72	ug/L
EPA 8270D	Groundwater	3-Nitroaniline	5	0.668	ug/L
EPA 8270D	Groundwater	4,6-Dinitro-o-cresol	10	1.36	ug/L
EPA 8270D	Groundwater	4-Bromophenyl phenyl ether	2	0.428	ug/L
EPA 8270D	Groundwater	4-Chloroaniline	5	0.835	ug/L
EPA 8270D	Groundwater	4-Chlorophenyl phenyl ether	2	0.355	ug/L
EPA 8270D	Groundwater	4-Nitroaniline	5	0.83	ug/L
EPA 8270D	Groundwater	4-Nitrophenol	10	1.09	ug/L
EPA 8270D	Groundwater	Acenaphthene	2	0.284	ug/L
EPA 8270D	Groundwater	Acenaphthylene	2	0.372	ug/L
EPA 8270D	Groundwater	Acetophenone	5	0.428	ug/L
EPA 8270D	Groundwater	Anthracene	2	0.2	ug/L
EPA 8270D	Groundwater	Atrazine	10	0.794	ug/L
EPA 8270D	Groundwater	Azobenzene	2	0.537	ug/L
EPA 8270D	Groundwater	Benzaldehyde	5	0.986	ug/L
EPA 8270D	Groundwater	Benzidine	20	5.24	ug/L
EPA 8270D	Groundwater	Benzo(a)anthracene	2	0.323	ug/L
EPA 8270D	Groundwater	Benzo(a)pyrene	2	0.658	ug/L
EPA 8270D	Groundwater	Benzo(b)fluoranthene	2	0.371	ug/L
EPA 8270D	Groundwater	Benzo(ghi)perylene	2	0.574	ug/L
EPA 8270D	Groundwater	Benzo(k)fluoranthene	2	0.3	ug/L
EPA 8270D	Groundwater	Benzoic Acid	50	1.0104	ug/L
EPA 8270D	Groundwater	Benzyl Alcohol	2	0.677	ug/L
EPA 8270D	Groundwater	Biphenyl	2	0.237	ug/L
EPA 8270D	Groundwater	Bis(2-chloroethoxy)methane	5	0.596	ug/L
EPA 8270D	Groundwater	Bis(2-chloroethyl)ether	2	0.409	ug/L
EPA 8270D	Groundwater	Bis(2-chloroisopropyl)ether	2	0.597	ug/L
EPA 8270D	Groundwater	Bis(2-Ethylhexyl)phthalate	3	0.928	ug/L
EPA 8270D	Groundwater	Butyl benzyl phthalate	5	1.13	ug/L
EPA 8270D	Groundwater	Caprolactam	10	0.3895	ug/L
EPA 8270D	Groundwater	Carbazole	2	0.374	ug/L
EPA 8270D	Groundwater	Chrysene	2	0.304	ug/L
EPA 8270D	Groundwater	Dibenzo(a,h)anthracene	2	0.438	ug/L
EPA 8270D	Groundwater	Dibenzofuran	2	0.218	ug/L
EPA 8270D	Groundwater	Diethyl phthalate	5	0.393	ug/L
EPA 8270D	Groundwater	Dimethyl phthalate	5	0.333	ug/L
EPA 8270D	Groundwater	Di-n-butylphthalate	5	0.768	ug/L
EPA 8270D	Groundwater	Di-n-octylphthalate	5	1.2	ug/L
EPA 8270D	Groundwater	Fluoranthene	2	0.401	ug/L
EPA 8270D	Groundwater	Fluorene	2	0.32	ug/L
EPA 8270D	Groundwater	Hexachlorobenzene	2	0.396	ug/L
EPA 8270D	Groundwater	Hexachlorobutadiene	2	0.417	ug/L
EPA 8270D	Groundwater	Hexachlorocyclopentadiene	20	0.585	ug/L
EPA 8270D	Groundwater	Hexachloroethane	2	0.298	ug/L
EPA 8270D	Groundwater	Indeno(1,2,3-cd)Pyrene	2	0.433	ug/L
EPA 8270D	Groundwater	Isophorone	5	0.787	ug/L
EPA 8270D	Groundwater	Naphthalene	2	0.332	ug/L
EPA 8270D	Groundwater	Nitrobenzene	2	0.401	ug/L
EPA 8270D	Groundwater	NitrosoDiPhenylAmine(NDPA)/DPA	2	0.34	ug/L
EPA 8270D	Groundwater	n-Nitrosodimethylamine	2	0.498	ug/L
EPA 8270D	Groundwater	n-Nitrosodi-n-propylamine	5	0.645	ug/L
EPA 8270D	Groundwater	P-Chloro-M-Cresol	2	0.543	ug/L
EPA 8270D	Groundwater	Pentachlorophenol	10	3.22	ug/L
EPA 8270D	Groundwater	Phenanthrene	2	0.23	ug/L
EPA 8270D	Groundwater	Phenol	5	0.27	ug/L
EPA 8270D	Groundwater	Pyrene	2	0.524	ug/L
EPA 8270D-SIM	Groundwater	2-Chloronaphthalene	0.2	0.035	ug/L
EPA 8270D-SIM	Groundwater	2-Methylnaphthalene	0.2	0.045	ug/L
EPA 8270D-SIM	Groundwater	Acenaphthene	0.2	0.035	ug/L
EPA 8270D-SIM	Groundwater	Acenaphthylene	0.2	0.035	ug/L
EPA 8270D-SIM	Groundwater	Anthracene	0.2	0.035	ug/L
EPA 8270D-SIM	Groundwater	Benzo(a)anthracene	0.2	0.016	ug/L
EPA 8270D-SIM	Groundwater	Benzo(a)pyrene	0.2	0.039	ug/L
EPA 8270D-SIM	Groundwater	Benzo(b)fluoranthene	0.2	0.016	ug/L
EPA 8270D-SIM	Groundwater	Benzo(ghi)perylene	0.2	0.042	ug/L
EPA 8270D-SIM	Groundwater	Benzo(k)fluoranthene	0.2	0.042	ug/L
EPA 8270D-SIM	Groundwater	Chrysene	0.2	0.038	ug/L
EPA 8270D-SIM	Groundwater	Dibenzo(a,h)anthracene	0.2	0.039	ug/L
EPA 8270D-SIM	Groundwater	Fluoranthene	0.2	0.038	ug/L
EPA 8270D-SIM	Groundwater	Fluorene	0.2	0.037	ug/L
EPA 8270D-SIM	Groundwater	Hexachlorobenzene	0.8	0.032	ug/L
EPA 8270D-SIM	Groundwater	Hexachlorobutadiene	0.5	0.036	ug/L
EPA 8270D-SIM	Groundwater	Hexachloroethane	0.8	0.03	ug/L
EPA 8270D-SIM	Groundwater	Indeno(1,2,3-cd)Pyrene	0.2	0.04	ug/L
EPA 8270D-SIM	Groundwater	Naphthalene	0.2	0.043	ug/L
EPA 8270D-SIM	Groundwater	Pentachlorophenol	0.8	0.22	ug/L
EPA 8270D-SIM	Groundwater	Phenanthrene	0.2	0.015	ug/L
EPA 8270D-SIM	Groundwater	Pyrene	0.2	0.04	ug/L

ATTACHMENT B

GROUNDWATER SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units
		Pesticides			
EPA 8081B	Groundwater	4,4'-DDD	0.04	0.00464	ug/L
EPA 8081B	Groundwater	4,4'-DDE	0.04	0.00381	ug/L
EPA 8081B	Groundwater	4,4'-DDT	0.04	0.00432	ug/L
EPA 8081B	Groundwater	Aldrin	0.02	0.00216	ug/L
EPA 8081B	Groundwater	Alpha-BHC	0.02	0.00439	ug/L
EPA 8081B	Groundwater	Beta-BHC	0.02	0.0056	ug/L
EPA 8081B	Groundwater	Chlordane	0.2	0.0463	ug/L
EPA 8081B	Groundwater	cis-Chlordane	0.02	0.00666	ug/L
EPA 8081B	Groundwater	Delta-BHC	0.02	0.00467	ug/L
EPA 8081B	Groundwater	Dieldrin	0.04	0.00429	ug/L
EPA 8081B	Groundwater	Endosulfan I	0.02	0.00345	ug/L
EPA 8081B	Groundwater	Endosulfan II	0.04	0.00519	ug/L
EPA 8081B	Groundwater	Endosulfan sulfate	0.04	0.00481	ug/L
EPA 8081B	Groundwater	Endrin	0.04	0.00429	ug/L
EPA 8081B	Groundwater	Endrin aldehyde	0.04	0.0081	ug/L
EPA 8081B	Groundwater	Endrin ketone	0.04	0.00477	ug/L
EPA 8081B	Groundwater	Heptachlor	0.02	0.0031	ug/L
EPA 8081B	Groundwater	Heptachlor epoxide	0.02	0.00415	ug/L
EPA 8081B	Groundwater	Lindane	0.02	0.00434	ug/L
EPA 8081B	Groundwater	Methoxychlor	0.2	0.00684	ug/L
EPA 8081B	Groundwater	Toxaphene	0.2	0.0627	ug/L
EPA 8081B	Groundwater	trans-Chlordane	0.02	0.00627	ug/L
		Polychlorinated Biphenyls			
EPA 8082A	Groundwater	Aroclor 1016	0.083	0.05478	ug/L
EPA 8082A	Groundwater	Aroclor 1221	0.083	0.05312	ug/L
EPA 8082A	Groundwater	Aroclor 1232	0.083	0.03071	ug/L
EPA 8082A	Groundwater	Aroclor 1242	0.083	0.05976	ug/L
EPA 8082A	Groundwater	Aroclor 1248	0.083	0.05063	ug/L
EPA 8082A	Groundwater	Aroclor 1254	0.083	0.03403	ug/L
EPA 8082A	Groundwater	Aroclor 1260	0.083	0.03154	ug/L
EPA 8082A	Groundwater	Aroclor 1262	0.083	0.02905	ug/L
EPA 8082A	Groundwater	Aroclor 1268	0.083	0.03735	ug/L
EPA 8082A	Groundwater	PCBs, Total	0.083	0.02905	ug/L
		Herbicides			
EPA 8151A	Groundwater	2,4,5-T	2	0.531	ug/L
EPA 8151A	Groundwater	2,4,5-TP (Silvex)	2	0.539	ug/L
EPA 8151A	Groundwater	2,4-D	10	0.498	ug/L
		Metals			
EPA 6010A	Groundwater	Aluminum, Dissolved	0.01	0.00169	mg/L
EPA 6010A	Groundwater	Aluminum, Total	0.01	0.00169	mg/L
EPA 6010A	Groundwater	Antimony, Dissolved	0.0005	0.0000699	mg/L
EPA 6010A	Groundwater	Antimony, Total	0.0005	0.0000699	mg/L
EPA 6010A	Groundwater	Arsenic, Dissolved	0.0005	0.000123	mg/L
EPA 6010A	Groundwater	Arsenic, Total	0.0005	0.000123	mg/L
EPA 6010A	Groundwater	Barium, Dissolved	0.0005	0.0000625	mg/L
EPA 6010A	Groundwater	Barium, Total	0.0005	0.0000625	mg/L
EPA 6010A	Groundwater	Beryllium, Dissolved	0.0005	0.00015	mg/L
EPA 6010A	Groundwater	Beryllium, Total	0.0005	0.00015	mg/L
EPA 6010A	Groundwater	Cadmium, Dissolved	0.0002	0.00005	mg/L
EPA 6010A	Groundwater	Cadmium, Total	0.0002	0.00005	mg/L
EPA 6010A	Groundwater	Calcium, Dissolved	0.1	0.032	mg/L
EPA 6010A	Groundwater	Calcium, Total	0.1	0.032	mg/L
EPA 6010A	Groundwater	Chromium, Dissolved	0.001	0.000253	mg/L
EPA 6010A	Groundwater	Chromium, Total	0.001	0.000253	mg/L
EPA 7196A	Groundwater	Chromium, Hexavalent, Dissolved	#REF!	#REF!	mg/L
EPA 7196A	Groundwater	Chromium, Hexavalent, Total	#REF!	#REF!	mg/L
EPA 6010A	Groundwater	Cobalt, Dissolved	0.0002	0.0000621	mg/L
EPA 6010A	Groundwater	Cobalt, Total	0.0002	0.0000621	mg/L
EPA 6010A	Groundwater	Copper, Dissolved	0.001	0.000262	mg/L
EPA 6010A	Groundwater	Copper, Total	0.001	0.000262	mg/L
EPA 6010A	Groundwater	Iron, Dissolved	0.05	0.012	mg/L
EPA 6010A	Groundwater	Iron, Total	0.05	0.012	mg/L
EPA 6010A	Groundwater	Lead, Dissolved	0.001	0.000129	mg/L
EPA 6010A	Groundwater	Lead, Total	0.001	0.000129	mg/L
EPA 6010A	Groundwater	Magnesium, Dissolved	0.07	0.0223	mg/L
EPA 6010A	Groundwater	Magnesium, Total	0.07	0.0223	mg/L
EPA 6010A	Groundwater	Manganese, Dissolved	0.001	0.000302	mg/L
EPA 6010A	Groundwater	Manganese, Total	0.001	0.000302	mg/L
EPA 7470A	Groundwater	Mercury, Dissolved	0.0002	0.000066	mg/L
EPA 7470A	Groundwater	Mercury, Total	0.0002	0.000066	mg/L
EPA 6010A	Groundwater	Nickel, Dissolved	0.0005	0.0000865	mg/L
EPA 6010A	Groundwater	Nickel, Total	0.0005	0.0000865	mg/L
EPA 6010A	Groundwater	Potassium, Dissolved	0.1	0.0193	mg/L
EPA 6010A	Groundwater	Potassium, Total	0.1	0.0193	mg/L
EPA 6010A	Groundwater	Selenium, Dissolved	0.005	0.001	mg/L
EPA 6010A	Groundwater	Selenium, Total	0.005	0.001	mg/L
EPA 6010A	Groundwater	Silver, Dissolved	0.00025	0.0000779	mg/L
EPA 6010A	Groundwater	Silver, Total	0.00025	0.0000779	mg/L
EPA 6010A	Groundwater	Sodium, Dissolved	0.1	0.0161	mg/L
EPA 6010A	Groundwater	Sodium, Total	0.1	0.0161	mg/L
EPA 6010A	Groundwater	Thallium, Dissolved	0.0002	0.0000566	mg/L
EPA 6010A	Groundwater	Thallium, Total	0.0002	0.0000566	mg/L
EPA 6010A	Groundwater	Vanadium, Dissolved	0.005	0.000551	mg/L
EPA 6010A	Groundwater	Vanadium, Total	0.005	0.000551	mg/L
EPA 6010A	Groundwater	Zinc, Dissolved	0.01	0.00256	mg/L
EPA 6010A	Groundwater	Zinc, Total	0.01	0.00256	mg/L
		Other			
EPA 9251	Groundwater	Chloride	1	0.2	mg/l
EPA 2320B	Groundwater	Alkalinity, Total	2	-	mg $CaCO_3$/L
EPA 9038	Groundwater	Sulfate	10	3.1	mg/l
EPA 2540C	Groundwater	Solids, Total Dissolved	10	3.561	mg/l
SM4500NO3-F	Groundwater	Nitrogen, Nitrate	0.1	0.0188	mg/l
EPA 9060A	Groundwater	Total Organic Carbon	0.5	0.114	mg/l
EPA 9010C/9012A	Groundwater	Cyanide, Total	0.005	0.00128	mg/l

APPENDIX B

AIR SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units	RL	MDL	Units
Volatile Organic Compounds								
EPA TO-15	Air	1,1,1,2-Tetrachloroethane	1.37	0.38	ug/m^3	0.2	0.0547	ppbV
EPA TO-15	Air	1,1,1-Trichloroethane	1.09	0.31	ug/m^3	0.2	0.057	ppbV
EPA TO-15	Air	1,1,2,2-Tetrachloroethane	1.37	0.38	ug/m^3	0.2	0.0548	ppbV
EPA TO-15	Air	1,1,2-Trichloro-1,2,2-Trifluoroethane	1.53	0.39	ug/m^3	0.2	0.0511	ppbV
EPA TO-15	Air	1,1,2-Trichloroethane	1.09	0.36	ug/m^3	0.2	0.0667	ppbV
EPA TO-15	Air	1,1-Dichloroethane	0.81	0.31	ug/m^3	0.2	0.0771	ppbV
EPA TO-15	Air	1,1-Dichloroethene	0.79	0.22	ug/m^3	0.2	0.0566	ppbV
EPA TO-15	Air	1,1-Dichloropropene	0.91	0.32	ug/m^3	0.2	0.0715	ppbV
EPA TO-15	Air	1,2,3-Trichlorobenzene	1.48	0.32	ug/m^3	0.2	0.0436	ppbV
EPA TO-15	Air	1,2,3-Trichloropropane	1.21	0.46	ug/m^3	0.2	0.0767	ppbV
EPA TO-15	Air	1,2,3-Trimethylbenzene	0.98	0.37	ug/m^3	0.2	0.0751	ppbV
EPA TO-15	Air	1,2,4,5-Tetramethylbenzene	1.1	0.44	ug/m^3	0.2	0.0795	ppbV
EPA TO-15	Air	1,2,4-Trichlorobenzene	1.48	0.45	ug/m^3	0.2	0.0611	ppbV
EPA TO-15	Air	1,2,4-Trimethylbenzene	0.98	0.34	ug/m^3	0.2	0.0694	ppbV
EPA TO-15	Air	1,2-Dibromo-3-chloropropane	1.93	0.72	ug/m^3	0.2	0.0744	ppbV
EPA TO-15	Air	1,2-Dibromoethane	1.54	0.6	ug/m^3	0.2	0.0779	ppbV
EPA TO-15	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	0.29	ug/m^3	0.2	0.0419	ppbV
EPA TO-15	Air	1,2-Dichlorobenzene	1.2	0.37	ug/m^3	0.2	0.0614	ppbV
EPA TO-15	Air	1,2-Dichloroethane	0.81	0.22	ug/m^3	0.2	0.0552	ppbV
EPA TO-15	Air	1,2-Dichloroethene (total)	0.79	0.23	ug/m^3	0.2	0.0587	ppbV
EPA TO-15	Air	1,2-Dichloropropane	0.92	0.32	ug/m^3	0.2	0.0697	ppbV
EPA TO-15	Air	1,3,5-Trimethylbenzene	0.98	0.29	ug/m^3	0.2	0.0584	ppbV
EPA TO-15	Air	1,3-Butadiene	0.44	0.18	ug/m^3	0.2	0.0799	ppbV
EPA TO-15	Air	1,3-Dichlorobenzene	1.2	0.38	ug/m^3	0.2	0.0637	ppbV
EPA TO-15	Air	1,3-Dichloropropane	0.92	0.36	ug/m^3	0.2	0.0776	ppbV
EPA TO-15	Air	1,3-Dichloropropene, Total	0.91	0.31	ug/m^3	0.2	0.0693	ppbV
EPA TO-15	Air	1,4-Dichlorobenzene	1.2	0.25	ug/m^3	0.2	0.0418	ppbV
EPA TO-15	Air	1,4-Dioxane	0.72	0.28	ug/m^3	0.2	0.078	ppbV
EPA TO-15	Air	1-Methylnaphthalene	5.82	1.66	ug/m^3	1	0.286	ppbV
EPA TO-15	Air	2,2,4-Trimethylpentane	0.93	0.31	ug/m^3	0.2	0.0659	ppbV
EPA TO-15	Air	2,2-Dichloropropane	0.92	0.27	ug/m^3	0.2	0.0581	ppbV
EPA TO-15	Air	2-Butanone	1.47	0.15	ug/m^3	0.5	0.0522	ppbV
EPA TO-15	Air	2-Ethylthiophene	0.92	0.26	ug/m^3	0.2	0.0571	ppbV
EPA TO-15	Air	2-Hexanone	0.82	0.25	ug/m^3	0.2	0.0604	ppbV
EPA TO-15	Air	2-Methylnaphthalene	5.82	0.16	ug/m^3	1	0.0273	ppbV
EPA TO-15	Air	2-Methylthiophene	0.8	0.32	ug/m^3	0.2	0.0789	ppbV
EPA TO-15	Air	3-Chloropropene	0.63	0.25	ug/m^3	0.2	0.0812	ppbV
EPA TO-15	Air	3-Methylthiophene	0.8	0.27	ug/m^3	0.2	0.0669	ppbV
EPA TO-15	Air	4-Ethyltoluene	0.98	0.38	ug/m^3	0.2	0.0776	ppbV
EPA TO-15	Air	4-Methyl-2-pentanone	2.05	0.25	ug/m^3	0.5	0.0607	ppbV
EPA TO-15	Air	Acetaldehyde	4.5	0.99	ug/m^3	2.5	0.547	ppbV
EPA TO-15	Air	Acetone	2.38	0.64	ug/m^3	1	0.269	ppbV
EPA TO-15	Air	Acetonitrile	0.34	0.13	ug/m^3	0.2	0.0761	ppbV
EPA TO-15	Air	Acrolein	1.15	0.26	ug/m^3	0.5	0.114	ppbV
EPA TO-15	Air	Acrylonitrile	1.09	0.17	ug/m^3	0.5	0.079	ppbV
EPA TO-15	Air	Benzene	0.64	0.17	ug/m^3	0.2	0.0537	ppbV
EPA TO-15	Air	Benzothiophene	2.74	0.26	ug/m^3	0.5	0.0468	ppbV
EPA TO-15	Air	Benzyl chloride	1.04	0.33	ug/m^3	0.2	0.0645	ppbV
EPA TO-15	Air	Bromobenzene	0.79	0.31	ug/m^3	0.2	0.079	ppbV
EPA TO-15	Air	Bromodichloromethane	1.34	0.44	ug/m^3	0.2	0.0656	ppbV
EPA TO-15	Air	Bromoform	2.07	0.54	ug/m^3	0.2	0.0523	ppbV
EPA TO-15	Air	Bromomethane	0.78	0.27	ug/m^3	0.2	0.0696	ppbV
EPA TO-15	Air	Butane	0.48	0.11	ug/m^3	0.2	0.0442	ppbV
EPA TO-15	Air	Butyl Acetate	2.38	0.54	ug/m^3	0.5	0.114	ppbV
EPA TO-15	Air	Carbon disulfide	0.62	0.11	ug/m^3	0.2	0.0345	ppbV
EPA TO-15	Air	Carbon tetrachloride	1.26	0.3	ug/m^3	0.2	0.0471	ppbV
EPA TO-15	Air	Chlorobenzene	0.92	0.36	ug/m^3	0.2	0.0789	ppbV
EPA TO-15	Air	Chlorodifluoromethane	0.71	0.22	ug/m^3	0.2	0.0626	ppbV

APPENDIX B

AIR SAMPLES
LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

Method	Matrix	Analyte	RL	MDL	Units	RL	MDL	Units
EPA TO-15	Air	Chloroethane	0.53	0.2	ug/m^3	0.2	0.0767	ppbV
EPA TO-15	Air	Chloroform	0.98	0.22	ug/m^3	0.2	0.0452	ppbV
EPA TO-15	Air	Chloromethane	0.41	0.2	ug/m^3	0.2	0.0958	ppbV
EPA TO-15	Air	cis-1,2-Dichloroethene	0.79	0.23	ug/m^3	0.2	0.0587	ppbV
EPA TO-15	Air	cis-1,3-Dichloropropene	0.91	0.34	ug/m^3	0.2	0.0745	ppbV
EPA TO-15	Air	Cyclohexane	0.69	0.23	ug/m^3	0.2	0.0656	ppbV
EPA TO-15	Air	Decane (C10)	1.16	0.28	ug/m^3	0.2	0.0484	ppbV
EPA TO-15	Air	Dibromochloromethane	1.7	0.64	ug/m^3	0.2	0.0747	ppbV
EPA TO-15	Air	Dibromomethane	1.42	0.34	ug/m^3	0.2	0.0476	ppbV
EPA TO-15	Air	Dichlorodifluoromethane	0.99	0.23	ug/m^3	0.2	0.0466	ppbV
EPA TO-15	Air	Dichlorofluoromethane	0.84	0.24	ug/m^3	0.2	0.0572	ppbV
EPA TO-15	Air	Dodecane (C12)	1.39	0.39	ug/m^3	0.2	0.0564	ppbV
EPA TO-15	Air	Ethyl Acetate	1.8	0.47	ug/m^3	0.5	0.131	ppbV
EPA TO-15	Air	Ethyl Alcohol	4.71	1.02	ug/m^3	2.5	0.542	ppbV
EPA TO-15	Air	Ethyl ether	0.61	0.18	ug/m^3	0.2	0.0591	ppbV
EPA TO-15	Air	Ethylbenzene	0.87	0.24	ug/m^3	0.2	0.0555	ppbV
EPA TO-15	Air	Ethyl-Tert-Butyl-Ether	0.84	0.22	ug/m^3	0.2	0.0515	ppbV
EPA TO-15	Air	Heptane	0.82	0.23	ug/m^3	0.2	0.0553	ppbV
EPA TO-15	Air	Hexachlorobutadiene	2.13	0.78	ug/m^3	0.2	0.0732	ppbV
EPA TO-15	Air	Indane	0.97	0.38	ug/m^3	0.2	0.0795	ppbV
EPA TO-15	Air	Indene	0.95	0.29	ug/m^3	0.2	0.0608	ppbV
EPA TO-16	Air	iso-Propyl Alcohol	1.23	0.28	ug/m^3	0.5	0.114	ppbV
EPA TO-17	Air	Isopropyl Ether	0.84	0.27	ug/m^3	0.2	0.0656	ppbV
EPA TO-18	Air	Isopropylbenzene	0.98	0.21	ug/m^3	0.2	0.043	ppbV
EPA TO-19	Air	Methanol	6.55	0.96	ug/m^3	5	0.736	ppbV
EPA TO-20	Air	Methyl Methacrylate	2.05	0.61	ug/m^3	0.5	0.148	ppbV
EPA TO-21	Air	Methyl tert butyl ether	0.72	0.16	ug/m^3	0.2	0.0452	ppbV
EPA TO-22	Air	Methylene chloride	1.74	0.65	ug/m^3	0.5	0.188	ppbV
EPA TO-23	Air	Naphthalene	1.05	0.23	ug/m^3	0.2	0.0432	ppbV
EPA TO-24	Air	n-Butylbenzene	1.1	0.35	ug/m^3	0.2	0.0639	ppbV
EPA TO-25	Air	n-Heptane	0.82	0.23	ug/m^3	0.2	0.0553	ppbV
EPA TO-26	Air	n-Hexane	0.7	0.18	ug/m^3	0.2	0.0518	ppbV
EPA TO-27	Air	Nonane (C9)	1.05	0.34	ug/m^3	0.2	0.0644	ppbV
EPA TO-28	Air	n-Propylbenzene	0.98	0.27	ug/m^3	0.2	0.0559	ppbV
EPA TO-29	Air	o-Chlorotoluene	1.04	0.25	ug/m^3	0.2	0.0487	ppbV
EPA TO-30	Air	Octane	0.93	0.2	ug/m^3	0.2	0.0421	ppbV
EPA TO-31	Air	o-Xylene	0.87	0.27	ug/m^3	0.2	0.0631	ppbV
EPA TO-32	Air	p/m-Xylene	1.74	0.6	ug/m^3	0.4	0.139	ppbV
EPA TO-33	Air	p-Chlorotoluene	1.04	0.4	ug/m^3	0.2	0.0764	ppbV
EPA TO-34	Air	Pentane	0.59	0.14	ug/m^3	0.2	0.0475	ppbV
EPA TO-35	Air	p-Isopropyltoluene	1.1	0.33	ug/m^3	0.2	0.0608	ppbV
EPA TO-36	Air	Propane	0.9	0.21	ug/m^3	0.5	0.114	ppbV
EPA TO-37	Air	Propylene	0.86	0.16	ug/m^3	0.5	0.0929	ppbV
EPA TO-38	Air	sec-Butylbenzene	1.1	0.4	ug/m^3	0.2	0.0731	ppbV
EPA TO-39	Air	Styrene	0.85	0.34	ug/m^3	0.2	0.0799	ppbV
EPA TO-40	Air	tert-Butyl Alcohol	1.52	0.18	ug/m^3	0.5	0.0599	ppbV
EPA TO-41	Air	tert-Butylbenzene	1.1	0.22	ug/m^3	0.2	0.0402	ppbV
EPA TO-42	Air	Tertiary-Amyl Methyl Ether	0.84	0.33	ug/m^3	0.2	0.0795	ppbV
EPA TO-43	Air	Tetrachloroethene	1.36	0.51	ug/m^3	0.2	0.0758	ppbV
EPA TO-44	Air	Tetrahydrofuran	1.47	0.18	ug/m^3	0.5	0.0622	ppbV
EPA TO-45	Air	Thiophene	0.69	0.18	ug/m^3	0.2	0.0528	ppbV
EPA TO-46	Air	Toluene	0.75	0.24	ug/m^3	0.2	0.0628	ppbV
EPA TO-47	Air	Total HC As Hexane	39.34	0.2	ug/m^3	10	0.0518	ppbV
EPA TO-48	Air	Total VOCs As Toluene	37.69	0.24	ug/m^3	10	0.0628	ppbV
EPA TO-49	Air	trans-1,2-Dichloroethene	0.79	0.29	ug/m^3	0.2	0.074	ppbV
EPA TO-50	Air	trans-1,3-Dichloropropene	0.91	0.31	ug/m^3	0.2	0.0693	ppbV
EPA TO-51	Air	Trichloroethene	1.07	0.38	ug/m^3	0.2	0.071	ppbV
EPA TO-52	Air	Trichlorofluoromethane	1.12	0.23	ug/m^3	0.2	0.0416	ppbV
EPA TO-53	Air	Undecane	1.28	0.34	ug/m^3	0.2	0.0528	ppbV
EPA TO-54	Air	Vinyl acetate	3.52	0.2	ug/m^3	1	0.0567	ppbV
EPA TO-55	Air	Vinyl bromide	0.87	0.31	ug/m^3	0.2	0.0699	ppbV
EPA TO-56	Air	Vinyl chloride	0.51	0.14	ug/m^3	0.2	0.0533	ppbV
EPA TO-57	Air	Xylene (Total)	0.87	0.27	ug/m^3	0.2	0.0631	ppbV

ATTACHMENT C

ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY TABLE

Attachment C
Analytical Methods/ Quality Assurance Summary Table

Matrix Type	Field Parameters	Laboratory Parameters	Analytical Methods	Sample Preservation	Sample Container Volume and Type	Sample Hold Time	Field Duplicate Samples	Equipment Blank Samples	Trip Blank Samples	Ambient Air Samples	MS/MSD
Groundwater	Temperature, Turbidity, pH, ORP, Conductivity	Part 375 + TCL VOCs+TICs	EPA 8260C	Cool to 4°C; HCl to pH <2;no headspace	Three 40-mL VOC vials with Teflon®-lined cap	Analyze within 14 days of Part 375 + TCL VOCs+TICs	1 per 20 samples (minimum 1)	1 per 20 samples (minimum 1)	1 per shipment of VOC samples	NA	1 per 20 samples
		Part 375 + TCL SVOCs+TICs	EPA 8270D	Cool to 4°C	Two 1-Liter Amber Glass	7 days to extract, 40 days after extraction to analysis					
		Part 375 + TAL Metals	EPA 6010C, EPA 7473	HNO3	250 mL plastic	6 months, except Mercury 28 days					
		Hexavalent Chromium	EPA 7196A	Cool to 4°C	250 ml plastic	24 hours					
		Cyanide	9014/9010C	NaOH plus 0.6g ascorbic acid	250 ml plastic	14 days					
		Part 375 + TCL Pesticides	EPA 8081B	Cool to 4°C	Two 1-Liter Amber for Pesticides/PCB	7 days to extract, 40 days after extraction to analysis					
		PCBs	EPA 8082A	Cool to 4°C	Two 1-Liter Amber for Pesticides/PCB	7 days to extract, 40 days after extraction to analysis					
Soil/ Sediment	Total VOCs via PID	Part 375 + TCL VOCs+TICs	EPA 8260C	Cool to 4°C	Two 40-ml VOC vials with 5 ml H2O, one with MeOH or 3 Encore Samplers (separate container for % solids)	14 days	1 per 20 samples (minimum 1)	1 per 20 samples (minimum 1)	1 per shipment of VOC samples	NA	1 per 20 samples
		Part 375 + TCL SVOCs+TICs	EPA 8270D	Cool to 4°C	4 oz. jar*	14 days to extract, 40 days after extraction to analysis					
		Part 375 + TAL Metals	EPA 6010C, EPA 7473 EPA 9014/9010C	Cool to 4°C	2 oz. jar*	6 months, except Mercury 28 days					
		Hexavalent Chromium	EPA 7196A	Cool to 4°C	2 oz. jar*	30 days to extract, 24 hours after extraction to analysis					
		Part 375 + TCL PCBs	EPA 8081A	Cool to 4°C	4 oz. jar*	14 days extract, 40 days after extraction to analysis					
		Part 375 + TCL Pesticides	EPA 8081B	Cool to 4°C	4 oz. jar*	14 days extract, 40 days after extraction to analysis					
Soil Gas	Total VOCs via PID	TO-15 Listed VOCs	TO-15	Ambient Temperature	6-Liter Summa Canister	Analyze within 30 days of collection	1 per 20 samples (minimum 1)	1 per 20 samples (minimum 1)	NA	1 per 10 samples	NA
Indoor Air	Total VOCs via PID	TO-15 Listed VOCs	TO-15	Ambient Temperature	6-Liter Summa Canister	Analyze within 30 days of collection	1 per 20 samples (minimum 1)	1 per 20 samples (minimum 1)	NA	1 per 10 samples	NA

Notes:
* can be combined in one or more 8 oz. jars

ATTACHMENT D

SAMPLE NOMENCLATURE

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SAMPLE NOMENCLATURE

The sample nomenclature outlined below provides consistency between sample events and projects but, most importantly, establish unique sample IDs that will avoid confusion months or years after the sample has been collected. Furthermore, unique sample IDs are required for any data submitted to the NYSDEC in EDD format or being uploaded to an EQuIS database.

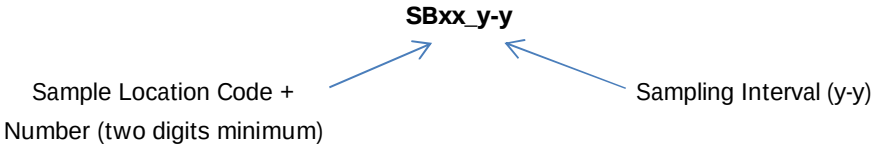
1.0 INVESTIGATION LOCATION CODES

SB	Soil Boring	SV	Soil Vapor Point
WC	Waste Characterization Boring	IA	Indoor Air
TP	Test Pit	AA	Ambient Air
EPSW	Endpoint Location (Sidewall)	SVE	Vapor Extraction Well
EPB	Endpoint Location (Bottom)	DS	Drum
MW	Monitoring Well	IDW	Investigation Derived Waste
TMW	Temporary Monitoring Well	SL	Sludge
SW	Surface Water	FP	Free Product

2.0 SAMPLE NOMENCLATURE

Each sample at a site must have a unique value.

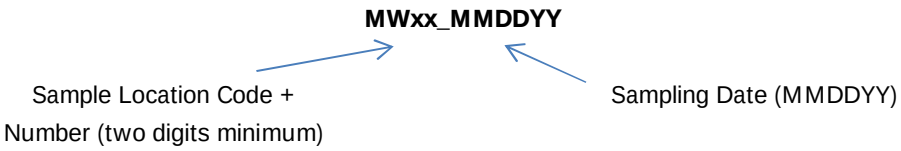
- **Soil/Sediment Samples:**



Sample Type	Sample Location Code	Sampling Depth or Interval (feet bgs or approx. elevation)	Sample Name
Phase II/Remedial Investigation			
Grab Soil Sample	SB01	2 to 4	SB01_2-4
	SB02	4	SB02_4
Waste Characterization			
Grab Soil Sample	WC01	2 to 4	WC01_2-4
	WC02	4	WC02_4
Composite Soil Sample from one or more locations	COMP01 or COMP02 + COMP03	0 to 10 (Fill)	COMP01_0-10

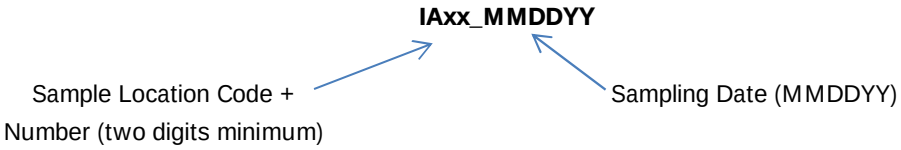
Sample Type	Sample Location Code	Sampling Depth or Interval (feet bgs or approx. elevation)	Sample Name
Endpoint Sampling			
Grab Soil Sample	EPSW01_N	5	EPSW01_N_5
	EPSW01_S	5	EPSW01_S_5
	EPSW01_E	5	EPSW01_E_5
	EPSW01_W	5	EPSW01_W_5
	EPB01	6	EPB01_6

- **Groundwater/Surface Water Samples:**



Sample Type	Sample Location Code	Sampling Date	Sample Name
Groundwater Sample	MW01	02/21/2013	MW01_022113

- **Air/Soil Vapor Samples:**



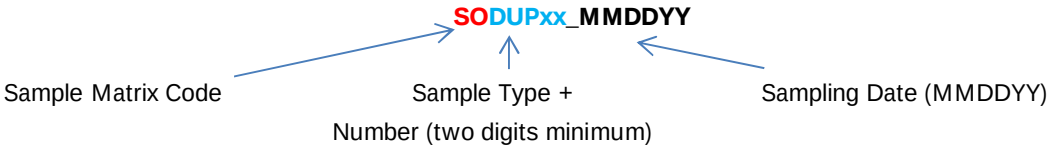
Sample Type	Sample Location Code	Date	Sample Name
Air Sample	IA01	02/21/2013	IA01_022113
Soil Vapor Sample	SV01	02/21/2013	SV01_022113
Vapor Extraction Well Sample	SVE01 (INLET/MIDPOINT/OUTLET)	02/21/2013	SVE01_IN_022113 SVE01_ MID_022113 SVE01_ OUT_022113

- **QA/QC Samples:**

Sample Matrix Codes

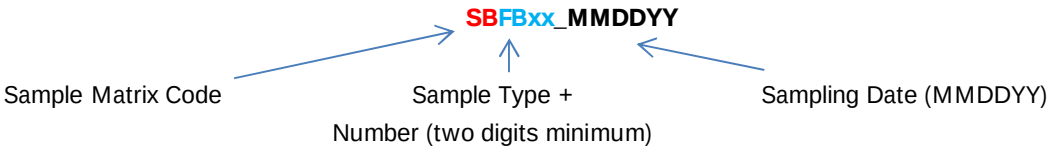
SO	Soil	AS	Air
SE	Sediment	SV	Soil Vapor
GW	Groundwater	SL	Sludge
SW	Surface Water	FP	Free Product

o Duplicates Samples



Sample Type	Parent Sample Code	Date	Sample Name
Groundwater Duplicate Sample (DUP)	MW01_022113	02/21/2013	GWDUP01_022113
Soil boring Duplicate Sample (DUP)	SBP01_022113	02/21/2013	SODUP01_022113
Grab Waste Characterization	WC01	02/21/2013	WCDUP01_022113
Composite Waste Characterization	COMP01	02/21/2013	COMPDUP01_022113

o Field Blanks and Trip Blanks



Sample Type	Date	Sample Name
Groundwater Field Blank (FB)	02/21/2013	GWFB01_022113
Groundwater Trip Blank (TB)	02/21/2013	GWTB01_022113
Soil Field Blank	02/21/2013	SOFB01_022113
Soil Trip Blank	02/21/2013	SOTB01_022113

o Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Parent Sample Name_MS or MSD

Sample Type	Sample Location	Parent Sample Name	Sample Name
Matrix Spike Soil (MS)	SB01	SB01_2-4	SB01_2-4_MS
Matrix Spike Soil Duplicate (MSD)	SB01	SB01_2-4	SB01_2-4_MSD
Matrix Spike GW (MS)	MW01	MW01	MW01_MS
Matrix Spike GW Duplicate (MSD)	MW01	MW01	MW01_MSD

3.0 NOTES

1. The sample location code should not exceed 20 characters and the sample name should not exceed 40 characters.
2. Sample location code (**SB01, MW01, etc.)** is a sequential number (starting with 01) and should be a minimum of two digits.
3. Sample Interval (SB01_**0-5**) is separated from the sample location code with an underscore, and the top and bottom interval with a dash. Soil and sediment sample intervals should always be in

feet. Soil and sediment sample intervals should contain no "/" or "()" or unit.

4. Sample date (MW01_**022113**) is separated from the sample location code with an underscore and should be provided in MMDDYY format [the date should contain no "/" or "-"].
5. If groundwater samples are collected from multiple intervals within one well, you may assign a letter designation (in lower case) to the well ID to differentiate between intervals (i.e., MW01a_022113, MW01b_022113, and MW01c_022113). The letter "a" would indicate the shallowest interval and "c" the deepest. The actual depth intervals should be documented in the project field book or field sheets and the letter designations should be used consistently between sampling events.
6. According to USEPA's Contract Laboratory Program (CLP) Guidance for Field Samplers (January 2011), field duplicate samples should remain "blind" to the laboratory (i.e., they should have separate CLP Sample numbers). Assign two separate (unique) CLP sample numbers (i.e., one number to the field sample and one to the duplicate). Submit blind to the laboratory. (http://www.epa.gov/superfund/programs/clp/download/sampler/CLPSamp-01-2011.pdf)